

Appendix A

Noise Exposure Map Documentation

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This appendix includes the Federal Aviation Administration's (FAA's) Letter of Acceptance for the Existing Conditions (year 2016) and Future Conditions (year 2021) Noise Exposure Maps (NEMs) for the Teterboro Airport (TEB) 14 CFR Part 150 Study, as well as the Federal Register publication of, "Noise Exposure Map Notice for Teterboro Airport, Teterboro, New Jersey" online and in local newspapers.

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Appendix A.1

Federal Aviation Administration Letter of Acceptance for NEM

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U.S. Department
of Transportation
**Federal Aviation
Administration**

New York Airports District Office
1 Aviation Plaza, Suite 111
Jamaica, NY 11434
(718) 995-5790

June 15, 2017

Mr. Tom Bock
General Manager, Aviation Regulatory & Operational Support
Port Authority of New York and New Jersey
Aviation Department
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, New York 10007

RE: Teterboro Airport 14 CFR Part 150 Study-FAA Acceptance of Noise Exposure Maps

Dear Mr. Bock:

This letter is to notify you that the Federal Aviation Administration (FAA) has evaluated and accepted the Noise Exposure Maps and supporting documentation dated May 2017 and received May 25, 2017 for Teterboro Airport.

The sponsor certification states the 2016 and 2021 Noise Exposure Maps for Teterboro Airport are true and complete as of December 31, 2016. Between the completion of the analysis in the development of the Noise Exposure Maps and final submittal, no substantial changes to the ongoing operations at Teterboro Airport have occurred. We note that final review of the Noise Exposure Maps showed that 21 parcels were identified with the incorrect land use in the Draft Noise Exposure Maps distributed to the public and that these parcels are now correctly identified on the Final Noise Exposure Map submittal. The change to the identification of these parcels did not alter the depiction of the noise contour lines in any fashion.

Therefore, in accordance with 49 U.S.C. Section 47503 (formerly the Aviation Safety and Noise Abatement Act of 1979), as amended, we have determined that:

1. The 2016 noise contours and supporting documentation meet the requirements for the current Noise Exposure Map as of the date of submission as set forth in Title 14, Code of Federal Regulations (CFR), Part 150, *Airport Noise Compatibility Planning*, Section 150.21, and are accordingly accepted under this Part.
2. The projected aircraft operations, and the 2021 noise contours and supporting documentation are accepted as the description of the future conditions as set forth in Part 150, and are accordingly accepted under this Part.

3. The documentation provides sufficient evidence consultation was accomplished in accordance with Section 150.21(b).

The FAA's acceptance of the Noise Exposure Maps is limited to the determination that the maps were developed in accordance with the procedures contained in Appendix A of Part 150. Such acceptance does not constitute approval of your data, information, or plans.

The FAA will publish a notice in the *Federal Register* announcing the acceptance of the Noise Exposure Maps for Teterboro Airport. The FAA's acceptance of these Noise Exposure Maps under Part 150 in no way approves or endorses a Noise Compatibility Program, potential related federal funding of projects identified in such a program, or any related operating restrictions at the subject airport.

Should any questions arise concerning the precise relationship of specific properties to noise exposure contours depicted on the Noise Exposure Maps, you should note that the FAA will not be involved in any way in the determination of relative locations of specific properties with regard to the depicted noise contours, or in interpreting the maps to resolve questions concerning, for example, which properties should be covered by the provision of Title 49 U.S.C. 47506. These functions are inseparable from the ultimate land use control and planning responsibilities of local government. These local responsibilities are not changed in any way under Part 150 or through FAA's acceptance of your Noise Exposure Maps. Therefore, the responsibility for the detailed overlaying of noise contours onto the maps depicting properties on the surface rests exclusively with you the airport operator, or those public agencies and planning authorities with which consultation is required under Title 49 U.S.C 47503. The FAA relies on the certification by you under 150.21 of FAR Part 150, that the statutorily required consultation has been accomplished. (14 C.F.R. 150.5)

Your notice of this determination, and the availability of the Noise Exposure Maps, which when published at least three (3) times in a newspaper of general circulation in the county where the affected properties are located, will satisfy the requirements of Title 49 U.S.C. 47506 of the Act. A sample publication announcement has been enclosed for your use.

Your attention is called to the requirements of Section 150.21(d) of Part 150, involving the prompt preparation and submission of revisions to these maps, if any actual or proposed change in the operation of the subject airport might create any substantial, new non-compatible land use in any areas depicted on the maps, or if there would be a significant reduction in noise over existing non-compatible land uses that is not reflected in either map now on file with the FAA.

Thank you for your continued interest in noise compatibility planning.

Sincerely,



for Evelyn Martinez
Manager, New York Airports District Office



- *Average Time per Response:* 1 hour.
- *Total Estimated Burden Time:* 828,728 annual hours.
- *Frequency:* Once per respondent.
- *Obligation to respond:* Required to Obtain or Retain a Benefit.

We are soliciting public comments to permit the Department to:

- Evaluate whether the proposed information collection is necessary for the proper functions of the Department.
- Evaluate the accuracy of our estimate of the time and cost burden of this proposed collection, including the validity of the methodology and assumptions used.
- Enhance the quality, utility, and clarity of the information to be collected.
- Minimize the reporting burden on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Please note that comments submitted in response to this Notice are public record. Before including any detailed personal information, you should be aware that your comments as submitted, including your personal information, will be available for public review

Abstract of Proposed Collection

Forms for this collection are completed by panel physicians for refugees, aliens seeking immigrant visas, and for some aliens seeking nonimmigrant visas to the United States. The collection records medical information necessary to determine whether refugees or visa applicants have medical conditions affecting the applicant's eligibility for a visa, or affecting the public health and requiring treatment.

Methodology

A panel physician, contracted by the consular post in accordance with instructions issued by the Centers for Disease Control (CDC), performs the medical examination of the applicant and completes the forms. Panel physicians follow Forms DS-3025, DS-3026, and DS-3030. Upon completing the applicant's medical examination, the examining panel physician submits a report to the consular officer on Form DS-2054.

Karin King,

Acting Deputy Assistant Secretary, Bureau of Consular Affairs, Department of State.

[FR Doc. 2017-12985 Filed 6-21-17; 8:45 am]

BILLING CODE 4710-06-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Noise Exposure Map Notice for Teterboro Airport, Teterboro, New Jersey

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: The FAA announces its determination that the noise exposure maps submitted by the Port Authority of New York and New Jersey for Teterboro Airport are in compliance with applicable requirements.

DATES: The effective date of the FAA's determination on the noise exposure maps is June 15, 2017.

FOR FURTHER INFORMATION CONTACT: Eastern Region Airports Division (AEA-600), Andrew Brooks, Environmental Program Manager, Federal Aviation Administration, AEA-600, 1 Aviation Plaza, Jamaica, New York 11434, Telephone: (718) 553-3330.

SUPPLEMENTARY INFORMATION: This notice announces that the FAA finds that the noise exposure maps submitted for Teterboro Airport under the provisions of 49 U.S.C. 47501 et. seq (Aviation Safety and Noise Abatement Act) and 14 CFR part 150 are in compliance with applicable requirements of 14 CFR part 150, effective January 13, 2004.

Under 49 U.S.C. Section 47503 of the Aviation Safety and Noise Abatement Act (hereinafter referred to as "the Act"), an airport operator may submit to the FAA noise exposure maps which meet applicable regulations and which depict non-compatible land uses as of the date of submission of such maps, a description of projected aircraft operations during a forecast period that is at least five (5) years in the future, and the ways in which such operations will affect such maps. The Act requires such maps to be developed in consultation with interested and affected parties in the local community, government agencies, and persons using the airport. An airport operator who has submitted noise exposure maps that are found by the FAA to be in compliance with the requirements of 14 CFR part 150, promulgated pursuant to the Act, may submit a noise compatibility program for FAA approval which sets forth the measures the operator has taken or proposes to take to reduce existing non-compatible uses and prevent the introduction of additional non-compatible uses.

The FAA has completed its review of the noise exposure maps and

accompanying documentation submitted by the Port Authority of New York and New Jersey. The documentation that constitutes the "Noise Exposure Maps" (NEM) as defined in Section 150.7 includes a 2016 Base Year NEM, Figure 5-1, and a 2021 Future Year NEM, Figure 5-2, located in Chapter 5 of the NEM Report. The figures contained within Chapter 5 are scaled to fit within the report context; however, the official, to scale, 2016 Base Year NEM and 2021 Future Year NEM are identified as Figures 5-8 and 5-9 and are both located in an attachment to the official NEM Report submittal.

The Noise Exposure Maps contain current and forecast information including the depiction of the airport and its boundaries, the runway configurations, land uses such as single family residential; multi-family residential; mobile home; transient lodging (hotel, motel, etc.); school, university, or daycare; place of worship; recreational, open space, and cemetery; commercial use; manufacturing and production; public use; and vacant or unidentified, and those areas within the Day Night Average Sound Level (DNL) 65, 70 and 75 noise contours. Estimates for the area within these contours for the 2016 Base Year and 2021 Future Year are shown in Table 5-4 of Chapter 5 of the NEM Report. Estimates of the residential population within the 2016 Base Year and 2021 Future Year noise contours are also shown in Table 5-2 of Chapter 5 of the NEM Report. Figure 2-5 in Chapter 2 displays the location of noise monitoring sites. Flight tracks are found in Figures 4-6 and 4-7 of Chapter 4 and detailed in Appendix D. The type and frequency of aircraft operations (including nighttime) are found in Appendix D.1, Tables 7 and 8.

As discussed in Chapter 6 of the NEM Report, the Port Authority of New York and New Jersey provided the general public the opportunity to review and comment on the NEMs. This public comment period opened on September 15, 2016 and closed on October 17, 2016. A public workshop for the Draft NEMs was held on September 22, 2016. All comments received during the public comment period and throughout the development of the NEMs, as well as responses to these comments, are contained in Appendix H of the NEM Report.

Following the closure of the public review period, final review of the Noise Exposure Maps showed that 21 parcels were identified with the incorrect land use in the Draft Noise Exposure Maps distributed to the public. These parcels have been correctly identified on the

28546

Federal Register / Vol. 82, No. 119 / Thursday, June 22, 2017 / Notices

Final Noise Exposure Map submittal. The change to the identification of these parcels did not alter the depiction of the noise contour lines in any fashion.

The FAA has determined that these noise exposure maps and accompanying documentation are in compliance with applicable requirements. This determination is effective on June 15, 2017.

FAA's determination on an airport operator's noise exposure maps is limited to a finding that the maps were developed in accordance with the procedures contained in Appendix A of 14 CFR part 150. Such determination does not constitute approval of the applicant's data, information or plans, or a commitment to approve a noise compatibility program or to fund the implementation of that program. If questions arise concerning the precise relationship of specific properties to noise exposure contours depicted on a noise exposure map submitted under Section 47503 of the Act, it should be noted that the FAA is not involved in any way in determining the relative locations of specific properties with regard to the depicted noise contours, or in interpreting the noise exposure maps to resolve questions concerning, for example, which properties should be covered by the provisions of Section 47506 of the Act. These functions are inseparable from the ultimate land use control and planning responsibilities of local government. These local responsibilities are not changed in any way under Part 150 or through FAA's review of noise exposure maps. Therefore, the responsibility for the detailed overlaying of noise exposure contours onto the map depicting properties on the surface rests exclusively with the airport operator that submitted those maps, or with those public agencies and planning authorities with which consultation is required under Section 47503 of the Act. The FAA has relied on the certification by the airport operator, under Section 150.21, that the statutorily required consultation has been accomplished.

Copies of the full noise exposure map documentation and of the FAA's evaluation of the maps are available for examination at the following locations:

Federal Aviation Administration,
Eastern Region, Airports Division,
AEA-600, 1 Aviation Plaza, Jamaica,
New York 11434
Federal Aviation Administration, New
York Airports District Office, 1
Aviation Plaza, Jamaica, New York
11434
The Port Authority of New York and
New Jersey, Aviation Department, 4

World Trade Center, 150 Greenwich
Street, 18th Floor, New York, New
York 10007

Issued in Jamaica, NY on June 15, 2017.

Steven M. Urlass,

Director, Airports Division, Eastern Region.

[FR Doc. 2017-12995 Filed 6-21-17; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF THE TREASURY

Office of Foreign Assets Control

Sanctions Action Pursuant to an Executive Order Issued on September 23, 2001, Titled "Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism"

AGENCY: Office of Foreign Assets Control, Treasury.

ACTION: Notice.

SUMMARY: The Department of the Treasury's Office of Foreign Assets Control (OFAC) is publishing the name of one individual that has been placed on OFAC's Specially Designated Nationals and Blocked Persons (SDN) List whose property and interests in property is blocked pursuant to an executive order issued on September 23, 2001, titled "Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism."

DATES: OFAC's action described in this notice was effective on June 16, 2017.

FOR FURTHER INFORMATION CONTACT: Associate Director for Global Targeting, tel.: 202/622-2420, Assistant Director for Sanctions Compliance & Evaluation, tel.: 202/622-2490, Assistant Director for Licensing, tel.: 202/622-2480, Office of Foreign Assets Control, or Chief Counsel (Foreign Assets Control), tel.: 202/622-2410, Office of the General Counsel, Department of the Treasury (not toll free numbers).

SUPPLEMENTARY INFORMATION:

Electronic Availability

The SDN List and additional information concerning OFAC sanctions programs are available from OFAC's Web site (www.treas.gov/ofac).

Notice of OFAC Actions

On June 16, 2017, OFAC blocked the property and interests in property of the following one individual pursuant to E.O. 13224 of September 23, 2001, "Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism" (E.O. 13224):

Individual

1. SAAL, Fared (a.k.a. SAAL, Farid; a.k.a. SAAL, Fehad; a.k.a. "AL-ALMANI, Abu Luqmaan"; a.k.a. "AL-ALMANI, Abu Luqman"; a.k.a. "AL-JAZAIRI, Abu Luqman"; a.k.a. "LOQMAN, Abu"; a.k.a. "LUQMAN, Abu"); DOB 18 Feb 1989; alt. DOB 08 Feb 1989; POB Bonn, Germany; citizen Germany; alt. citizen Algeria; Gender Male; National ID No. 5802098444 (individual) [SDGT] (Linked To: ISLAMIC STATE OF IRAQ AND THE LEVANT). Designated pursuant to section 1(c) of E.O. 13224 for acting for or on behalf of the Islamic State of Iraq and Levant (ISIL), an entity designated pursuant to E.O. 13224.

Dated: June 16, 2017.

Andrea Gacki,

Acting Director, Office of Foreign Assets Control.

[FR Doc. 2017-13009 Filed 6-21-17; 8:45 am]

BILLING CODE 4810-AL-P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900-0001]

Agency Information Collection Activity: Veteran's Application for Compensation and/or Pension and Veteran's Supplemental Claim Application

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: Veterans Benefits Administration, Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of a currently approved collection, and allow 60 days for public comment in response to the notice.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before August 21, 2017.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at www.Regulations.gov or to Nancy J. Kessinger, Veterans Benefits Administration (20M33), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420 or email to nancy.kessinger@va.gov. Please refer to "OMB Control No. 2900-0001" in any correspondence. During the comment

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Stk#21549, Vin#HM538308, 4 cyl. auto, p/s/b, a/c. MSRP \$26,070, \$181/mo. Due at Inception. \$0 sec dep req. Price excludes bank fees, licensing, d/t fee, reg fees & taxes. Ttl pymts/purch opt/ttl cost: \$7704/\$14,338.50/\$95/mo.



SALES: Mon-Thurs 9am-9pm, Fri 9am-6:30pm, Sat 9am-5pm **SERVICE:** Mon, Tues, Wed, Fri 8am-6pm

[illegible]

PUBLIC NOTICES

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
NOISE EXPOSURE MAP ACCEPTANCE

PUBLIC ANNOUNCEMENT
TETERBORO AIRPORT

Pursuant to Section 107(a) & (b) [Title 49, United States Code, Section 107(a) & (b)] of the Federal Aviation Act of 1958, as amended, the following information is being furnished:

47506) of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on **June 15, 2017**, the Federal Aviation Administration has completed its evaluation of, and has formally accepted the Noise Exposure Maps for **Teterboro Airport**, located in **Bergen County, New Jersey** that was prepared pursuant to Title 14, Code

July 20, 27, August 3, 2017 – Fee: \$118.80 (24) 4182170

OAKLAND SCHOOL DISTRICT
315 RAMAPO VALLEY ROAD
OAKLAND, NEW JERSEY 07436

TO: OAKLAND BOROUGH CLERK
PRESS AND GENERAL PUBLIC

DATE: July 17, 2017

NOTICE IS HEREBY GIVEN IN ACCORDANCE WITH THE N.J. OPRA "OPEN PUBLIC MEETING ACT" OF THE FOLLOWING MEETING DATE OF THE OAKLAND BOARD OF EDUCATION:

REVISED
TUESDAY — JULY 25, 2017 @ 5:00PM

DATE	PLACE	TIME
July 25	Special Meeting Administration Office 315 Ramapo Valley Rd Oakland, NJ 07436	5:00PM
Purpose:		

1. Screening of Candidates for Principal Position
at Dogwood Hill School.
2. Action may be taken.

Ms. Rachel DeCarlo
Business Administrator/Board Secretary
July 20, 2017 - Fee: \$44.55 (54) 4182163

Sealed proposals will be received by the Borough of Rockleigh ("the Borough")

in the Municipal Building, 26 Rockleigh Road, Rockleigh, New Jersey, on Thursday, August 3, 2017 at 10:00 a.m. for the leasing of public property known as Block 102, Lot 4 as depicted on the municipal tax map, being more commonly known as 33 Piermont Road, Rockleigh, New Jersey ("the property"). The property comprises a land area of 14,400 square feet and is improved with a single-story structure which has a floor area of 2,348 square feet. The property is located in the C Light Industry District wherein is permitted administrative office use.

Detailed information pertaining to the leasing of the property may be obtained by perspective bidders at the Office of the Borough Clerk between the hours of 9:00 a.m. and 4:00 p.m., Monday thru Friday, inclusive. Bidders are advised to carefully review the bid package, which includes the proposed Lease Agreement, research laboratories and light industrial uses. The property may not be used for residential purposes or for an automotive repair business, for a retail use, or a landscaping business.

The following is a summary of the terms and conditions in connection with the proposed Lease Agreement:

1. The Lease Agreement shall be for a three (3) year term to begin on September 1, 2011.

ber 1, 2017 and may be renewed upon terms and conditions as may be agreed upon by the perspective Tenant and the Borough.
2. The minimum monthly rent shall be \$3,000.00 and the successful bidder shall be required to provide a bank or certified check representing the first month's rent based upon the bidder's proposal. Upon execution of the Lease Agreement, the successful bidder shall be required to deposit with the Borough a security deposit representing three (3) month's rent.

3. During the proposed tenancy, the Tenant shall be responsible for all improvements to the property and for the maintenance of same, except that the Tenant shall have no obligation pertaining to roof repairs or replacement of the heating system. The foregoing does not include each and every term of the proposed Lease Agreement, which terms and conditions are set forth in the bid package and the Lease Agreement made a part thereof (Appendix A).

A bidder's proposal must be placed in a sealed envelope and addressed to the Borough Clerk, Borough of Rockleigh, 26 Rockleigh Road, Rockleigh, New Jersey 07647, with the name of the bidder and the words "Bid For Lease of Borough Property" printed thereon. Bid proposals must be delivered by hand, certified mail/return receipt requested, or by overnight courier to the Borough Clerk at the Municipal Building during normal business hours, but no later than 10:00 a.m. on Thursday, August 3, 2017. All such bid proposals will be accepted.

The Mayor and Council reserve the right to reject any or all bids for any cause whatsoever. In addition, the Borough reserves the right to waive any technical or non-conforming condition, whether material or otherwise, to investigate the business and background of a bidder as deemed appropriate, and to abandon the process pertaining to the leasing of the property at any time for any reason. All bids are subject to the provisions of the Local Laws and Regulations.

By order of the Mayor and Council of the Borough of Rockleigh.
MARCELLA GIAMPICCOLO
Borough Clerk
Tel: 201-261-7617 Fax: 201-261-7617

July 20, 27, 2017 • PDB: 5Z07:30 (128) 4162225

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Dietas

El yogurt griego es una merienda saludable

(MS)

Las modas de alimentación saludable van y vienen, y lo que hoy se considera sano, podría ser calificado de perjudicial mañana, y los alimentos que hoy atentan contra la salud, podrían ser beneficiosos a la larga. Un alimento que está ganando cada vez más el apoyo de los

gurús de la buena forma física y los profesionales médicos es el yogurt griego. El yogurt en sí es uno de esos alimentos que parece tener firmes simpatizantes, quienes reconocen su valor nutricional, y sus detractores, quienes afirman que su textura es demasiado desagradable al estómago. A diferencia del yogurt tradicional al estilo estadounidense, el yo-



gurt griego tiene una textura más gruesa que sus contrapartes. Esa textura más gruesa y rica lo hace más atractivo a quienes consideran poco apetecible la textura del yogurt menos grueso. Pero el yogurt griego proporciona una serie de beneficios que van más allá de lo agradable de su textura.

El yogurt griego cuenta con un potencial de proteínas más intenso. El yogurt griego ofrece generalmente muchas más proteínas que sus contrapartes estadounidenses. Las proteínas son beneficiosas de muchas maneras para el organismo, pues contribuyen a la salud ósea,

muscular, de los cartilagos y la piel. Aunque las dietas con abundantes proteínas están de moda, es importante consultar con el médico para determinar qué cantidad de proteínas es ideal para cada persona. Aún así, una ración de seis onzas de yogurt griego puede proporcionar hasta 15 gramos de proteínas. O sea, hasta tres veces más proteínas de lo que ofrece una ración similar del yogurt sin grasa estadounidense.

Ayuda con problemas intestinales

El yogurt griego ayuda a solucionar problemas intestinales. Cerca de 60 millones de estadounidenses sufren del síndrome de colon irritable (SCI), un trastorno incómodo caracterizado por dolor y molestias abdominales. Y el dolor puede ser intenso hasta que la persona que sufre de SCI evacúa los intestinos.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY AVISO PÚBLICO DE ACEPTACIÓN DEL MAPA DE EXPOSICIÓN AL RUIDO AEROPUERTO TETERBORO

En conformidad con la Sección 107(a) y (b) [Título 49 del Código de los Estados Unidos, Sección 47506] de la Ley de Seguridad y Abatimiento de Ruido en Aeropuertos de 1979, según enmendada, por medio del presente se informa que el 15 de junio de 2017, la Administración Federal de Aviación ha completado su evaluación de Mapas de Exposición al Ruido para el Aeropuerto Teterboro, ubicado en el Condado de Bergen, Nueva Jersey, que se preparó en conformidad con el Título 14 del Código de Reglamentos Federales, Parte 150 (14 CFR Parte 150) y la ha aceptado formalmente. Estos mapas y documentación de apoyo están accesibles para revisión del público en Internet: http://panynjpart150.com/TEB_FNEM.asp

Dietas

Combatiendo la celulitis con la alimentación

FasterNew - Dreamstime

Te recomendamos algunos alimentos con propiedades anticelulíticas para que tu misma puedas elaborar tu propia dieta personalizada. Pero primero unos consejos generales: Ten en cuenta beber como mínimo 2 litros de agua

al día. Cocinar los alimentos a la plancha, al vapor o de forma sencilla, en todo caso evitando los fritos. Como siempre para hacer más efectiva la dieta te recomendamos paseos de 30-45 minutos diarios o algún otro tipo de actividad física ligera. Como tratamientos colaterales



optar por la liposucción. Se trata de inyectar a nivel subcutáneo sustancias homeopáticas que destruyen y eliminan el tejido adipocitario (la grasa). Aceite de rosa mosqueta. Extraído de plantas medicinales de origen latinoamericano. Son potentes regeneradores de la piel. Corrigiendo la celulitis, estrías, cicatrices queloides, manchas en la piel, etc. Suele encontrarse a la venta en Herboristerías y clínicas de belleza o cosmética.

Alimentación efectiva

Una alimentación para combatir la celulitis debe incluir: **UN ALTO APORTE PROTEICO:**
- Pollo
- Pescado
- Fiambre de pavo
- Queso fresco
- Clara de huevo (en tortillas puedes usar 3claras y 1 yema)
- Un alto aporte de verduras y hortalizas variadas.

que pueden ayudar en casos más revesidos o difíciles, te aconsejamos que sigas alguna de estas últimas novedades en tratamiento contra la celulitis no invasivos. El primer y más efectivo tratamiento es la mesoterapia. Es el tratamiento de elección en los casos en que no se puede

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY AVISO PÚBLICO DE ACEPTACIÓN DEL MAPA DE EXPOSICIÓN AL RUIDO AEROPUERTO TETERBORO

En conformidad con la Sección 107(a) y (b) [Título 49 del Código de los Estados Unidos, Sección 47506] de la Ley de Seguridad y Abatimiento de Ruido en Aeropuertos de 1979, según enmendada, por medio del presente se informa que el 15 de junio de 2017, la Administración Federal de Aviación ha completado su evaluación de Mapas de Exposición al Ruido para el Aeropuerto Teterboro, ubicado en el Condado de Bergen, Nueva Jersey, que se preparó en conformidad con el Título 14 del Código de Reglamentos Federales, Parte 150 (14 CFR Parte 150) y la ha aceptado formalmente. Estos mapas y documentación de apoyo están accesibles para revisión del público en Internet: http://panynjpart150.com/TEB_FNEM.asp

EL ALCALDE NICHOLAS J. SACCO Y EL COMISIONADO DE SEGURIDAD PÚBLICA ALLEN PASCUAL PRESENTAN:



CONTRA EL CRIMEN MARTES, 1º DE AGOSTO

¡GRATIS
Comida, bebidas, música
y diversión para todos!
Ubicaciones:

- LAYLOR SENIOR CITIZEN BUILDING [4:00 PM-6:00 PM]
6121-6131 Grand Ave
- KENNEDY SCHOOL [4:30 PM-7:30 PM]
1210 11th Street
- MEADOWVIEW VILLAGE [4:30 PM-7:30 PM]
58th-61st on Meadowview Ave
- APPLIED HOUSING [5:00 PM-8:00 PM]
1108 26th Street
- POLICEMAN'S PARK [5:00 PM-8:00 PM]
37th and Union Turnpike
- 86TH STREET PARK [6:30 PM-9:00 PM]
BROADWAY BETWEEN 73RD AND 76TH [6:30 PM-9:30 PM]

AUDIENCIAS PÚBLICAS PARA LA DECLARACIÓN DE IMPACTOS AMBIENTALES BORRADOR Para el Proyecto del Túnel Hudson

La Administración Federal de Ferrocarriles (FRA) y NJ TRANSIT han preparado una Declaración de Impactos Ambientales Borrador (DEIS) para evaluar el Proyecto del Túnel Hudson. El Proyecto pretende preservar la funcionalidad actual del Corredor Nordeste (NEC) cruce ferroviario del Río Hudson entre Nueva Jersey y Nueva York y reforzar la resistencia del NEC. La DEIS del Proyecto del Túnel de Hudson evalúa una Alternativa Preferida que consiste en la construcción de un nuevo túnel de ferrocarril de pasajeros entre Secaucus Junction, Nueva Jersey y Pennsylvania Station de Nueva York (PSNY), junto con la infraestructura que lo acompaña, para permitir la rehabilitación del Túnel North River existente, sin interrupción de servicio mayor del NEC de NJ TRANSIT y Amtrak. La DEIS también contiene el Acuerdo Programático Borrador preparado en conformidad con la Sección 106 del Acto Nacional de Conservación Histórica, una ley que exige la consideración de los efectos culturales, históricos y arqueológicos y cómo pueden ser evitados, minimizados o mitigados.

1 de agosto de 2017	3 de agosto de 2017	10 de agosto de 2017
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impartido por Jessica Pereira y Shino Aguakate de El Vacillon de la Mañana siendo coordinador y maestro de ceremonia de este taller. Este Dominicano no sólo vive de los medios de la comunicación ya que también es mánager de unos de los restaurantes de la cadena Masamushi restaurant.

¿Qué te motivó a ser parte de los medios de prensa? Fue mi sueño, es mi pasión comunicar a un público que desea informarse de lo que está pasando en el mundo de manera constructiva y divertida.

¿Cuándo decides venir a los Estados Unidos a forjar tu carrera en los medios? Yo emigré a este país cuando a penas tenía 6 años pero no fue hasta que cumplí los 19 años que comencé a vivir ese sueño que ya llevaba por dentro y esto fue con el programa El Farandulazo gracias a quien me descubriera en ese entonces Carmen Martínez.

¿Cuál es tu papel en los medios en este momento? Wow un sueño, ya gracias a Dios estoy exponiendo mi talento a través de Telemundo 47 en el Show de Jackie y también como corresponsal de entretenimiento para Aneury La Revista transmitido por Telemundo canal 12 en la República Dominicana.

Tus Consejos para las personas que desean entrar a la prensa. Este es un medio de mucha competencia y vivimos en NY una ciudad cosmopolitana y la clave para poder brillar es la preparación, dedicación y sobre todo las ganas de querer lograrlo sin importar cuantas veces nos tropecemos.

¿Cuál es tu proyección en tu carrera como comunicador social? Profesionalismo, alegría, buena información y entrevistas y sobre todo lo que más me interesa proyectar es esa chispa que con mi trabajo

pueda llegar a cada hogar para alegrar los corazones de un público.

Redes sociales para que los lectores te sigan en Instagram, Facebook y en mi canal de YouTube me pueden encontrar como MAIROBIN CARABALLO.



THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY AVISO PÚBLICO DE ACEPTACIÓN DEL MAPA DE EXPOSICIÓN AL RUIDO AEROPUERTO TETERBORO

En conformidad con la Sección 107(a) y (b) [Título 49 del Código de los Estados Unidos, Sección 47506] de la Ley de Seguridad y Abatimiento de Ruido en Aeropuertos de 1979, según enmendada, por medio del presente se informa que el 15 de junio de 2017, la Administración Federal de Aviación ha completado su evaluación de Mapas de Exposición al Ruido para el Aeropuerto Teterboro, ubicado en el Condado de Bergen, Nueva Jersey, que se preparó en conformidad con el Título 14 del Código de Reglamentos Federales, Parte 150 (14 CFR Parte 150) y la ha aceptado formalmente. Estos mapas y documentación de apoyo están accesibles para revisión del público en internet: http://panynjpart150.com/TEB_FNEM.asp

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Carlstadt Seniors

The Carlstadt Senior Friendship Club meets on the 1st and 3rd Wednesdays of the month at 1:30 p.m. at the Civic Center.

Join them for interesting programs, camaraderie and refreshments. Bingo follows the meeting with a jackpot game to sweeten the pot.

Scheduled trips: August 15 Crystal Point Yacht Club, Pt. Pleasant, for show "Cabaret by Sea," August 16 in-house picnic, September 27, San Geronimo Festival at Brownstone, October 23, Sands Casino, and a new added show on December 15, to "Sight & Sound" for the Christmas Show. They will accept persons not members after their own members have signed up for the trips.

Please see Helene at meetings or call her at 201-463-3000. ###

Cancelled Stamps

Thirteen years ago, in 2004, the Kiwanis Club of Hasbrouck Heights started a project collecting cancelled stamps. They came upon a letter from a Sister Ann Mary, a retired Carmelite Sister who was collecting stamps and selling them to dealers.

The money helped children at St. Benedict's Day Nursery and Infant Hospital of Georgetown, St. Vincent of the West Indies. She collected stamps until 2008. In 2008, the AARP Chapter 418 took this project as one of their own. Kiwanis Club has since disbanded.

In August of 2008, the AARP Chapter 418 found another organization that was collecting stamps. After a phone call to them (Ulath Lodge Sons of Norway NLC) in Calumet, MI, they decided to send the cancelled stamps to them.

The Lodge collects and sends the stamps to a facility where they are sorted and packaged to sell to collectors and dealers. The proceeds are donated to the Norwegian Health System to aid physically and mentally challenged children and youth.

In June 2015, the AARP Chapter 418 disbanded. The Leisure Club of Hasbrouck Heights then took over the project. If you would like to help the Leisure Club of Hasbrouck Heights in collecting cancelled stamps, please trim the stamps to 1/4 inch around the stamps.

Old envelopes and postcards are also being collected. If envelopes, postcards etc., are more than 40 years old, please do not cut off the stamps, but save the whole envelope/postcard. The stamps can be dropped off or sent to: The Gazette Newspaper, 345 Boulevard, Hasbrouck Heights, NJ 07604. Or bring them to a Leisure Club meeting. ###

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Lodi American Legion Post 136 Installs Officers

Francis A. Carrasco, a Viet Nam and Purple Heart awardee, was recently installed as Commander of the Joseph M. Lane Post 136, American Legion by Bergen County American Legion Post Commander Frank Jiosi.

In accepting the position, Commander Carrasco praised the Post membership for their support and for their efforts in bringing the Post back from the brink of extinction after the Post 136 home was destroyed by fire. "We are here today because of those members who believed in the ideals of the American Legion and its presence in this community," said Carrasco.

"In 2017 Legion Post 136 is marking our 98th year of service to the community, state and nation, and I am proud to say we will be here to serve future generations."

Also installed were: Senior Vice Commander: Joseph Botas; Vice Commanders: Willie Johnson and Anthony Bua III; Adjutant and Finance Officer: Vincent C. Mariorano; Chaplain: Samuel J. White; Judge Advocate: Philip V. Toronto, Esq.; Service Officer: Robert Monico; Historian: Rob Callen; and Sergeants At Arms: John DeChristofaro and Gary Trippodi. Darren Bavaro, a member of Lyndhurst Post 139, assisted Jiosi in the installation. Provided by Vincent C. Mariorano. ###

Having an Affair?

If your organization is having an event that is open to the public, we can help you tell "everybody" about it. Simply provide the following event details: name, date, times, cost, brief explanation of program features, etc., along with contact information. Send these details at least 45 days prior to the event to: fritz@hasbrouckheights.com or drop them off at: The Gazette Newspaper, 345 Boulevard, Hasbrouck Heights, NJ 07604. ###

Journey Through STEAMPUNK Land August 4-5

Take a Journey Through STEAMPUNK Land is the Free Public Library of Hasbrouck Heights' 11th Annual Summer Bash on Friday, August 4, 2017, from 6:30 p.m. to 1 a.m., Saturday, August 5th.

This journey features costume characters, DIY craft projects, a karaoke sing-off, entertainment, and science experiments geared for families in a Steampunk setting, transporting them to a world of magic, technology, and science.

The Library will be dressed up as it is the Belle Epoch era in France - the late 1800s, a period of scientific, artistic and literary innovation, full of optimism, creativity, and excitement.

Events and exhibits include: • The Magic of Light Painting: a photographer will demonstrate how to make long exposure photos, illuminating bright light so it appears as a neon painting.

• Josh Urban, a musician who specializes in humor and a bluesy, rock-and-roll one-man show, will perform a 45-minute concert.

• A workshop on making musical instruments using found materials.

• Makerspace Alley, where children will have the opportunity to make slime, paper flowers, and build bristle bots - an introductory robot that's powered by toothbrush-style bristles and a tiny motor - along with other DIY crafts.

• Scott Calvin, the "Steampunk Professor," will tell stories and use gadgets to

showcase the magic of physics, the scientific process, and some of the inventors and inventions that have formed the modern world.

• A demonstration of aerodynamics from the Aviation Hall of Fame and Museum of New Jersey in Teterboro.

There will be a late-night movie screening of a 2017 animated feature, rated PG, from approximately 11 p.m. to 1 a.m. While there is no extra cost for the movie, registration is separate for the screening, as seating is limited.

Food will be provided, featuring finger sandwiches of cheese, ham, turkey and roast beef, a caprese-style pasta salad, cupcakes, and pastries and coffee and tea for adults, served in a bistrot style.

Children under 12 are required to be accompanied by a parent or guardian.

The suggested donation is \$5 for children under 12 years old and \$10 for those 12 and above. The last day to RSVP is August 2. Registration must be in-person; no tickets will be sold at the door.

This year's theme, building upon the summer reading tagline "Build a Better World," is meant to inspire the next generation of inventors, innovators and leaders. STEAMPUNK Land, which focuses on Science, Technology, Engineering, Art and Math, fits in with the Library's 100th anniversary, blending the old and new in imaginative ways. For more information, call 201-288-0488. ###

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY NOISE EXPOSURE MAP ACCEPTANCE PUBLIC ANOUNCEMENT TETERBORO AIRPORT

Pursuant to Section 107(a) & (b) [Title 49, United States Code, Section 47506] of the Airport Safety and Noise Abatement Act of 1972, as amended, notice is hereby given that on June 15, 2017, the Federal Aviation Administration has completed its evaluation of, and has formally accepted the Noise Exposure Map for Teterboro Airport, located in Bergen County, New Jersey (see map prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). These maps and supporting documentation are accessible to the public review online at: http://panynjpart150.com/TEB_FNEM.asp

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중앙일보 2017년 7월 20일 목요일

미국/국제 9

미국 5년 만에 광우병...한국, 수입 검역 강화

엘라베마주 11살 암소 광우병 발견
한국, 30개월 미만 쇠고기만 수입
검역 비율 3%→30%로 확대
발병 지역 도축장에선 안 들여와

미국에서 5년 만에 광우병에 걸린 소가 발견됐다. 미국 농무부는 이 사실을 한국 측에 통보했고, 농림축산식품부는 19일 오후 긴급 대책회의를 열고 미국산 쇠고기기에 대한 검역을 강화하기로 했다.

로 넘어가서 잘아 식용 위험에 전혀 노출되지 않았다"고 설명했다. 이어 "이번 발병은 안전에 전혀 영향을 끼치지 않으나 미국의 광우병 위험관리국가(원고 지위) 등급이나 무역 거래에도 아무 지장이 없다"고 덧붙였다. 미국에서 광우병이 발견된 건 이번이 5번째로 마지막으로 발견된 2012년 이후 5년 만이다.

광우병은 크게 전형(classical) BSE와 비전형(atypical) BSE 등 두 가지로 나뉜다. 전형 BSE는 소로 만든 육류분(파우더)이 들어 있는 사료 등 오염된 사료를 섭취해 감염되는 소의 만성 신경성 질병이다.

미국 농무부는 현재 미국에서 한 국가로 쇠고기를 수출할 수 있게 승인된 현지 도축장·가공장은 총 65곳이지만, 광우병이 발견된 엘라베마주에는 한국으로 쇠고기를 수출하는 도축장·가공장이 한 곳도 없다고 밝혔다.

요한 조지훈 해아 한다" "관계 기관에서는 강화된 검역조치를 철저히 시행하고, 관련 규정에 따라 미국 측이 실시한 역학조사 결과를 조속히 받을 수 있도록 미국 측과 협의하라"고 지시했다.

뉴욕 식당체인 CEO "최저임금 인상 뒤 1000명 해고"

애플비 프랜차이즈 운영 자인 댄텔
뉴욕주 최저임금 50% 올리자라적
"1920년대 대공황 때와 같은 상황"
뉴욕 음식점 직원 1000명 해고

하는 건서이지 직원으로 곧 고 제할 예정이라고 했다. 그러면서 "식당은 생존을 위해 사업을 크게 변경

에서 10.5달러로 인상됐고 지난 해말 12달러까지 올랐다. 매스트루도 레스토랑의 일자리는 2010년까지 7%대 증가율을 보이다가 지난해 절반도 안되는 3.4%로 하락했다. 올해 들어서는 2%대 증가율을 보이고 있다.

한편, 댄텔이 직장이 없다면 시간당 100달러의 임금이 무슨 도움이 되나"라고 되물었다. 그는 "합리적 진보주의자들이 과도한 최저임금 상승을 주장한 결과 많은 사람이 도둑을 범하고 있다"고 주장했다.

그런데, 댄텔이 직장이 없다면 시간당 100달러의 임금이 무슨 도움이 되나"라고 되물었다. 그는 "합리적 진보주의자들이 과도한 최저임금 상승을 주장한 결과 많은 사람이 도둑을 범하고 있다"고 주장했다.

"최저임금을 50% 인상한 이후 지난해 1000여 명의 종업원을 해고해야 했습니다. 전체 직원의 3분의 2에 달합니다. 1920년대 대공황 때와 같은 상황이라고 생각합니다."

미국 유력 레스토랑체인 애플비와 뉴욕 프랜차이즈를 운영하는 자인 댄텔(사진)은 최근 뉴욕주 연인원과 가진 인터뷰에서 과도한 최저임금 인상이 '필자녀 필라'로 불려받게 된 상황을 소개했다.

그는 만주강 소독인 앤드류 쿠오노 뉴욕주지사와 빌 드를라치오 뉴욕시장이 추진한 최저임금 인상이 기업과 직원에게 큰 혼란을 안겼을 뿐 아니라 뉴욕을 방문하는 수많은 사람들이 뉴욕의 식당가황에 대해 어이할을 미쳤다고 주장했다.

뉴욕주에서 40개의 애플비 체인을 운영하고 있는 댄텔은 "서빙 종업원 한 명이 3~4 테이백을 팔았는데, 이제는 10 테이백을 팔아야 겨우 한 끼를 살 수 있다"고 말했다. 그는 "그나마 있던 서빙 종업원들도 고객에 편안하고 느끼는 수시로 확인

한편, 댄텔이 직장이 없다면 시간당 100달러의 임금이 무슨 도움이 되나"라고 되물었다. 그는 "합리적 진보주의자들이 과도한 최저임금 상승을 주장한 결과 많은 사람이 도둑을 범하고 있다"고 주장했다.



블루코스트 미로의 길을 향해 떠날 예정인 중국 기업인 황세 부부가 19일 애플비와 나치 최성자 블루코스트 메도리얼을 찾아 후오의 길을 걸어가고 있다. 뉴이와 두에게 모두 다른 장방형 판서들이 붙어있어 도둑의 길은 길을 만 못하고 있다. (AP)

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- 10. 업소 정보 상세보기

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

소음노출지도 수락 발표

테터보로 공항

1979년도 제정 공학 안전 및 소음저감법 수정법 107(a), (b) 및 미국법정 제49편 47506조에 의거하여, 지난 2017년 6월 15일 연방항공청에서는 뉴저지 주 버겐 카운티에 위치한 테터보로 공항에 대해 미국연방규정 제14편 150.114(14 CFR Part 150)에 의거하여 작성된 소음노출지도를 평가 완료하고 본 지도를 공식적으로 수락할 것을 알려 드립니다.

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스북 라이브를 통해 생중계 된
모 단장이 사회를 보며 위안부
녀상 건립의 의의와 중요성 등
대해서도 설명할 예정이며 중
간간 토크쇼 형식으로 관객과
통할 예정이다. 황주영 기

**THE PORT AUTHORITY
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NEW JERSEY**

**소속노출지도 수락 발표
테터보로 공항**

1979년에도 제정 공항 안전 및
수거지킴법 수정법 107(a),
(b)절(미국법정 제49편
47508절)에 의거하여, 지난
2017년 6월 15일
연방항공청에서는 뉴저지 주
버겐 카운티에 위치한 테터보로
공항에 대해 미국연방공정
제14편 150절(14 CFR Part
150)에 의거하여 작성된
소속노출지도 평가를 완료하고
본 지도를 정식으로 수락했음을
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8/3/17

한국/국제 9

미국/국제 9



그날 침식된 시계는 그대로지만... 미시간의 도우와 주민들의 시계가 쓰나미가 덮쳤던 시간에 멈춰있다. 미시간의 리쿠엔타카타에서 산을 깎아 만든 터널을 높이는 작업이 수백년 걸렸다. 250m였던 산이 45m로 줄어들었다. (출처: AP)

쓰나미 휩쓴 곳, 산 깎아 땅 10m 높여

동일본 대지진 6년, 피해현장을 가다

250m였던 산이 45m로 낮아져

리쿠엔타카타엔 12.5m 방파제

아직 가설주택 신세 주민 있지만

"100년간 쓰나미 6번, 복귀해 일어서"



지황한 복귀와 포기할 수 없는 희망...

지난달 29일 첫 일본 이외에 리쿠엔타카타는 신도시 공사 현장 같았다. 안전도를 본 인

부들이 본주하게 움직이고, 골짜기 20여 대와 트랙들이 성립이 오가고 있었다. 인근에 있는 산을 깎아 만든 터널을 높이는 공사가 몇년째 진행 중이다. 그 사이 높이 250m였던 산은 45m까지 깎아 줄어들었다. 지면은 10m로 높아졌다. 또 다른 쓰나미 피해를 막기 위한 작업이다.

2011년 3월 11일, 진도 6(최고 진도 7)의 강진과 30m에 가까운 쓰나미가 리쿠엔타카타를 비롯한 도호쿠지역 해안을 덮쳤다. 리쿠엔타카타 인구 10만의 1에 가까

운 1800명 이상이 숨지거나 행방 불명했다. 중앙일보 취재팀이 대지진 1년 뒤 이곳을 찾았을 때만 해도 쓰나미에 휩쓸린 방파제와 등화대 쓰레기 더미가 곳곳에 놓여 있었다.

그러나 5년반이 지난 지금 리쿠엔타카타에서 대항사의 흔적을 찾기는 쉽지 않았다. 해변엔 높이 12.5m, 길이 2km의 방파제와 광섬유 배관을 깔고 있다. "제대로 보이지 않아 싫다"는 주민도 있지만, 언제 다시 찾아올지 모르는 쓰나미에 대비하기 위한 방책이 마련된 것이다.

리쿠엔타카타에서 남쪽으로 약 60km 떨어진 곳에 있는 미시간의 리쿠엔타카타의 산맥도 비슷했다. 지진과 쓰나미로 1만8000명의 주민

중 5%가 숨지거나 실종됐다. 미시간의 리쿠엔타카타 쓰나미 피해 지역의 지반을 높이는 공사가 진행 중이다. 시간이 6년이 지난 지금도 아직 지기 일로 돌아가지 못한 채 가설주택 생활을 이어가는 세대가 300세대나 됐다. 이 와테현 주민인 야즈마 카에키(67)는 "배도 없고, 침도 없고, 가혹도 않은 채 혼자 사는 고립감이 많다"며 "대피소와 가설주택을 전전하느라 커뮤니티가 제대로 형성되지 않는 게 큰 문제"라고 했다. 정부와 자원은 부족했다. 어떤 일에도 무상으로 배를 제공했었다. 하지만, 3년이 지나도록 배를 받지 못하는 경우가 허다했다. 하지만 이리들속에서도 희망을 지니는 이들이 있었다. 대지진 당

시 마을 전체가 찢어지게 됐던 이 와테현 제삼누마시의 수산물가공업 15개 회사는 2012년 시시오리 가업협동조합을 만들었다. 이들은 공업과 방파제, 사무실 등 돈 돈이 들어가는 생산비를 공동으로 마련했다. 세계 3대 어항으로도 손꼽혔던 지역인만큼, 수산물 가공업을 번성시켰던 노하우를 살려 지역경제를 살려보자는 의기투합했다. 호소 카오루(44)는 협동조합사무장은 "대지진 직후 유류업체에 절반으로 줄었다가. 지금은 전국 20개사로 뿔뚝 났고 있다. 대지진 이전의 60~70% 수준까지 회복했다"고 말했다.

도에서 잘나가는 대기업 영업맨이었던 다카하시 카즈요시(55)씨는 2012년 하얀 일출 도두 연고 리쿠엔타카타로 온 케이스다. 죽은 마을을 되살리고 폐허지역의 젊은이들을 지키고 싶었기 때문이다.

그는 폐허의 땅에서 변화기업을 시작했다. 대지진과 쓰나미 속에서도 살아남은 동계스포츠 센터와 농구, 축구, 파스카면 등 지역 특산품을 판매하는 아이디어를 냈다. 제품의 연구개발과 공장 설비 등에 1억5000만 엔(약 15억원)

을 쏟아부은 끝에 5년 만에 판로가 열렸다. 그 사이 회사 직원은 3명에서 20여 명으로 늘었고, 그날 보고 용기내 회사를 사러한 젊은이도 3명이나 나왔다. 그는 "지역 젊은이들이 꿈을 꿀 수 있는 환경을 만들고 싶다"고 말했다.

할 길은 부족은 생각하다. 최근 미시간산리쿠엔타카타 현을 연 소망되는 시급 1200엔(약 1만3000원) 일본 현금 최저임금 848엔)에도 못미치는 실정이다. 일 자리를 만들어도 사람을 구하지 못하고, 그러다 보니 마을이 활기를 찾지 못하는 악순환이다.

하지만 주민들은 희망을 잃지 않고 있었다. 미시간의 도우와 주민들은 마을회관의 시계를 2011년 쓰나미가 덮쳤던 시간에 맞춰 놓고 매일 복귀 의지를 다지고 있었다. 미시간산리쿠엔타카타 주민들이 사는 "100여 년간 6번의 쓰나미가 왔고, 그때마다 마을 사람들이 복귀에 매달렸다. 일과 가족, 삶의 역사도 모두 이곳에 있어 다들 지역에 정착하는 건 생각조차 할 수 없다"고 했다.

리쿠엔타카타-미시간산리쿠엔타카타 = 출생지 특산물

영국 여왕 남편 필립공, 65년 만에 은퇴

마지막 일정으로 해병대 퍼레이드에 참관

영국 엘리자베스 2세 여왕(91)의 남편 필립공(95)이 왕실 공식업무에서 손을 뗐다. 2일 버킹엄궁에서 열린 해병대 퍼레이드 참석을 마지막으로였다.

AFP통신 등 외신은 약 70년간 엘리자베스 여왕의 곁을 지닌 필립공이 왕실 업무에서 은퇴했다

고 보도했다. 세계 2차대전 당시 해군 사관 출신인 필립공은 1952년 엘리자베스 여왕이 즉위한 이래 2만2219회의 공무를 단국으로 수행했다. 여왕과 함께한 왕실 활동은 더욱 많다. 637차례의 해외 방문, 5500번의 연설을 했고, 780개 단체의 대표·회원·후원자

역임했다. 두달 전 발왕에 인원에 간여 치료를 받던 필립공은 고령에도 여전히 건장한 편이라고 한다. 지난 몇 년간 왕실 업무를 줄여왔던 필립공은 이번 은퇴로 영국 역사상 가장 오래 왕실 업무를 수행한 통치자의 배우자가 됐다. 남편의 은퇴 이후에도 엘리자베스 여왕은 계속 왕실 업무를 수행할 예정이다. 필립공 역시 일부 행사에는 참석할 것이라고 AFP통신은 전했다.



왕실 업무에서 은퇴하는 영국 엘리자베스 여왕의 남편 필립공(2월(현지시각)) 마지막 공식 일정으로 해병대 퍼레이드를 참관하고 있다. (AP)

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- 6. 업소 정보: 업소 영업시간, 가격, 영업시간, 영업시간, 영업시간

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THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

소음노출지도 수록 발표

테터보로 공항

1979년도 재정 공황 안전 및 소음저감법 수정법 107(a), (b)절(미국법정 제49편 47508절)에 의거하여, 지난 2017년 6월 15일 연방항공청에서는 뉴저지 주 버겐 카운티에 위치한 테터보로 공항에 대해 미국연방규정 제14편 150절(14 CFR Part 150)에 의거하여 작성된 소음노출지도를 평가 완료하고 본 지도를 정식으로 수록했음을 알려 드립니다.

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NFL

JETS

Ex-Cowboy Whitehead claimed off waivers

Connor Hughes For The Star-Ledger

The Jets received a little luck days before the start of training camp.

On Wednesday, the team was awarded ex-Cowboys returner Lucky Whitehead off the waiver wire. A corresponding transaction hasn't been announced.

Whitehead, 25, gives the Jets arguably their best returner since Leon Washington, who last played for the team in 2009. With the Cowboys his first two seasons, Whitehead averaged 25.6 yards per kick return, and 6.9 per punt. He averaged a career-high 28.3 yards per kick return with a long of 79 last year.

The Jets' return game — and special teams as a whole — has been dreadful the last two years, especially in 2016. According to Football Outsiders, the Jets had a weighted special teams efficiency rating of negative 7.1, which ranked last in the NFL. That included a negative 6.4 kick and negative 7.0 punt return rating.

While few doubt Whitehead's ability on the field, his off-the-field character was brought into question this week. Whitehead was accused of shoplifting on June 22, then failed to appear for arraignment on July 6. When a warrant was issued for Whitehead's arrest this week, the Cowboys cut him.

However, Whitehead wasn't ever actually arrested. It was discovered that he had been wrongfully accused by someone who had his social security number and other personal information.

Here's the statement from the Prince William County (Virginia) Police Department, which was released after the Cowboys had waived Whitehead:

Upon reviewing the June 22, 2017 arrest of an individual named "Rodney Darnell Whitehead, Jr.", the police department is confident that the man charged with petit larceny, and who is subsequently being sought on an active warrant for failure to appear in court, is not Lucky Whitehead of the Dallas Cowboys. The man charged on the morning of June 22 was not in possession of identification at the time of the encounter; however, did verbally provide identifying information to officers, which included a name, date of birth, and social security number matching that of Rodney Darnell Whitehead, Jr. Officers then checked this information through the Virginia Department of Motor Vehicles (DMV) database. The DMV photo on file was then used to compare to the man who was in custody. Officers acted in good faith that, at the time, the man in custody was the same man matching the information provided.

At this point, the police department is also confident in confirming that Mr. Whitehead's identity was falsely provided to police during the investigation. The police department is currently seeking the identity of the man involved in the incident. Since the identifying information provided by the arrestee during the investigation was apparently false, the police department is working with the Prince William County Commonwealth Attorney's Office to clear Mr. Whitehead from this investigation. The police department regrets the impact these events had on Mr. Whitehead and his family.

The Cowboys have since stood by their decision to release Whitehead.

"We made a move that we thought was in the best interest of the Dallas Cowboys," coach Jason Garrett told reporters yesterday.

Whitehead figures to take over as the starting kick and punt returner when training camp opens July 28 (the Jets report the day before). He will also receive some reps with the receivers.

In organized team activities and minicamp, rookie running back Eli McGuire received the bulk of the special teams work. While the Jets like his upside at the position, he doesn't have much experience (even in college) returning.



Lucky Whitehead Michael Owen Baker/AP

Kick returns						
Year	Ret	Yds	Avg	Lng	TD	
2016	17	394	23.2	33	0	
2015	16	452	28.3	79	0	
Punt returns						
Year	Ret	Yds	Avg	Lng	TD	
2016	25	195	7.8	39	0	
2015	19	110	5.8	28	0	



Dwayne Harris is trying to bounce back this season. His punt-return average nosedived from 10.0 yards in 2015 to 5.9 yards last season, while his kick-return average dipped from 28.7 yards in 2015 to 24.2 yards. Andrew Mills/NJ Advance Media

GIANTS

Facing Cowboys in opener extra incentive for Harris

Dan Duggan
For The Star-Ledger

Giants wide receiver Dwayne Harris was doing some last-minute fine-tuning on Tuesday before reporting with the rest of his teammates for the start of

training camp on Thursday.

The workout at Caldwell High, which was conducted by trainer Brian Martin, is part of the process for Harris to get ready for his seventh NFL season. The dog days of training camp will follow, but Harris said the Giants will bring added excitement to the practice field due to their season-opening opponent.

The Giants travel to Dallas on Sept. 10 for a Sunday Night Football matchup with the Cowboys. It will be the Giants' third straight opener in Dallas.

"When you come back and that first game is a divi-

sion game against a rivalry opponent, it always helps that rivalry," said Harris. "It definitely adds a little bit of juice because I know what I'm playing for. I know what my mind right and visualizing my opponent. I already know who that's going to be."

Harris has a personal connection to the rivalry. He spent his first four years with the Cowboys before signing a five-year, \$17.5 million deal with the Giants in 2015.

While the rivalry has always been heated, it regained some steam when

the Giants and the Cowboys made the playoffs last season. It was the first time since 2007 that both teams made the playoffs in the same season.

The Giants had the head-to-head bragging rights after sweeping the Cowboys, but Dallas won the NFC East. Unlike teammate Landon Collins, Harris didn't provide any bulletin board material leading into the opener.

"Fortunately, we beat them twice," Harris said. "A lot of people say they're better than us. When you put it on paper, they do look better than us. But when you get on the field, the better team always wins."

Harris finds himself in an odd position, trying to bounce back after the first Pro Bowl selection of his career. His punt-return average nosedived from 10.0 yards in 2015 to 5.9 yards last season, while his kick-return

average dipped from 28.7 yards in 2015 to 24.2 yards last season.

Harris earned the Pro Bowl selection due to his work on coverage units, but the Giants expect more in the return game. Harris was forced to take a \$500,000 pay cut this off-season, slashing his salary from \$2.975 million to \$2.475 million. As part of the restructured contract, \$1.1 million of Harris' 2017 base salary is now guaranteed and he can earn a \$600,000 bonus if he averages 10-plus yards per punt return this season.

Harris is more focused on team goals as he enters training camp.

"For me, get a Super Bowl. That's my No. 1 goal right now," Harris said after catching passes from former Caldwell High and current Trinity College quarterback Sonny Puzzo. "I think that's what's on everybody's mind on our team. Just to get to that big stage. My personal goals are just to continue to get better and get another Pro Bowl if not a Super Bowl."

"If you don't go with the flow of the changes, you're going to be left behind for sure."

— Dave Merritt,
Giants safeties coach

GIANTS

FROM 33

do that than sit in the classroom. They love it."

Rookie offensive lineman Adam Bisnowaty hadn't seen this type of technology before joining the Giants.

"It's like virtual reality," Bisnowaty said.

"You can be looking at things. I think it's the next generation of football. You do the meeting room, you come on the field, but this is something in between. It's great."

It's not just rookies embracing the technology. Sixth-year safety Duke Ihenachor, who signed with the Giants in May, is excited about using the video screen in training camp.

"I think it's great for young guys. It's great for the older guys, too," Ihenachor said.

"Guys like me, we come over here thinking we've seen it all and thinking we've got it figured out. We're used to doing things a certain way, so we're kind of closed when it comes to accepting new ways of learning. But it's definitely a dope way of learning and I'm definitely going to try it out soon."

A handful of NFL teams are being even more progressive, using virtual reality headsets that enable quarterbacks to review practices.

The Giants haven't adopted those headsets yet, but they're steadily increasing their use of technology.

"If you don't go with the flow of the changes, you're going to be left behind for sure," Merritt said.

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RFP No. 1306
The Director of Procurement Services at Montclair State University, Overlook Corporate Center, 150 Clive Road, 3rd Floor, Little Falls, NJ 07424 is issuing Addendum No. 1 to RFP No. 1306 to provide Charter Bus Travel for the Athletics Department.
ADDENDUM ARE AVAILABLE FOR DOWNLOAD AT:
<http://www.montclair.edu/finance/new/index.php?ChannelID=2>
OR,
ADDENDUM MAY BE PICKED UP AT THE UNIVERSITY BETWEEN 8:30 AM AND 4:30 PM.
Notice: Beginning June 5, 2017, the Procurement Services Office will operate on a summer schedule, Monday through Thursday, 8:00 AM to 5:30 PM and closed each Friday.
By Christine Palma, Director of Procurement Services, Montclair State University

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL PLANNING, ARCHITECTURAL AND ENGINEERING SERVICES FOR THE REDEVELOPMENT OF JOHN F. KENNEDY INTERNATIONAL AIRPORT - MASTER PLAN AND NEAR TERM PROGRAM PLANNING
The Port Authority of New York and New Jersey is seeking to identify firms interested in responding to a Request for Proposal (RFP) for the Performance of Expert Professional Planning, Architectural and Engineering Services for the Redevelopment of John F. Kennedy International Airport - Master Plan and Near Term Program Planning.
RFP #40155 may be obtained online at <http://www.panynj.gov/business-opportunities/01proposal-advertisements/mfr/planum-4>, Addenda to the RFP, if any, will be posted on this site. Monitor the advertisement on the web site to ensure your awareness of any changes.
If you have any technical problems accessing the documents online, email us at airports@panynj.gov or call us at (212) 435-4800 for assistance. Your email should include the RFP number, your firm name, email address, contact person, mailing address, and phone number.
It is currently anticipated that proposals shall be due by 2:00 PM on August 10, 2017 or as otherwise indicated in the document. Proposals must have the RFP Number and NDI legal firm name clearly indicated on the inside package.
Seal Proposals: The Port Authority of New York and New Jersey, Procurement Department, 4 WTC, 150 Greenwich Street, 21st Floor, New York, NY 10007, RFP/Proposal Custodian, "SEE RFP DOCUMENT FOR SPECIFIC DELIVERY INSTRUCTIONS"

A VALID PHOTO ID IS REQUIRED TO GAIN ACCESS INTO THE BUILDING. IF YOU ARE HAND DELIVERING YOUR PROPOSAL.
Seal Proposals: The Port Authority of New York and New Jersey, Procurement Department, 4 WTC, 150 Greenwich Street, 21st Floor, New York, NY 10007, RFP/Proposal Custodian, "SEE RFP DOCUMENT FOR SPECIFIC DELIVERY INSTRUCTIONS"

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
Sealed proposals for the following contract will be received by The Port Authority of New York and New Jersey in the office of the Chief Procurement Officer, Attn: Bid Custodian, 4 World Trade Center, 150 Greenwich Street, 21st Floor, New York, NY 10007, until 2:00 PM on the date indicated where the proposals will then be publicly opened and read in the Bid Room.
Contract documents may be seen at the Contract Desk on the 1st Floor, 2 Montgomery Street, Jersey City, NJ and may be obtained upon receipt of a non-refundable payment of \$100.00 per set. If contract documents are not immediately available, prospective bidders are encouraged to pre-order the contract documents by sending the payment of \$100.00 per set in advance. The contract documents will be shipped by overnight delivery at no additional cost as soon as they become available. Only company checks or money orders payable to the order of The Port Authority of New York and New Jersey will be accepted. If checks or money orders for documents are mailed, address them to The Port Authority of New York and New Jersey, Contract Desk, 1st Floor, 2 Montgomery Street, Jersey City, NJ 07302. For availability of contract documents, go to <http://www.panynj.gov/business-opportunities/01proposal-advertisements/mfr/planum-4>. Questions by prospective bidders concerning the contract should be directed only to the person whose name and phone number is listed.
A VALID PHOTO ID IS REQUIRED TO GAIN ACCESS INTO EITHER BUILDING
Contract #14-0101 - Full-Rate Tunnel - Replacement of Existing Tunnel Tiles at Tunnel Walls and Ceiling, Estimate Range: \$1M - \$5M, Bids Due: Wednesday, August 23, 2017. The bidder who is selected for this contract will be responsible for the adjustment of electronic cables and related work at walls and ceiling on the North and South Tubes of the Hoboken Tunnel and the vicinities thereof in the States of New Jersey and New York. See questions and answers document at <http://www.panynj.gov/business-opportunities/01proposal-advertisements/mfr/planum-4>

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
NOISE EXPOSURE MAP ACCEPTANCE
PUBLIC ANNOUNCEMENT
TETERBORO AIRPORT
Pursuant to Section 107(a) & (b) (Title 49, United States Code, Section 47506) of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on June 15, 2017, the Federal Aviation Administration has completed its evaluation of, and has formally accepted the Noise Exposure Maps for Teterboro Airport, located in Bergen County, New Jersey that was prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). These maps and supporting documentation are accessible for public review online at: http://panynjpart150.com/TBEN_FTEM.asp

MAPLEWOOD

Police reports describe response to 2016 fracas

Jessica Mazzola
For The Star-Ledger

After a year of residents questioning what happened during a melee after Maplewood's July 4th fireworks display last year, video, audio and police reports have started to paint a picture of the events that night.

In the video, officers appear to be kicking and punching one of the four juveniles arrested during the incident. The audio of police radio exchanges describes police attempts to subdue the crowd, with commands like "maintain our border," after the teens dispersed, partly into Irvington.

Police declined to comment further on the incident and ongoing investigation.

According to newly released police reports, about 150 to 200 teenagers and young adults congregated near the Maplewood-Irvington border on July 5, 2016, after fireworks.

In police incident reports obtained by NJ Advance Media, officers describe the following responses to the rowdy crowds:

"As officers were attempting to separate two females that were engaged in a physical altercation... a group of 10 to 15 people began to rush at officers. ... The officer

began yelling multiple orders for the group to back up, but they did not comply. ... This officer... deployed (pepper) spray in a horizontal sweeping motion on the group. ... It was at this time the group dispersed."

"Patrol was dispersing and moving a very large and disorderly crowd. ... Multiple subjects from the crowd became extremely irate and refused to comply with orders to get out of the roadway. When an officer attempted to 'guide' one girl away from the crowd, a teen boy grabbed the officer to try to pull him away, a report

says. During a scuffle between the teen and officers, the teen tried to "overtake an officer," the report says. "I attempted to place (the teen) in a pain compliance hold by bending his wrist and arm, and guide him to the ground, which he began to resist, while hanging on to another officer's body. I then struck (the teen) approximately three times in the abdomen/side of his body with a closed fist" and arrested him.

Staff reporters Noah Cohen and Luke Nozicka contributed to this report.

ARRESTS

FROM 1

Maplewood because of insufficient evidence. The Maplewood investigation, which began in April, is ongoing.

The township has hired consulting firm Hillard Heintze to examine what happened on that night and how the department responded to it. Law enforcement consultants interviewed members of the police department Monday and plan to soon talk with residents, said Robert Davis, the firm's senior vice president of law enforcement consulting.

The firm will likely deliver a report of its findings and recommendations to township officials at the end of September, Davis said.

Authorities recently released video and audio clips of the incident, which appear to show officers kicking and punching one of the four arrested. Police declined to comment further on the incident and the ongoing investigation.

During the meeting, the township's mayor said the committee was appalled by the use of excessive force and the decisions made by police leadership on that night last year.

"Tonight, the excuses stop," DeLuca said before announcing his motion to



Mayor Victor DeLuca speaks during a township committee meeting on Tuesday in Maplewood. Luke Nozicka/For The Star-Ledger

demand Cimino's resignation. "Tonight, the delays stop."

Calling the incident sickening and unacceptable, Committee Member Frank McGehee said the group of black youths were "herded like cattle" as police attempted to move them to Irvington.

"There is no greater message than, 'You are not welcome here,' than being driven out of your hometown simply because of the color of your skin," McGehee said. "When did being black become a qualifying factor regarding residency in Maplewood?"

Deputy Mayor Nancy Adams agreed, saying no resident should have to experience what the juveniles did last year.

"This isn't the town that I

love right now," she said.

Before the meeting, more than 100 residents marched against police brutality from near the Hilton Branch Public Library to DeHart Park to protest the township's National Night Out event. Along the way, the group called for Cimino's resignation.

"Hey hey, ho ho, Cimino has got to go," the crowd shouted as they walked past officers and residents gathered at the annual community-building event created for police to interact with the people they serve, and vice versa.

Cimino was briefly reached at his home Tuesday night, but the call went silent after a reporter introduced himself. The police chief did not return a second call seeking comment.

One of the protest organizers, Thomas "Whitaker," a teacher at Columbia High School, said the goal of the march was to demand the firing of Cimino and

the six officers involved in the incident. He said residents were troubled by how authorities handled the incident and how long it took for officials to release the video.

"People are justifiably upset at the delay and even more upset at what was revealed on the audio and video recording," he said. "We're here tonight to demand justice."

Walter Fields, chairman of the Black Parents Workshop community group, sent a letter Wednesday asking the state Attorney General's Office to oversee the police department and launch its own investigation. Fields said the video was eye-opening to many in a community that prides itself on diversity and inclusion.

"It was a shock to many because we thought we were not that type of community," he said. "To see our children abused like that really sent a chill through our hearts."

Avery Julien, a recent high school graduate who is running for a spot on the Board of Education that oversees the South Orange Maplewood School District, said he was infuriated by the incident in which a person he knew was allegedly kicked and punched by officers.

"I had a realization that could have happened to me," he said.

Staff writers Jessica Mazzola and Paul Milo contributed to this report.

NEWARK

FROM 1

set a date for the local board to resume its full authority.

The commissioner's recommendation is a pivotal step toward giving the Newark School Advisory Board the power to hire and fire its own schools chief. Since 1995, the state has appointed the district's superintendent, who has veto power over decisions by the board.

"As the transition to local control begins, it is important that those of us entrusted by the public remember that with power comes responsibility," Harrington wrote. "The people of Newark are entitled to an orderly and collaborative transition that is solely focused on the interests of its 50,000 children. It is my hope that the leaders of Newark will fully embrace this commitment."

The state board Wednesday voted to certify the Quality Single Accountability System scores, which Harrington called a monumental step in the district's progress.

A vote to return local control is expected as early as the board's meeting next month. President Arcelio Aponte said.

"It's a particularly proud moment for me, as a son of the city of Newark and the public school system of Newark, to be in a position that returns local control," said Aponte, who graduated from Eastside High School.

The state took over the district more than 20 years ago, striving to fix a system said to be riddled by corruption, crumbling facilities and low-performing students.

The QSAC, which is the state's way of monitoring schools, gives the state the power to take over a district. It measures a district's performance in five areas: instruction and program; personnel; fiscal management; operations; and governance.

Over the last decade, the state has returned control of fiscal management, personnel and operations to the board. The district must earn above an 80 percent in its QSAC review in each area to regain control of it.

In May, the state reviewed the areas of governance (which allows the board to hire a superintendent) and instruction and program. The district earned a 92 percent in instruction and program and a 100 percent in governance, according to results released by the state this week.

Cerf said he was delighted the district had exceeded the QSAC threshold in all areas.

"We look forward to working with the State Board of Education, the commissioner and our local school board to con-

tinue this momentum, and to meet the necessary benchmarks to officially secure full local control for the Newark community," he said in a statement.

After the state board vote, the commissioner will work in collaboration with the district to compile a transition plan by the end of 2017. The commissioner will then present the plan to the local school board.

'A COMMUNITY DECISION'

At that point, the school board will shed its advisory title and receive official control of its 36,000-student district.

It's not clear what the transition plan will say, but it will likely outline the process for selecting a new superintendent and expectations for the local board.

"I can guarantee that it will be a community decision, that it will not be a board decision, not a mayor decision, not a school board decision, but a community decision," Cerf said.

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THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

REQUEST FOR BIDS

Sealed proposals for the following contract will be received by The Port Authority of New York and New Jersey in the office of the Chief Procurement Officer, 150 Greenwich Street, 21st Floor, New York, NY 10007, until 2:30 PM on the date indicated where the proposals will then be publicly opened and read in the Bid Room.

Contract documents may be seen at the Contract Desk on the 1st Floor, 21 Montgomery Street, Jersey City, NJ and may be obtained upon receipt of a non-refundable payment of \$100.00 per set. Contract documents are not immediately available; prospective bidders are encouraged to peruse the contract documents by sending the payment of \$100.00 per set in advance. The documents will be shipped by overnight delivery at no additional cost as soon as they become available. Only company checks or money orders payable to the order of The Port Authority of New York and New Jersey will be accepted. If checks or money orders for documents are mailed, address them to The Port Authority of New York and New Jersey, Contract Desk, 1st Floor, 21 Montgomery Street, Jersey City, NJ 07302. For availability of contract documents, go to <http://www.panynj.gov/bids> or <mailto:procurement@panynj.gov>. Questions by prospective bidders concerning the contract should be directed only to the person whose name and phone number is listed.

A VALID PHOTO ID IS REQUIRED TO GAIN ACCESS INTO EITHER BUILDING.

Contract #F45072 - John F. Kennedy International Airport - Fuel Tank Infrastructure Repair in New York. Contract Range: \$1M - \$5M. Bids Due: Tuesday, August 29, 2017. The work under this contract consists generally of repair and installation of fuel tank infrastructure including underground piping, storage tanks, valves, drains and other fuel tank infrastructure associated components; site work associated with fuel tank infrastructure repair and installation; including excavation, backfill, pipe bedding, piping, splicing, marking, landscaping, shoring, cribbing, maintenance of traffic and work area protection and related work at various locations at John F. Kennedy International Airport, Queens, New York. It is ordered by Engineer and in accordance with Work Order(s) issued by the Engineer. For questions, call Gustavo Ortiz at (212) 435-6864 or email gustavo.ortiz@panynj.gov. The contract documents are available at:

1. The bidder must complete the following:

a. That bidder has a minimum of five (5) years of continuous experience as a general contractor performing similar type of work.

b. That bidder has a minimum of five (5) years of experience with the coordination and management of various fuel tank infrastructure and associated components.

2. That the bidder is currently performing the repair and installation of the fuel tank infrastructure work has the following qualifications:

a. A minimum of five (5) years working on contracts comparable in type and complexity to the work of this Contract.

b. Completed or substantially completed at least two (2) contracts comparable in type and complexity to the work of this Contract.

c. The entity's Project Manager must have a minimum of five (5) years construction experience on contracts comparable in complexity involving multiple areas of an airport facility in a signed manner.

d. The entity's Safety Superintendent must have a minimum of five (5) years construction experience on contracts comparable in type (repairing and installation of fuel tank infrastructure and associated components) and complexity involving multiple areas of an airport facility in a signed manner.

e. The entity's Safety Project Manager and Superintendent shall have experience with the scope of work of this Contract.

A Proposal submitted by a bidder who does not meet the prerequisite Qualification Information requirements will be considered non-responsive and the bidder's Proposal will not be eligible for acceptance by the Authority.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

NOISE EXPOSURE MAP ACCEPTANCE

PUBLIC ANNOUNCEMENT

TETERBORO AIRPORT

Pursuant to Section 107(a) & (b) (Title 46, United States Code, Section 47506) of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on June 15, 2017, the Federal Aviation Administration has completed its evaluation of, and has formally accepted the Noise Exposure Maps for Teterboro Airport, located in Bergen County, New Jersey that was prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). These maps and supporting documentation are accessible for public review online at: http://panynj.gov/part150.com/TEB_FNEM.asp

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

REQUEST FOR BIDS

Sealed Bids for the following contract(s) will be accepted at the address indicated below until 11:00 am on the date indicated and will then be publicly opened and read in the bid room. Sealed bids to: The Port Authority of NY & NJ, Attn: BIDDING Coordinator, Procurement Dept., 4 World Trade Center, 150 Greenwich St, 21st Floor, New York, NY 10007.

R0474 Maintenance and Repair Services of Automatic Doors at Newark Liberty International Airport (EWI) - Three (3) Year Contract, DESCRIPTION: The Port Authority will conduct a Facility Inspection for all parties interested in submitting a bid for this Contract, on Monday, August 14, 2017 at 10:00 am. All interested parties should meet at Newark Liberty International Airport, Building 80, Electrical Maintenance Unit, 1st Floor, Room 107, Newark, NJ 07114. Please contact Robert Graess (rgraess@panynj.gov) or later than two (2) business days preceding the scheduled date to confirm attendance and/or receive verbal directions. PHOTO ID REQUIRED TO ATTEND THE FACILITY INSPECTION. Bids Due DATE: 08/23/2017

Solicitation documents available online at: www.panynj.gov/bids or <mailto:procurement@panynj.gov>. Address to the bid, if any, will be posted at this site. Monitor the advertisement on the website to ensure your awareness of any changes. If you have any technical problems accessing the documents online, email us at procurement@panynj.gov or call us at (212) 435-4600 for assistance.

A VALID PHOTO ID IS REQUIRED TO GAIN ACCESS INTO THE BUILDING. IF YOU ARE HAND DELIVERING AND/OR ATTENDING THE BID OPENING.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL SERVICES FOR THE CONSTRUCTION OF CONCRETE INSPECTION, SAMPLING AND TESTING SERVICES AS REQUESTED ON A "CALL" BASIS DURING 2018-2021

The Port Authority of New York and New Jersey is seeking to identify firms interested in responding to a Request for Proposal (RFP) for the Performance of Expert Professional Structural Concrete Inspection, Sampling and Testing Services As Requested on a "Call" Basis During 2018-2021.

RFP #A0474 may be obtained online at: <http://www.panynj.gov/bids> or <mailto:procurement@panynj.gov>. Address to the bid, if any, will be posted at this site. Monitor the advertisement on the web site to ensure your awareness of any changes. If you have any technical problems accessing the documents online, email us at procurement@panynj.gov or call us at (212) 435-4600 for assistance. Your email should include the RFP number, your firm name, email address, contact person, mailing address, and phone number. If you currently anticipate that proposals will be due by 2:00 PM on August 18, 2017 or as otherwise indicated in the document, Proposals should be submitted by 11:00 am (New York time) daily indicated on the outside package.

Send Proposals to: The Port Authority of New York and New Jersey, Procurement Department, 4 World Trade Center, 21st Floor, New York, NY 10007. Attention: RFP #A0474.

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Send Proposals to: The Port Authority of New York and New Jersey, Procurement Department, 4 World Trade Center, 21st Floor, New York, NY 10007. Attention: RFP #A0474.

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Garfield agency to explore redevelopment opportunities

KRISTIE CATTAFI
STAFF WRITER, @KRISTIECATTAFI

GARFIELD: The mayor is looking for new opportunities for the city's redevelopment agency to explore, including factories next to the middle school and at the Babe Ruth baseball field.

Mayor Richard Rigo-
glio said the main priority is still development in the first ward and revitalizing Passaic Street.

"We are trying to revitalize Garfield," Passaic Street redevelopment could take many years and we are looking for new short-term goals," Rigo-
glio said.

While the redevelopment process continues for Passaic Street, Rigo-
glio said he wants the city to continue moving forward and look at new options.

An old factory site at 141 Lanza Ave., next to the middle school and Columbus Park and across from Plauderville train station, could offer new develop-

ment possibilities.

The Lanza Avenue property is the former home to the Forstmann mills plant, which was a large employer of residents until it went out of business several years ago, City Manager Tom Duch said. Since then, smaller warehouse businesses have been on the property, such as a self-storage facility.

"The property is extremely old and disintegrating," Duch said. "In the future, it could be considered for redevelopment."

The other location, Columbus Park, is home to the Babe Ruth league and a monument of Christopher Columbus and is across the street from a train station.

The field is only used for eight weeks of the year for the Babe Ruth League, which has a couple of teams, according to Rigo-
glio. He said the baseball games can be relocated to 20th Century Field.

The mayor's vision for the properties includes mix-use with residences on top of stores and restaurants.

A resolution that includes both properties as redevelopment potentials was scheduled to be discussed at the July 25 council meeting.

Passaic Street redevelopment

In May, with the hope of revitalizing the area around the Passaic Street train station and gaining Transit Village status, the redevelopment agency recommended six blocks in the 1st Ward be designated as a redevelopment area.

The area includes Palisade Avenue, Passaic Street, Somerset Street, Hepworth Place, Midland Avenue and Atlantic Street.

It is zoned for mixed-use and is home to residential, commercial and industrial properties. The study area includes 27 lots

plus a vacated portion of the properties includes mix-use with residences on top of stores and restaurants.

The plan is now in the hands of planning board members, who will review the proposal and hold public meetings. Duch has said the entire process will be lengthy.

The first public meeting and a presentation on the redevelopment area and possible condemnation is scheduled for July 27 at 7:30 p.m.

The properties include two single-family homes, four two-family homes, 28 apartment units, two houses of worship and the Alfred J. Thomas Home for Veterans Program, an eight-bed transitional housing program for homeless veterans.

Although 11 of 27 properties do not meet the redevelopment criteria, Local Redevelopment Housing Law allows the properties' inclusion to make way for redevelopment.

Email: cattafi@northjersey.com



KRISTIE CATTAFI/NORTHERJSEY.COM
An old warehouse property in Garfield, next to the middle school, is being explored for possible redevelopment.

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THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY NOISE EXPOSURE MAP ACCEPTANCE PUBLIC ANNOUNCEMENT TETERBORO AIRPORT

Pursuant to Section 107(a) & (b) [Title 49, United States Code, Section 47506] of the Airport Safety and Noise Abatement Act of 1979, as amended, notice is hereby given that on **June 15, 2017**, the Federal Aviation Administration has completed its evaluation of, and has formally accepted the Noise Exposure Maps for **Teterboro Airport**, located in **Bergen County, New Jersey** that was prepared pursuant to Title 14, Code of Federal Regulations, Part 150 (14 CFR Part 150). These maps and supporting documentation are accessible for public review online at: http://panynjpart150.com/TEB_FNEM.asp

10 Thursday, August 3, 2017 Community News 5

Team on cutting edge of shark research

JESSICA PRESINZANO
STAFF WRITER, @PRESINZANOJ

WAYNE – Every week is "shark week" for Dr. Martin Becker and his undergraduate student research team at William Paterson University. However, it hasn't stopped them from keeping up with the Discovery Channel's weeklong shark

craze. "I won the bet that [Michael] Phelps was going to lose to the great white. I don't think the shark even knew they were racing," Becker said with a chuckle, referring to the simulated race televised on Sunday between the Olympian and the shark, which kicked off "shark week."

The shark expert is leading a small research team tasked with documenting changes in ocean chemistry and temperature over millennia and how those changes have affected sharks.

In their laboratory at William Paterson University, undergraduates Rich Plattel of Rochelle Park, Chris Gocklin of Vernon and Fatima Popcakova of Lodi mark their progress with the two dozen samples on a glass window of a fume hood.

When a shark loses a tooth, one of the 40,000 it may lose in a lifetime, that tooth serves as a "fingerprint" of the state of the ocean, including its temperature and mineral content at the time, said Becker.

The team is using a dozen contemporary shark species including makos and great white sharks as a control group for its research. Once mineral concentrations and other data have been logged, the students begin testing their ancient shark counterparts to draw conclusions and fill in the blanks of what ocean conditions were millions of years ago.

On Monday morning Plattel was scraping an enamel sample of a fossilized megalodon tooth — about 2.5 million years old — with a dental drill. Then he ran the white powder



AMY NEWMANN/NORTHERJSEY.COM
William Paterson University professor Martin Becker of Wayne holds teeth from goblin sharks that are more than 70 million years old and were found in Marlboro.

through an X-ray diffraction machine to analyze the molecular structure of the enamel and the concentration of fluorapatite, a chief component of teeth.

The data are laid against a "pure" library sample of various components, he said. The purpose is to rule out contamination in the samples, which may skew results. It's a very real concern when your specimens have been lying in sediment for hundreds of thousands of years, according to the research team.

"So far [the samples] have held up pretty well" through the test of time, said Plattel, a chemistry major with his sights set on becoming a professor.

Becker, 51, a former commercial bay clammer, environmental scientist and paleontologist at the university, has collected contemporary shark teeth from shores as well as ancient samples 100 miles from the nearest shoreline in his three decades of research.

The samples the students are examining originated in Japan, Eastern Europe and the coasts of



PHOTOS BY AMY NEWMANN/NORTHERJSEY.COM
A 2 million-year-old tooth, from a megalodon shark.

eastern and western North America, according to Becker. Some were personally obtained by him, while others are from museums or aquariums, he said.

Because the samples have been lying in sediment for as long as 200 million years, it is important to separate what is part of the tooth's structure from how it was affected by the sediment where it was found, said the Wayne resident.

It's just one of a battery of tests the samples undergo, including tests to determine the oxygen and carbon isotopes present in a sample.

See SHARKS, Page 11

RELIGIOUS EVENTS

Zion Lutheran Church

111 Midland Ave., Garfield
» **Healing service:** Aug. 12 and Sept. 16 at 4:30 p.m. Healing prayers, anointing and laying on of hands. Call 646-321-3737.

Most Sacred Heart of Jesus

127 Paterson Avenue, Wallington, 973-778-7405. <http://www.mostsacredheart.org/>
» **Beefsteak and Mini Tricky Tray:** Sept. 29 in the Great Hall. Doors open 6 p.m. \$40 per person includes dinner, coffee/tea and dessert, BYOB, but ice, soda and water available. No one under 18 years old will be admitted. Entertainment provided by Anthony Tabish. Seating is by reservation only and tickets

may be purchased at the rectory during business hours. You can also mail your name, address, phone number and number of tickets available to the church, with the letter labeled "Attention: Rosary Confraternity Beefsteak." If you wish a table of eight or 10, please submit full payments with a printed list of all names of persons to be seated. Checks payable to "Most Sacred Heart Rosary Confraternity." RSVP by Sept. 20.

» **Jesus, the Musical:** March 17, 2018. Be one of the first to see "Jesus," a new, action-packed musical stage adventure that takes you on a miraculous journey alongside the most famous person to ever walk the earth, and the everyday people whose lives he changed forever...a one of a kind, awe-inspiring, family experience. The day's activities will include a leisurely ride to the Amish country, a brief morning stop at the Kitchen Kettle Village for shopping and snacks (time and weather permitting) the performance of "Jesus" and a family style lunch at the famous "Good 'n' Plenty" Restaurant. Cost is \$165 per person for adults and \$115 for children. Bus departs the Most Sacred Heart of Jesus Church at 7 a.m. and returns approximately 6:30 p.m. All reservations are due no later than Jan. 19, 2018, availability permitting. Limited tickets are available. Full payment is due at the time of reservation. Checks should be made payable to "MSH Rosary Confraternity" and mailed to Most Sacred Heart of Jesus Church, 127 Paterson

Avenue, Wallington, NJ 07057, ATTN: Rosary Confraternity. For additional information, call Ginny at 201-715-2087.

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Project

Continued from Page 1

a pilot study that will include field tests, according to EPA Public Information Officer Elias Rodriguez.

The tests will provide critical data needed to evaluate and support the design of one or more treatment technology options in Garfield.

During the pilot study the EPA will be installing and sampling groundwater wells and installing and evaluating specially designed trenches to treat the contaminated groundwater.

"This innovative technology is being evaluated for a pilot study because of their potential to reduce a larger amount of the mass of hexavalent chromium and potentially speed up the cleanup," Rodriguez said.

Preparations for the study will start in early September, with facilities set up in early October. An estimated timeline has groundwater well installation in November and groundwater sampling beginning in early January 2018.

City Manager Tom Duch informed the council of the plans earlier this month and said the city will prepare a community update before the study begins.

The \$1 million was funded in the first quarter of 2018 funds for remedial design work from the EPA.

The EPA's cleanup plan called for a combination of cleanup measures to address the problem in the long term, including treatment of the contaminated groundwater, and restrictions on the use of the groundwater.

Continued contamination

Since 2011, the EPA has spent \$5 million at the site addressing the immediate concerns from hexavalent chromium seeping into area basements.

The chemical can cause cancer and other serious health problems, including kidney and liver damage. When groundwater contaminated by hexavalent chro-

mium evaporates, it can leave behind chromium crystals, which can then adhere to the skin and be accidentally ingested by humans.

The EPA has demolished the factory, removed 5,700 tons of chromium-contaminated soil, 1,150 tons of concrete, 600 cubic yards of debris, 325 drums of hazardous waste and 6,100 gallons of polluted water from the property. The site has been capped.

The EPA has already addressed 14 basements in the community and has an ongoing program of assessing and remediating basements. It has tested more than 500 homes.

Over 750 truckloads of contaminated soil have been taken from the area.

Funding

Garfield is listed as an "orphaned" site since there are no responsible parties left to pay for the cleanup.

The EPA said a total of \$37 million will be needed for remediation. Garfield is on a waiting list for the rest of the funds.

Garfield's Superfund site will have enough funding for the next year before it has to compete for funds with contaminated places across the nation.

Before the EPA can request funds to carry out remedy to the site, it must first complete the remedial design. After that is done, Garfield's site will join the pool of Superfund sites nationwide that need funding for actual construction, Rodriguez explained.

In 2016, the EPA allocated approximately \$200 million from its annual appropriation for construction projects, Rodriguez said.

The limited funding stems from the 1995 expiration of the Superfund tax that was specifically dedicated to finance orphan sites.

The funding could also be reduced. Earlier this year President Donald Trump proposed cuts to the Superfund program of 33 percent, from \$1.092 billion to \$762 million. New Jersey is home to 118 Superfund sites, the highest number in the nation.

Email: cattaf@northjersey.com

5 Community News Thursday, August 24, 2017 11

BERGEN COMMUNITY COLLEGE

Enroll at New Jersey's #1 this Fall
Classes begin Sept. 1

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Express Registration

All services in one spot!

Register for classes • Meet with advisors

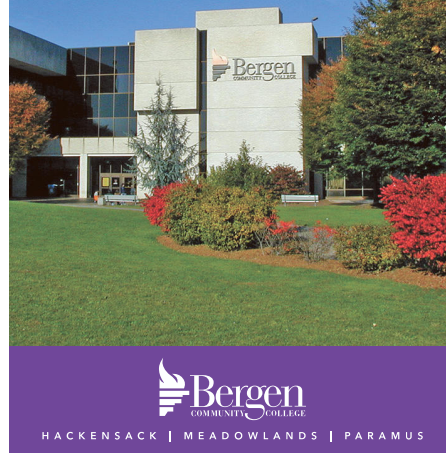
Speak with financial aid specialists

Weekdays - Aug. 24, 25, 28, 29

8:30 a.m. - 6 p.m.

Saturdays - Aug. 19 and 26

10 a.m. - 1 p.m.



HACKENSACK | MEADOWLANDS | PARAMUS

4 Friday, July 21, 2017 Hackensack Chronicle

Apartment project moving forward

Planning Board OKs preliminary plans to redevelop old Holman Moving site

RODRIGO TORREJON
STAFF WRITER, @ROD_TORREJON

six-story apartment building.

The mixed-use building on Main Street, bounded by Anderson Street and Maple Avenue, would include residential units, parking and a space that

could be used for retail. It is one of the latest projects in the city's redevelopment push.

"This property is already designated as in an area in need of redevelopment," said city planner Fran Reiner, of DMR Architects.

The plans are to replace the site of Holman Moving, at 435 Main St., with a mixed-use apartment building. Holman Moving has moved its operations to Randolph, said Bob Holman, one of the company's owners. The Planning Board approved recommending the plans to the City Council in a vote of 6-0.

The project follows the redevelopment area's most common model of



A presentation is given for a new city development planned on the Holman site at 435 Main St.

residential units on the top floors and retail on the bottom floor. The six-story building would have 236 residential units.

The first floor would

include a two-story lobby, residential units facing Anderson Street and parking behind. There is also an amenity area that can be used for retail in

the future, said Reiner.

The second floor would include more parking in the center, surrounded by residential units facing out to the streets.

The third floor would have residential units facing out toward the streets, as well as units facing inward to a shared common space.

The space could be used for a plaza, a firepit area or a communal space, said Reiner.

The top three floors would have residential units facing out to the streets and inward, overlooking this central amenity space.

The next step would be for the City Council to approve the redevelopment plan for the property. A developer would then be able to submit an application for the site.

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THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
NOISE EXPOSURE MAP ACCEPTANCE
PUBLIC ANNOUNCEMENT
TETERBORO AIRPORT

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Englewood student plans to study Chinese in China

FROM REPORTS

Englewood resident David Jansen, a high school student at Bergen County Academies in Hackensack, has been awarded a National Security Language Initiative for Youth scholarship for 2017-18 by the U.S. State Department's Bureau of Educational and Cultural Affairs. He will study Chinese in China for the summer.

Jansen is one of only approximately 600 competitively selected students from across the U.S. who will receive a scholarship to study Arabic, Chinese, Hindi, Korean, Persian or Russian overseas. While in China, he will receive formal instruction and informal language practice as part of an immersion environment.

The NSLI-Y program is part of a multi-agency U.S. government initiative launched in 2006.

The goals of the program include pro-

moting critical language learning among American youth; enhancing cross-cultural understanding and deepening trust; sparking a lifetime of interest in foreign language and culture; and developing the skills to advance international dialogue, compete effectively in the global marketplace, promote mutual understanding and contribute to a more peaceful world.

NSLI-Y is administered by American Councils for International Education in cooperation with AFS-USA, American Cultural Exchange Service, Amideast, I-EARN-USA, Legacy International, the Russian American Foundation, Stony Brook University, the University of Delaware, the University of Minnesota, and the University of Wisconsin.

Applications for 2018-19 NSLI-Y programs are expected to be available at www.nsliforyouth.org in the early fall. For information about U.S. Department of State-sponsored exchange programs visit exchanges.state.gov.



Jansen

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4 Friday, July 28, 2017 Hackensack Chronicle

LIBRARY

Johnson Public Library

274 Main St., Hackensack, johnsonlib.org, 201-343-4169
Adult Department is open 9 a.m. to 9 p.m. from Monday through Thursday, and 9 a.m. to 5 p.m. on Friday and Saturday. Junior Department is open 9 a.m. to 5 p.m. on Monday and Tuesday, 9 a.m. to 8:30 p.m. on Wednesday and Thursday, and 9 a.m. to 5 p.m. on Friday and Saturday. Periodicals Department is open 9 a.m. to 8:30 p.m. from Monday through Thursday, and 9 a.m. to 4:30 p.m. on Friday and Saturday. Limited metered parking is available in the parking lot adjacent to the library entrance on Moore Street. There is a large lot between Main and State with the entrance on Camden with metered parking. There is also a two-hour free lot on Berry Street, between State

and Main.
Gallery and Display Cases: ICAI presents, "Images and Artwork from Latin Artists". ICAI's mission is to open new ways of accessing Latin-American culture and art through activities that help to promote and preserve the different traditions and values of the countries of Latin America.

Language and Technology Classes and Unique Library Services

Contact Michelle at 201-343-4169, ext. 34 or michelle.ferreira@hackensackbccl.org for information.
ESL Conversation Classes: Wednesdays, 10:30 a.m. and Thursdays, 12:30 p.m. Conversation classes are offered to Hackensack residents who are non-native English speakers but who speak a

high-intermediate or advanced English level. This class is designed to help attendees become more comfortable speaking English in a social setting by learning new vocabulary and pronunciation. No registration required.

Children's Department

hackjuv@hackensackbccl.org, 201-343-4169, ext. 14. No registration required unless otherwise noted.
Crafters: Mondays at 3:30 p.m., for grades 3 through 6. Explore different crafts every week in this new take on arts and crafts. Supplies are limited on a first come, first serve basis.
Once Upon a Craft: Mondays at 3:30 p.m., for grades K through 2. Merge story-telling with crafts. Supplies are limited on a first come, first serve basis.
Sensory Story Time: Tuesdays at 10 a.m. For all ages, but geared toward a pre-school group. Hands-on stories and interactive songs in an open and inviting environment. Plenty of manipulatives and fidget toys are waiting to be used.

Bilingual Reading Helper: Tuesdays from 3:15 to 3:45 p.m. For kids through grade 6. If a little extra help is needed with reading comprehension as an ESL student, stop by for one-on-one reading time with a librarian. Spots will be filled on a first come, first serve basis.
Tiny Tots Story Time: Wednesdays at 10 a.m. For ages 2 to 5, featuring colorful stories, a short video and an entertaining craft. This is a great program for kids to start socializing with other kids before they get ready for kindergarten.

Rhythm and Rhyme: Wednesdays at 11:15 a.m. For children up to age 2. This interactive program includes rhymes, songs, instruments, dancing, and much more for children and their fellow caregivers.
Video Game Club: Wednesdays at 3:30 p.m., for grades 3 to 6. Get your game on! Drop in to play with our Wii and Xbox and get creative with

Minecraft and Roblox with fellow video game lovers.
Bilingual Story Time: Thursdays at 11:15 a.m. For ages 3 to 5. Listen to stories in both English and Spanish, watch a short movie and end with a craft. The Young and the Restless for Preschoolers: Thursdays, 10 a.m. Weekly song and dance party for ages 3 to 5. Dance to age-appropriate contemporary songs and the classics; play with shakers, scarves, and more.
Lego League: Thursdays at 3:30 p.m. For grades 2 to 6. Work with other Lego lovers and build planes, spaceships, houses, or anything you can dream up whether you have a million pieces of Legos at home or none at all.
Chess Club: Fridays at 3:30 p.m. For beginners, intermediates and experts, grades 3 to 6. Spots will be allotted to the first 20 children.
Saturday Afternoon at the Movies: Saturdays at 2 p.m. For all ages. Parents and children are welcome.

Teen Summer Events

Free for all Fridays: 2 p.m. to 4 p.m., July 28. All favorite activities so you can choose what you'd like to participate in: Video Games, Board Games, Laptops, Art Supplies, and Perler Bead Magnets.

Adult Programs

For more information, contact Michelle at 201-343-4169 ex. 34 or email michelle.ferreira@hackensackbccl.org.
Veterans Benefit Information: July 28, Drop-in between 1 p.m. and 3 p.m. Come and find out about your VA benefits. Vet Center Services include readjustment counseling, marital and family counseling and substance abuse referral and information.
Inspect Your Gadget: Thursdays, 11 a.m. to noon. Stop by these drop-in sessions and get help you with your mobile device.

2 Friday, August 4, 2017 Hackensack Chronicle

\$2.3M in upgrades planned to City Hall, streets, parks

RODRIGO TORREJON
STAFF WRITER, @ROD_TORREJON

HACKENSACK — The City Council plans to make \$2.3 million in improvements to streets and city-owned buildings, including its own headquarters, the City Hall Complex.

The city plans to use \$455,000 from its coffers and borrow \$1.86 million through bonding, in order to pay for long-term and short-term upgrades to facilities and streets and to fund continuing projects.

"Everything's needed," said James Mangin, the city's chief financial officer.

The City Council approved the introduction of both the bond and capital ordinances in unanimous votes of 5-0. There is a public hearing scheduled for the adoption of each ordinance at the Aug. 22 council meeting.

The short-term improvements are funded using city money, said Mangin, and are usually smaller projects that need upgrading more frequently. The projects generally are funded in five-

year time frames.

Planned short-term improvements to City Hall include heating system upgrades, sound system upgrades, air conditioning renovations and various rug replacements, according to the ordinance.

Also planned are several hardware and software upgrades, including a replacement of the voicemail server, network firewall and computer switch systems in City Hall and the Health Department, which is also part of the complex.

There are also plans to renovate the locker rooms in the Police Department, which is part of the City Hall complex. Upgrades to two parks are also planned. The city will upgrade the light fixtures at a baseball field in Foschini

Park to LED lights and will install a flagpole at Pulaski Park.

The long-term projects, with life spans ranging from 10 to 20 years, include replacing the roof of City Hall for \$120,000. The city also plans to purchase a fire rescue vehicle for \$600,000.

Hackensack also plans to replace its sewer pumping and screening stations, which were damaged during Superstorm Sandy, said Mangin. That project will cost \$400,000.

Additionally, the city will bond for \$476,000 to go toward the Main Street and State Street two-way conversion project, which began this month.

Email: torrejon@northjersey.com

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Dr. Roman has been named to "Top Docs" by Consumer Research Council every year since 2005.

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Utility pole crashes along Route 17 in Hackensack

TOM NOBLE
STAFF WRITER, @TOMNOBLE

HACKENSACK — Two utility poles collapsed into the Crow's Nest parking lot early on July 21, knocking out power to several local businesses and slowing down traffic on Route 17 south.

The crash local forced authorities to close one lane on Route 17 while PSEG removes the damage, said Hackensack Fire Official Justin Derveynik. A county HAZMAT team is currently at the scene cleaning fluid that spilled from the transformers, he said.

The pole broke at its base around 7:45 a.m. without being struck, according to Derveynik. No injuries were reported. Eight customers are currently without power, said PSEG's spokesperson



PROVIDED BY HACKENSACK FIRE DEPARTMENT
A pole fell down in Hackensack early Friday, July 21.

Brooke Houston. Company employees need to set two new poles before power is restored to this evening, she said. PSEG is investigating the collapse, she said.

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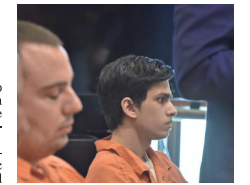
Dalal, Graziano sentenced to 35 years in firebombing case

KAITLYN KANZLER
STAFF WRITER, @KAITLYNKANZLERS
AND **SVETLANA SHKOLNIKOVA**
STAFF WRITER, @SVETASKHO

Aakash Dalal and Anthony Graziano were sentenced last Friday to 35 years in prison for arson attempts targeting five Jewish facilities in North Jersey in December 2011 and January 2012.

The two Lodi men were charged together for spray painting anti-Semitic graffiti at temples in Maywood and Hackensack and attempting to burn down others in Paramus and in Rutherford, where a rabbi and his family awoke to flames spread by Molotov cocktails.

Graziano was tried and found guilty of terrorism and 19 other counts in May; Dalal was tried later and found guilty of



MARKO GEORGE@NORTHJERSEY.COM
Aakash Dalal sits in court during his sentencing on July 28.

terrorism and 16 other counts in November 2016.

RELIGION

Mount Olive Baptist Church

260 Central Ave., Hackensack, 201-489-6888, officemanager@mountolivebaptist.org, mountolivebaptist.org

2017 Summer food Service Program: To make sure children do not go hungry when school is closed, the Mount Olive Baptist Church of Hackensack will be participating in the 2017 Summer Food Service Program until Aug. 25. This is a federal program run through the Food and Nutrition Services, United States Department of Agriculture, every year since 2005.

It provides a free meal to all children 18 and younger in accordance with a menu approved by the state agency.
Summer Jam 2.0: Spend one night with six preachers and help bridge the gap between church and community on Aug. 25 at 7 p.m.
Block Party: The entire city of Hackensack is invited to join the day with dance contests, free haircuts, music, singers, food, and a surprise guest on Aug. 26 from noon to 5 p.m.
Back to school service: Receive free backpacks and school supplies from the church on Aug. 27 at 9:30 a.m.

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Appendix A.2

2016 and 2021 FAA Accepted Noise Exposure Maps (June 15, 2017)

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Teterboro Airport

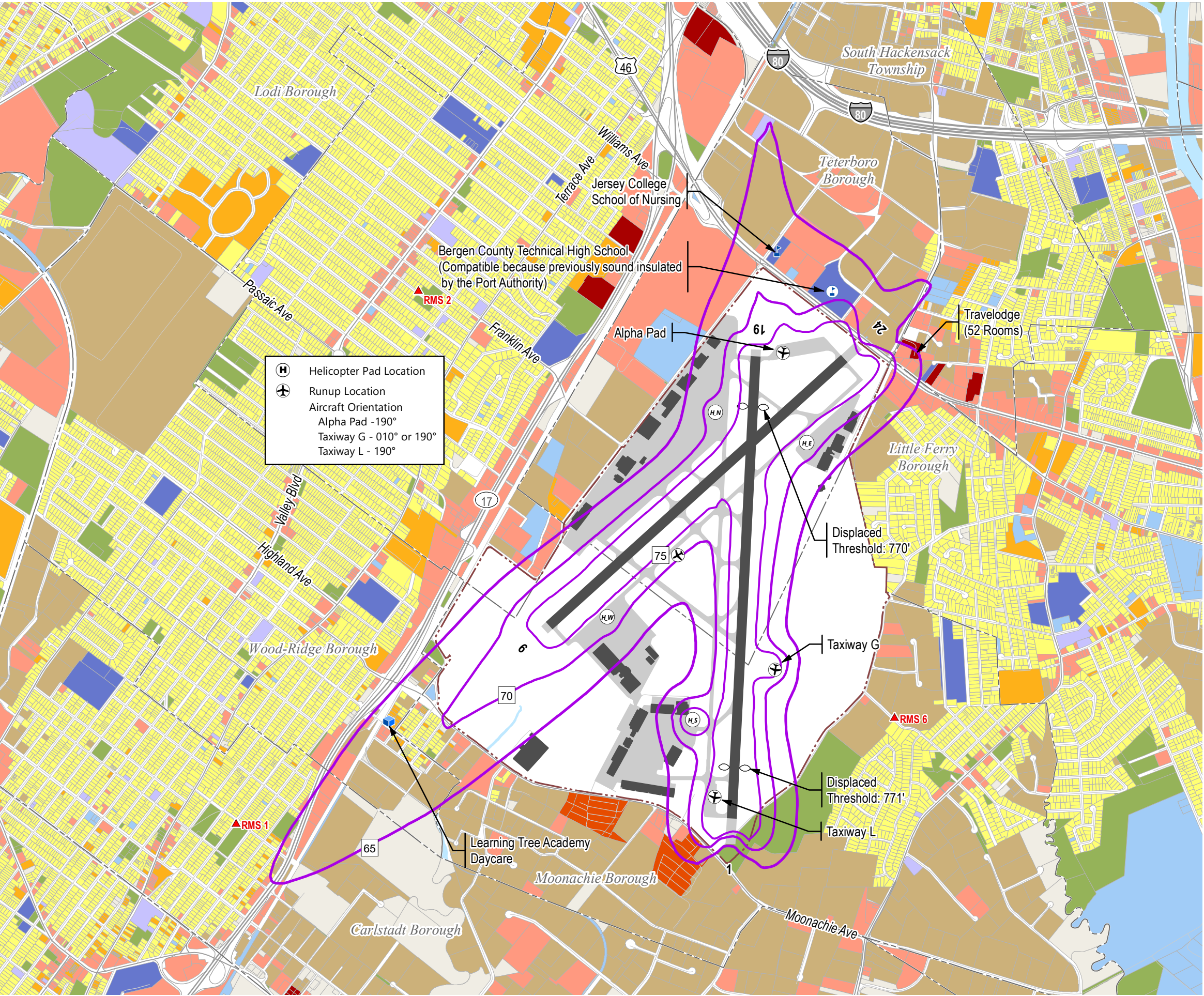
Airport Noise Compatibility

Part 150 Study

2021 Noise Compatibility Program

Figure: A-1

Existing Conditions (2016)
Noise Exposure Map



Teterboro Airport

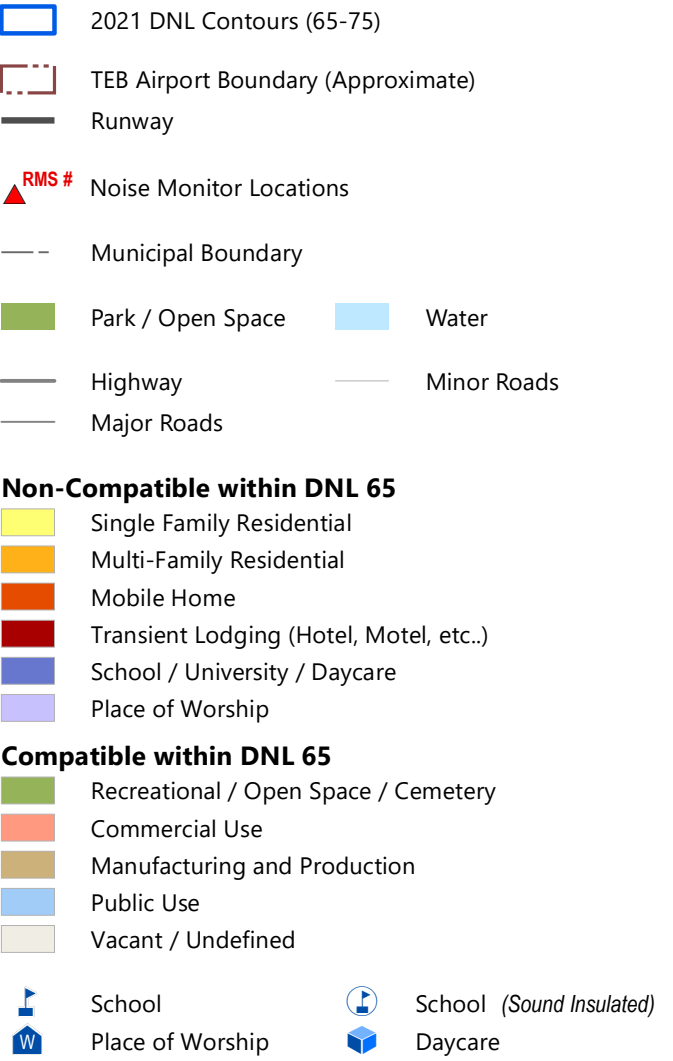
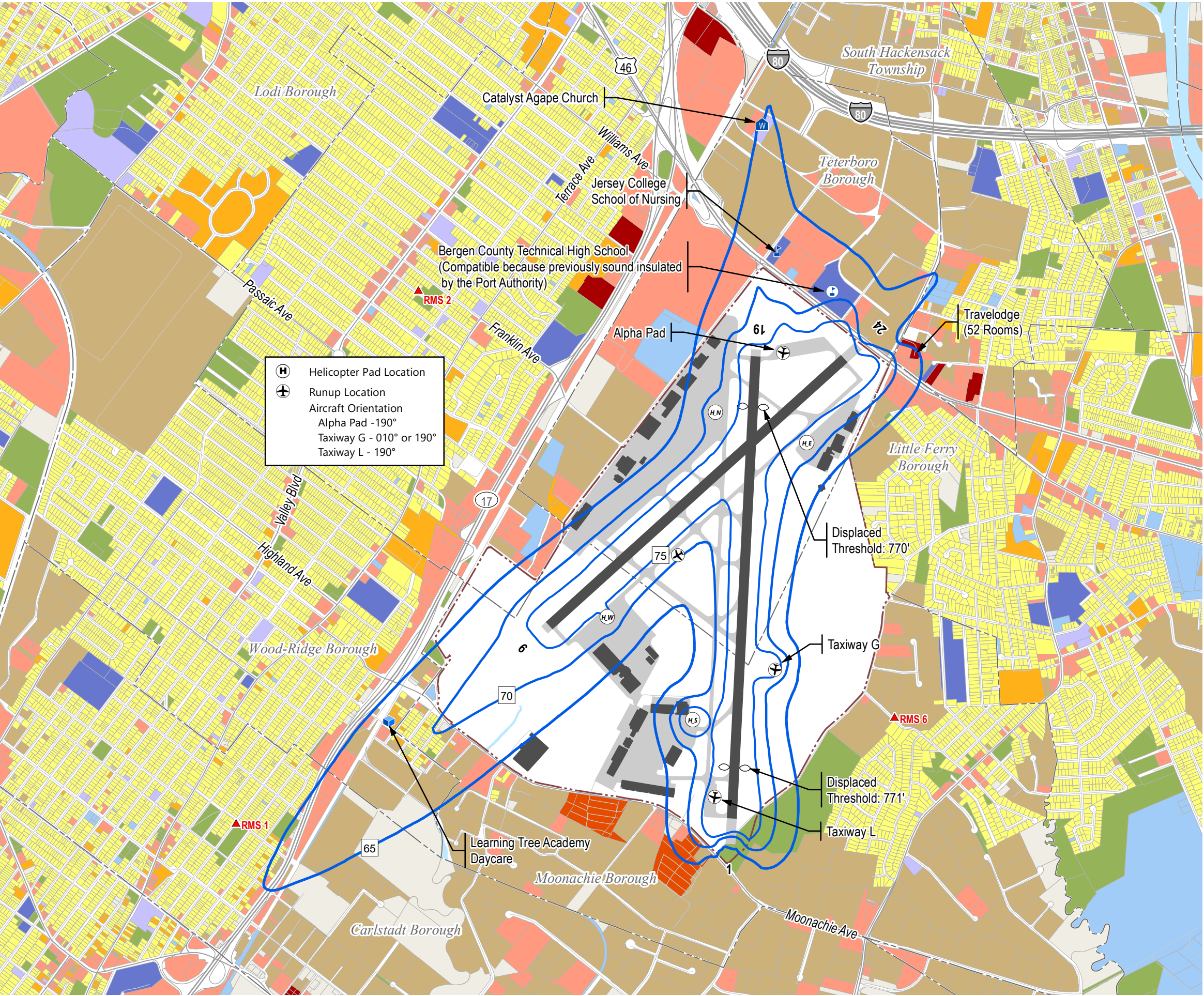
Airport Noise Compatibility

Part 150 Study

2021 Noise Compatibility Program

Figure: A-2

Forecast Conditions (2021)
Noise Exposure Map



Note: Entire area depicted on the figure is within Bergen County and Bergen County has jurisdictional and land use control

Appendix B

Glossary of Terms

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Glossary

Term	Definition	First reference location
ADO	[Federal Aviation Administration] Airports District Office	Checklist, page xvii
AEE	[Federal Aviation Administration] Office of Environment and Energy	Section 1.4, page 1-6
AIP	Airport Improvement Program	Section 1, page 1-1
Airport Sponsor	A public agency or tax-supported organization, such as an airport authority, authorized to own and operate an airport, obtain property interests, obtain funds, and be legally, financially, and otherwise able to meet all applicable requirements of current laws and regulations.	Certification, page xi
ANCA	Airport Noise and Capacity Act of 1990	Checklist, page xvii
ANOMS	Airport Noise and Operations Management System	Section 3.2, page 3-10
ATCT	[Federal Aviation Administration] Airport Traffic Control Tower	Section 1.4, page 1-6
ATO	[Federal Aviation Administration] Air Traffic Organization	Section 1.4, page 1-6
CFR	Code of Federal Regulations	Cover page
COVID-19 pandemic:	An acute respiratory illness in humans caused by a coronavirus, capable of producing severe symptoms and in some cases death, especially in older people and those with underlying health conditions. It was originally identified in 2019 and became pandemic in 2020.	Section 1, page 1-1
dB	Decibel	Section 1.3, page 1-4
dBA	A-Weighted Decibel	Table 1-1, page 1-10
DNL	Day-Night Average Sound Level	Section 1.3, page 1-4
EWR	Newark Liberty International Airport	Section 1.4, page 1-6
FAA	Federal Aviation Administration	Section 1, page 1-1
FAR	Federal Aviation Regulation	Section 1.3, page 1-3
FBO	Fixed Base Operator	Section 2.2, page 2-71
FMRA	the FAA Modernization and Reform Act of 2012	Section 2.1, page 2-1
GIS	Geographic Information System	Section 1.7, page 1-11
IFR	Instrument Flight Rules	Section 2.1, page 2-1
ILS	Instrument Landing System	Section 2.2, page 2-35
INM	Integrated Noise Model	Section 1.7, page 1-11
JFK	John F. Kennedy International Airport	Section 1.4, page 1-6
Ldn	Alternative abbreviation for DNL or Day-Night Average Sound level	Section 5.1, page 5-1
LGA	LaGuardia International Airport	Section 1.4, page 1-6
MNL	Maximum Noise Level	Section 2.1, page 2-1
N90	New York Terminal Radar Approach Control Facility (TRACON), referred to as N90	Appendix E.4, page E-67
NADP	Noise Abatement Departure Procedures	Chapter 2, page 2-1

Term	Definition	First reference location
NBAA	National Business Aviation Association	Chapter 2, page 2-1
NCP	(Part 150) Noise Compatibility Program	Chapter 1, page 1-1
NEM	(Part 150) Noise Exposure Map	Chapter 1, page 1-1
NEPA	National Environmental Policy Act	Table 2-4, page 2-14
NLR	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure	Table 1-1, page 1-10
nmi	nautical miles	Section 2.2, page 2-5
Noise	Sound that is unwelcome because of its undesirable effects on persons (e.g., speech interference, sleep disturbance) or on entire communities (annoyance).	Section 1.5, page 1-7
NOMS	noise and operations management system	Section 4.1, page 4-1
PANYNJ	The Port Authority of New York and New Jersey	website address, page 1-2
Part 150	14 CFR (FAR) Part 150, "Airport Noise Compatibility Planning"	Chapter 1, page 1-1
Part 161	14 CFR (FAR) Part 161, "Notice and Approval of Airport Noise and Access Restrictions"	Section 2.1, page 2-1
Permission to Operate	An agreement between the Teterboro Airport Manager and jet aircraft operators acknowledging awareness of and commitment to compliance with the TEB noise abatement program	Chapter 2, page 2-1
PlaneNoise	Noise Complaint Management System	Section 4.1, page 4-2
Port Authority	The Port Authority of New York and New Jersey	Section 1, page 1-1
published procedures	FAA's formal instructions to aircraft operators, specifying approach or departure recommendations for a certain runway	Section 2.2, page 2-50
RMS	Remote Monitoring Sites	Section 2.1, page 2-3
RNP	Required Navigation Performance	Section 2.2, page 2-5
ROA	Record of Approval	Section 1.4, page 1-6
Sound	A physical phenomenon consisting of minute vibrations (waveforms) that travel through a medium such as air or water.	Section 1.5, page 1-7
TAC	Technical Advisory Committee	Section 1.3, page 1-4
TANAAC	Teterboro Aircraft Noise Abatement Advisory Committee	Section 1.3, page 1-4
TARGETS	Terminal Area Route Generation and Traffic Simulation tool	Section 2.2, page 2-5
TEB	Teterboro Airport	Section 1, page 1-1
TRACON	FAA Terminal Radar Approach Control Facility	Section 1.4, page 1-6
VFR	Visual Flight Rules	Section 2.1, page 2-4
WebTrak	Public Flight Tracking Portal which allows the public to view aircraft movements within the New York / New Jersey metropolitan area via a website	Section 4.1, page 4-2

Appendix D

Technical Advisory Committee

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Appendix D.1

Technical Advisory Committee Members

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Technical Advisory Committee – Teterboro Airport (TEB) Part 150 Study

First Name	Last Name	Organization	E-Mail
Gabriel	Andino	AvPORTS TEB Staff	gandino@teb.com
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Mario	Diaz	FBO, Landmark Aviation	Mdiaz@landmarkaviation.com
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First Name	Last Name	Organization	E-Mail
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Joe	Lepis	EWR Noise Community Roundtable	joejr@hudsonrealty.biz
Tom	Malone	FAA Flight Standards District Office (FSDO)	thomas.f.malone@faa.gov
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Timothy	Middleton	PANYNJ Noise Office	tmiddleton@panynj.gov
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Mike	Porcello	FAA NY TRACON	michael.porcello@faa.gov
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Peter	Rothwell	Dassault Falcon Jet	peter.rothwell@falconjet.com
David	Sanchez	FAA Airports District Office (ADO)	david.sanchez@faa.gov
Ronald	Seelogy	NJ Sports Authority	Ronald.Seelogy@njmeadowlands.gov
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Appendix D.2

Technical Advisory Committee Presentations

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Teterboro Airport
14 CFR Part 150 Noise Compatibility Study
Technical Advisory Committee Meeting #6
May 24, 2016

1



TEB Part 150 Study | TAC Meeting #6

THE PORT AUTHORITY OF NY & NJ

Meeting Agenda

- Welcome and introductions
- Current status of Part 150 process
- Status of noise model input development, review, and approval
- Preliminary draft 2016 and 2021 contours
- Comparison of measured and modeled DNL
 - Noise monitor site descriptions
- Complaint plots
- Preliminary introduction to Noise Compatibility Planning (NCP) process
- Schedule and topics of upcoming meetings
- TAC discussion
- Public comment opportunity
- Adjournment

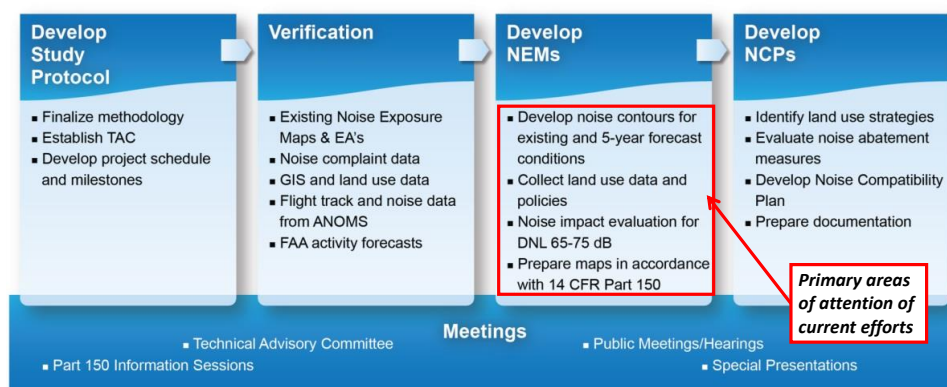
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TEB Part 150 Study | TAC Meeting #6

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Generalized Part 150 Study Process / Schedule



3



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Noise model input development, review, and approval status

- Draft model inputs were shared with the TAC over the past several meetings
 - TAC comments were due on April 15, 2016
 - No comments on draft inputs were received by that date or in the interim
- Final step: FAA review and approval of non-standard flight profiles
 - To reflect airspace-related altitude holds
 - To model departures in a heavier weight Gulfstream GV
 - HMMH has addressed FAA and other stakeholder comments, received operator concurrences, and PA has submitted to FAA for review
- *With FAA approval of non-standard profiles, all model inputs will be final*
 - Land use analyses are postponed until modeling inputs are approved

4

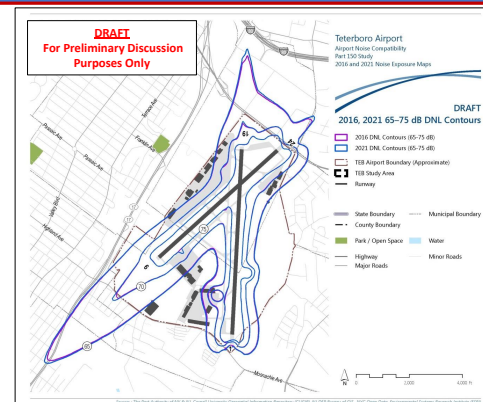


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Comparison of Preliminary Draft 2016 and 2021 DNL Contours

- 2021 contours are very slightly larger than those for 2016
- Slight extensions in 2021, compared to 2016, off both ends of Runway 6/24 and the north end of Runway 1/19
- Associated with 9% increase in operations



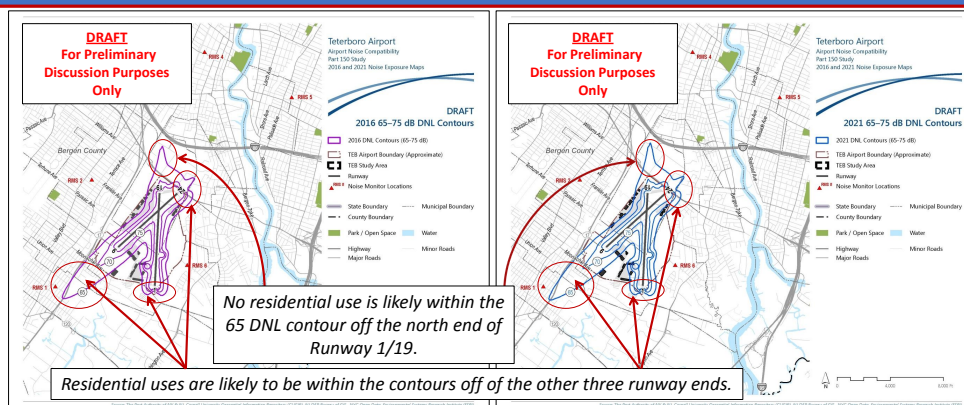
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Next Step Will Be Land Use Analysis



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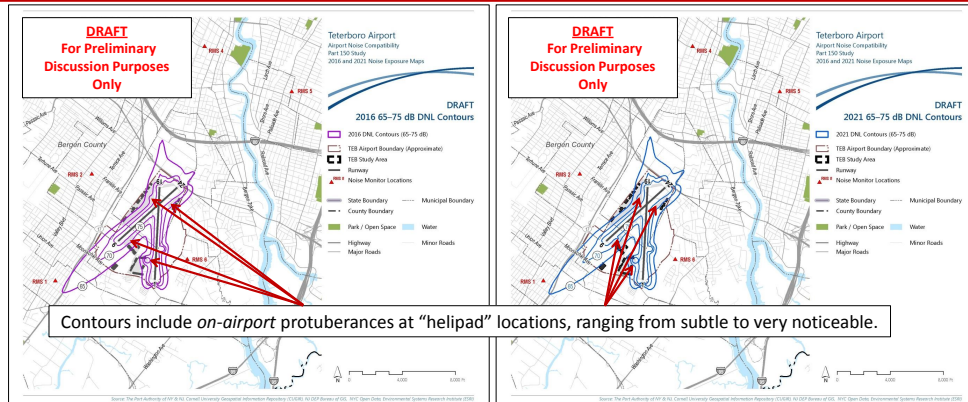


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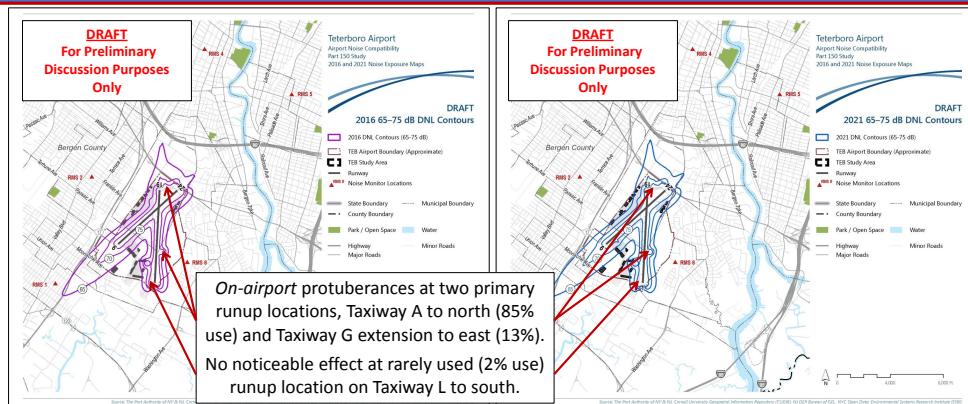
Effect of Helicopter Operations



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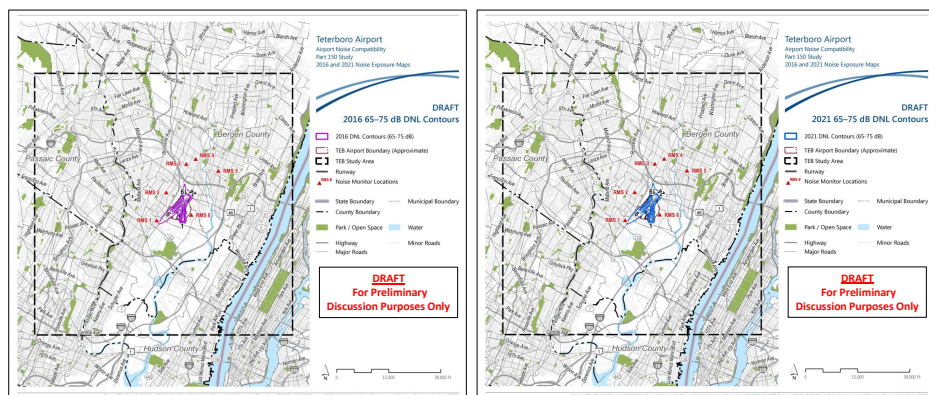
Effect of Runups



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Draft 2016 and 2021 DNL Contours Relative to Study Area

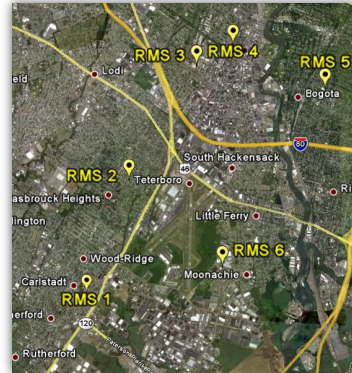


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TEB Noise Monitoring Locations

- TEB has six Remote Monitoring Site (RMS) installations
 - RMS 1 - Carlstadt
 - RMS 2 - Hasbrouck Heights
 - RMS 3 - Hackensack Hospital
 - RMS 4 - Hackensack
 - RMS 5 - Bogota
 - RMS 6 - Moonachie



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RMS 1 - Carlstadt

- RMS 1 is approximately 1.1 miles (0.9 nautical miles) from the southwest end of Runway 6/24
- The site is approximately 40 feet above mean sea level, approximately 32 feet above airport elevation (approximately 8 feet MSL)
- The site is in a residential neighborhood next to a cemetery
- The site is primarily affected by Runway 24 departures and Runway 06 arrivals



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RMS 2 - Hasbrouck Heights

- RMS 2 is approximately 1.2 miles (1.0 nautical miles) west of the north end of Runway 1/19
- The site is approximately 150 feet above mean sea level, approximately 142 feet above airport elevation
- The site is in a residential neighborhood near the fire station
- The site primarily measures sideline noise from operations on both runways.



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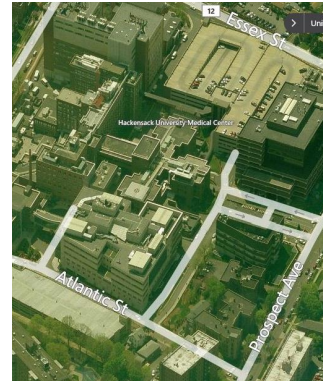


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RMS 3 - Hackensack Hospital

- RMS 3 is on the roof of the Hackensack Medical Center, approximately 1.7 miles (1.5 nautical miles) from the north end of Runway 1/19
- The ground level at the site is approximately 93 feet above mean sea level, approximately 85 feet above airport elevation
- The site at the medical center is in a urban area
- The site primarily measures arrivals to Runway 19 and departures from Runway 01 and 06



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RMS 4 - Hackensack

- RMS 4 is approximately 2.1 miles (1.8 nautical miles) northeast of the north end of Runway 1/19, and approximately the same distances north of the north end of Runway 6/24
- The site is approximately 18 feet above mean sea level, approximately 10 feet above airport elevation
- The site is in a residential area
- The site primarily measures from Runway 01 and 06 departures, and Runway 24 arrivals



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RMS 5 - Bogota

- RMS 5 is behind Bogota High School, approximately 2.2 miles (1.9 nautical miles) northeast of the north end of Runway 6/24
- The site is approximately 150 feet above mean sea level, approximately 142 feet above airport elevation
- The site is in a residential area
- The site primarily measures Runway 06 departures and Runway 24 arrivals



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RMS 6 - Moonachie

- RMS 6 is approximately 0.4 miles (0.4 nautical miles) due east of Runway 1/19
- The site is approximately 7 feet above mean sea level, approximately the same elevation as the airport (8 feet above mean sea level)
- The site is in a commercial area
- The site primarily measures sideline noise from Runway 01/19 and from helicopter operations



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Comparison of Modeled and Measured DNL

RMS #	2016 Modeled DNL [Note]	2014 Measured DNL	2016 Modeled-2014 Measured
1	62	58	+4
2	47	40	+7
3	59	61	-2
4	55	52	+3
5	50	48	+2
6	53	52	+1

Note: Modeled DNL values are preliminary **draft** estimates for discussion purposes only.

- Study protocol calls for comparing 2016 modeled to 2014 measurements (operations are reasonably similar)
- Modeled is greater than measured in 5 out of 6 sites
- Modeled estimates are for *ground level* at RMS sites
- Greatest variation (7 dB) is at the site with the least aircraft noise (RMS 2)
- These types of differences are not unusual when measuring well outside 65 DNL, where aircraft DNL is close to or below non-aircraft DNL
- Automated monitoring systems have significant difficulty separating aircraft and non-aircraft noise at these types of locations
- Agreement within 2 dB is unusually close

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Complaint Graphics

- Each figure depicts combined numbers of complaints received in 2014 and 2015
- Prepared for four categories of operations:
 - Jets, props, helicopter, and "unspecified" (where complainant did not identify a specific type)
- Very small numbers of complaints fall outside the boundaries of the figures, even including a buffer beyond the study area (see table below)

Complaint Statistic	Jets	Propeller	Helicopter	Unspecified
Number of complaints within the Study Area	1,345	36	76	1,683
Number of complaints shown on the figure	1,357	36	76	1,692
Number of complaints <i>not</i> shown on the figure	36	1	2	12

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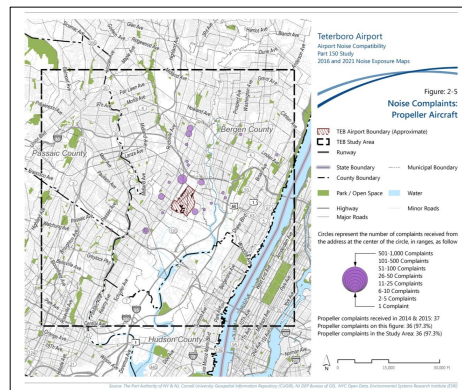
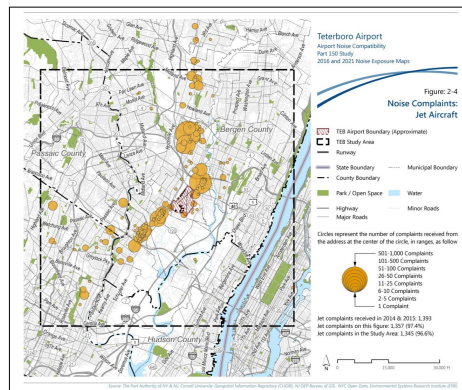


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Jet and Propeller Complaints



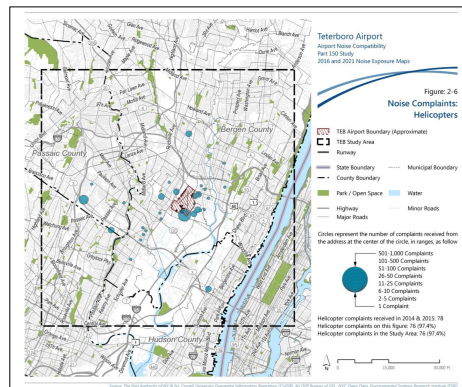
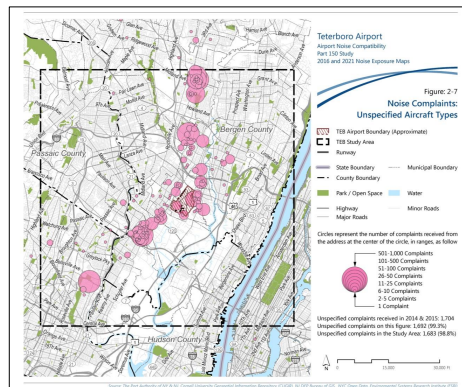
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Helicopter and Unspecified Complaints



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Introduction to Noise Compatibility Program Development

- NCP documentation must describe:
 - Development of the program
 - Each measure that the proprietor considered
 - Reasons the proprietor elected to *include* or *exclude* individual measures
 - Entities responsible for implementing each measure
 - Implementation and funding mechanisms
 - The predicted effectiveness of *individual measures* and *the overall program*.
- FAA first *accepts* the NCP as compliant with Part 150 standards
- FAA then reviews and *approves* or *disapproves* individual proposals
 - Approval does not eliminate requirements for formal environmental assessment of any proposal pursuant to the National Environmental Policy Act (NEPA).
 - FAA approval of individual measures is a prerequisite to application for federal funding

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Since Part 150 was promulgated in 1981...

- The industry (airports, consultants, and FAA) has developed a well-understood and well-accepted Part 150 process that:
 - Meets statutory requirements
 - Addresses concerns of industry, government, and community stakeholders
 - Follows a logical progression
 - Is reasonably time-and cost-efficient
 - Provides appropriate outreach, consultation, and “transparency”
- FAA has published clear “checklists” to assist in organizing the process
- The scope of NCP analyses has evolved into consideration of three primary categories of alternatives (noise abatement, land use, and programmatic)
 - All required categories are addressed in a comprehensive and logical fashion

The next two slides summarize this more evolved process

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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred “package” of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers
- Runup enclosures
- Use restrictions
- Other actions proposed by stakeholders

Land Use Strategies

- Mitigation
 - Land acquisition
 - Sound insulation
 - Avigation easements
- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

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Minimum Scope of NCP Alternatives (Part 150 Sec. B150.7)

- Acquisition of land and interests, including at least air rights, easements, and development rights
- Barriers and acoustical shielding, including soundproofing of public buildings
- Implementation of a preferential runway system.
- Use of flight procedures (including modification of flight tracks)
- Restriction on the use of aircraft based on their noise characteristics, including at least:

[Note: Part 161 has added further notice, review, and approval requirements for proposals to restrict many categories of aircraft operations.]

 - Denial of use of the airport to aircraft types or classes which do not meet Federal noise standards
 - Capacity limitations based on the relative noisiness of different types of aircraft
 - Required use of noise abatement takeoff or approach procedures previously approved as safe by the FAA
 - Landing fees based on FAA certificated or estimated noise emission levels or on time of arrival
 - Partial or complete curfews
- Other actions or combinations of actions which would have a beneficial noise impact
- Other actions recommended for analysis by the FAA for the specific airport

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TEB Part 150 Study | TAC Meeting #6

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Projected TAC & Public Meeting Topics, 2015-16

Date	Meeting	Major Actual / Anticipated Topics
July 30, 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
Sept. 25, 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
Oct. 15, 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November, 12 2015	TAC 3 - Complete	Present draft runway and helipad use, flight track density plots, forecast process, and land use inventory status
January 2016	TAC 4 - Complete	Present draft noise modeling flight tracks, forecast summary, and overviews of user-defined flight-profile development process, maintenance run-up modeling, and meteorological and terrain data
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Today	Present draft contours (land use compatibility postponed)
3 rd quarter 2016	Workshop 2	Present Draft NEM, including contours and land use compatibility
3 rd quarter 2016	NEM comment period	Workshop 2 will be held during the comment period

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TEB Part 150 Study | TAC Meeting #6

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Projected TAC & Public Meeting Topics, 2015-16

Date	Meeting	Major Actual / Anticipated Topics
July 29, 2016 (9 am)	TAC 7	Present first-round noise abatement alternative analysis
September 23, 2016 (9 am)	TAC 8	Present second-round abatement alternative analysis
November 2016	TAC 9	Present third-round abatement alternative analysis
January 2017	TAC 10	Present first-round compatible land use alternatives
March 2017	TAC 11	Present second-round compatible land use alternatives
May 2017	TAC 12	Recommend abatement and compatibility measures
June 2017	Workshop 3	Present draft NCP recommendations
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Review NCP recommendations
September 2017	TAC 15	Discuss Draft NCP and public input
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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TEB Part 150 Study | TAC Meeting #6

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Wrap-Up

- Next meeting dates and topics
 - 7th TAC – July 29, 2016
 - Land use compatibility analysis
 - Continued discussion of noise compatibility options; e.g., further review of categories that Part 150 requires be considered, solicitation of TAC suggestions, initial noise abatement alternative analyses, etc.
 - 8th TAC – September 23, 2016
 - Land use compatibility analysis
- TAC member questions, comments, and discussion?
- Public comments?
- Thanks for attending!

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Teterboro Airport
14 CFR Part 150 Noise Compatibility Study
Technical Advisory Committee Meeting #7
July 29, 2016

1



TEB Part 150 Study | TAC Meeting #7

THE PORT AUTHORITY OF NY & NJ

Meeting Agenda

- Welcome and introductions
- Current status of Part 150 process
- Draft 2016 and 2021 Noise Exposure Map figures and land use analyses
- DNL 55 and 60 dB noise contours
- Response to specific requests at TAC #6
- Continued brainstorming of noise abatement options
- Upcoming Part 150 milestones
- TAC member discussion
- Study schedule update
- Public comment opportunity
- Adjournment

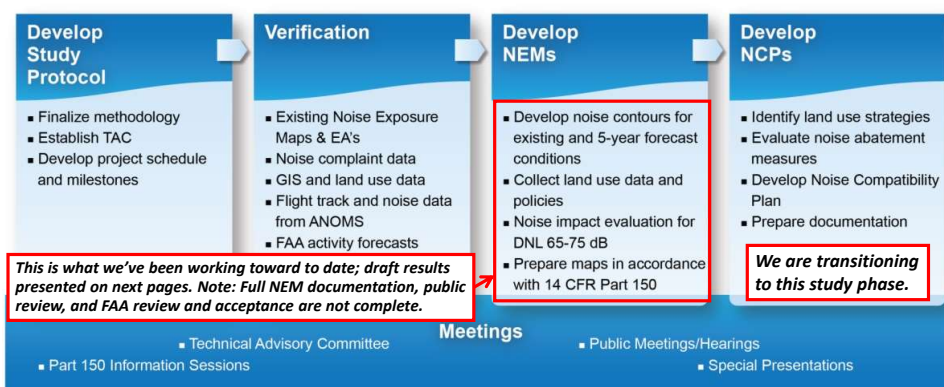
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TEB Part 150 Study | TAC Meeting #7

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Generalized Part 150 Study Process / Schedule



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TEB Part 150 Study | TAC Meeting #7

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Draft 2016 and 2021 Noise Exposure Maps and Land Use

- As a refresher, Part 150 requires depiction of:
 - DNL 65, 70, and 75 dB contours
 - Existing conditions (year of submission; 2016 in this case)
 - Forecast conditions (at least five years in the future; 2021 in this case)
 - Land use information within contours
 - Noise sensitive public buildings, such as schools, places of worship, health care facilities, and properties on or eligible for inclusion in the National Register of Historic Places
 - Identification of all *noncompatible* land uses
 - Jurisdiction(s) responsible for land use controls
 - Generalized land uses and street map
 - Other information
 - Runway layout and airport boundary
 - Flight tracks (may be on supplemental graphics, as in this case)
 - Noise monitoring locations¹

4

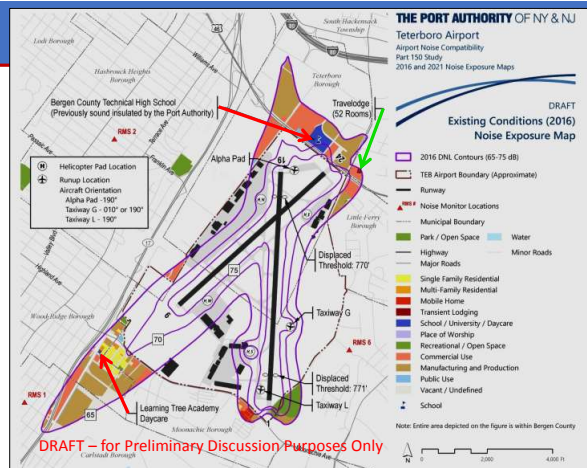


TEB Part 150 Study | TAC Meeting #7

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Draft 2016 NEM

- Contains all information required for inclusion on NEM figure
- Will be presented in NEM document at 1":2,000', as required by Part 150
- Shows permanent noise monitor locations to the extent feasible (others will be presented on a supplemental graphic, as permitted by Part 150)
- Flight tracks will be shown on supplemental graphics, as permitted by Part 150



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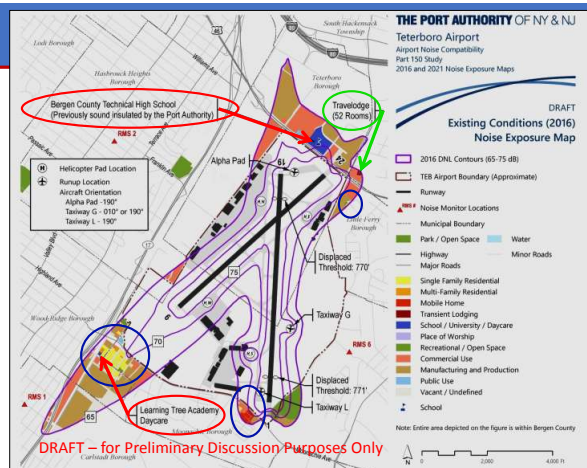


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Draft 2016 NEM

- Non-compatible land uses:
 - Two schools
 - Portion of one transient lodging structure
- Single family, multifamily, and mobile home residences
 - Slide 9 presents a table with dwelling unit counts and residential population estimates for 2016 and 2021
- Slide 10 summarizes land areas within each contour interval



6



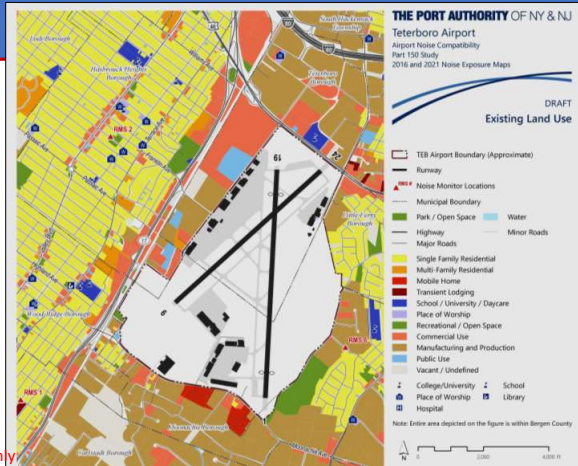
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Land Use

- Figure shows generalized land uses over full area covered in NEM figures
- Part 150 only requires analysis of land use within DNL 65 dB contour
- Noise abatement alternatives may extend contours within this larger area

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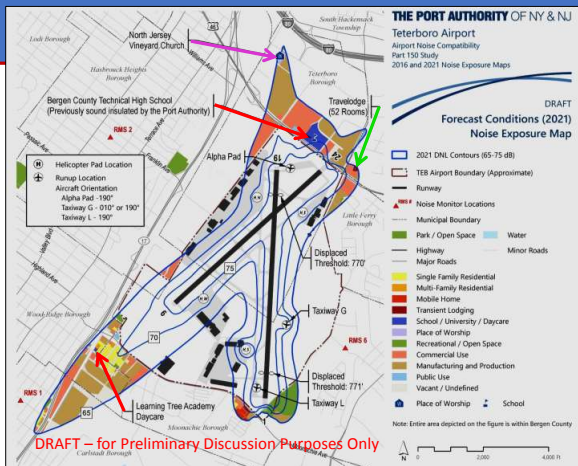


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Draft 2021 NEM

- Contains all information required for inclusion on NEM figure
- Will be presented in NEM document at 1"=2,000', as required by Part 150
- Shows permanent noise monitor locations to the extent feasible (others will be presented on supplemental graphic, as permitted by Part 150)
- Flight tracks will be shown on supplemental graphics, as permitted by Part 150

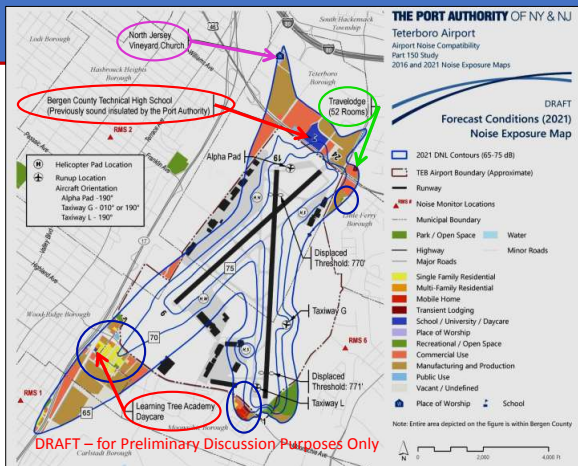


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Draft 2021 NEM

- Non-compatible land uses:
 - Portion of one church building (2016 contour did not extend over any portion of structure)
 - Two schools
 - Portion of one transient lodging structure
- Single family, multifamily, and mobile home residences
 - Slide 9 presents counts and population estimates
- Slide 10 summarizes land areas within each contour interval



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Dwelling units and residential population

Year	Type of Dwelling	Dwelling Unit Counts within DNL intervals ⁽¹⁾				Estimated Residents within DNL Intervals ^(2, 3)			
		65-70 dB	70-75 dB	>75 dB	Total	65-70 dB	70-75 dB	>75 dB	Total
2016	Single Family	95	0	0	95	230	0	0	230
	Multi-Family	19	0	0	19	46	0	0	46
	Mobile Home	44	8	0	52	106	19	0	125
	Total	158	8	0	166	382	19	0	401
2021	Single Family	95	5	0	100	230	12	0	242
	Multi-Family	19	2	0	21	46	5	0	51
	Mobile Home	48	10	0	58	116	24	0	140
	Total	162	17	0	179	392	41	0	433

Notes: 1. Based on GIS-based identification of parcels confirmed with direct counts using aerial photography.

2. Estimates based on 2.42 residents per dwelling unit, developed from 2010 U.S. Census block data.

3. Estimated residents within each contour interval rounded to nearest whole number.

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Land Areas within Contour Intervals

2016		Total Area in Contour Interval		Area Over Airport Property		Area Over Off-Airport Property	
	Contour Interval	Square Miles	Acres	Square Miles	Acres	Square Miles	Acres
	DNL 65-70 dB	0.7	439.1	0.3	209.8	0.4	229.3
	DNL 70-75 dB	0.3	178.7	0.3	166.6	0.0	12.2
	DNL >75 dB	0.3	201.3	0.3	200.2	0.0	1.2
	Total within DNL 65	1.3	819.2	0.9	576.5	0.4	242.7
2021		Total Area in Contour Interval		Area Over Airport Property		Area Over Off-Airport Property	
	Contour interval	Square Miles	Acres	Square Miles	Acres	Square Miles	Acres
	DNL 65-70 dB	0.7	453.6	0.3	210.2	0.4	243.4
	DNL 70-75 dB	0.3	183.3	0.3	169.8	0.0	13.5
	DNL >75 dB	0.3	203.3	0.3	202.1	0.0	1.2
	Total within DNL 65	1.3	840.3	0.9	582.1	0.4	258.2
Change from 2016 to 2021		Total Area in Contour Interval		Area Over Airport Property		Area Over Off-Airport Property	
	Contour interval	Square Miles	Acres	Square Miles	Acres	Square Miles	Acres
	DNL 65-70 dB	0.0	14.5	0.0	0.5	0.0	14.1
	DNL 70-75 dB	0.0	4.6	0.0	3.3	0.0	1.4
	DNL >75 dB	0.0	2.0	0.0	1.9	0.0	0.1
	Total within DNL 65	0.0	21.1	0.0	5.6	0.0	15.5

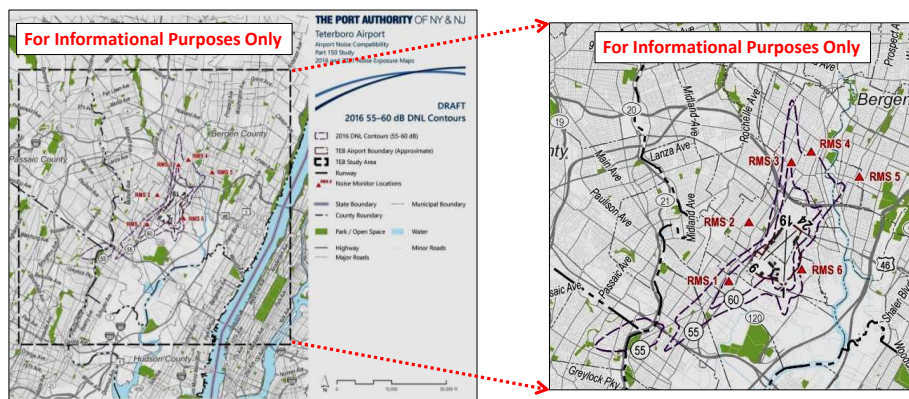
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Supplemental 2016 DNL Contours Relative to Study Area



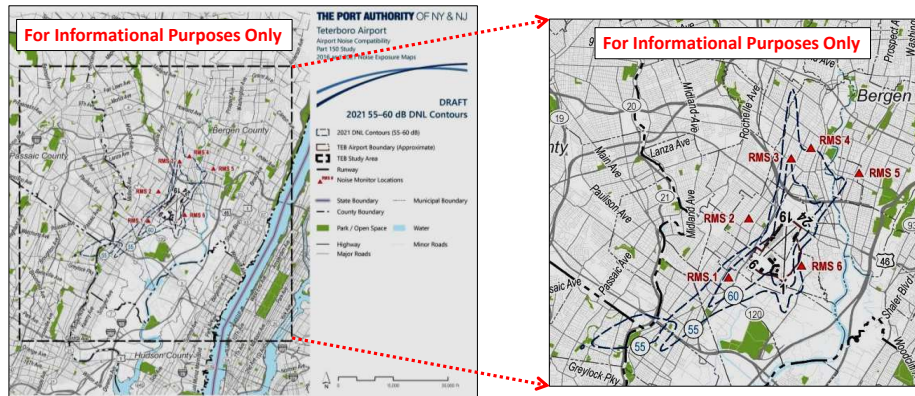
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Supplemental 2021 DNL Contours Relative to Study Area



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Response to Specific Requests at TAC #6

Requests included:

- Relationship of runway use to contour shape
 - To help understand effect of runway use on shape
- Comparison of day and night complaint plots
 - 24-hour plots were provided at TAC #6
- Measured vs. modeled DNL at Hackensack Hospital with elevation of RMS 3 taken into account
 - To seek improved agreement between measured and modeled

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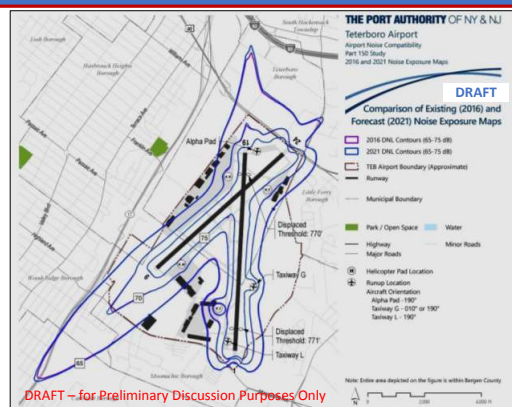


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Comparison of Draft 2016 and 2021 DNL Contours

- Repeat from TAC 6 presentation
- 2021 contours are slightly larger than those for 2016
- Slight extensions in 2021, compared to 2016, off both ends of Runway 6/24 and the north end of Runway 1/19
- Associated with 9% increase in operations



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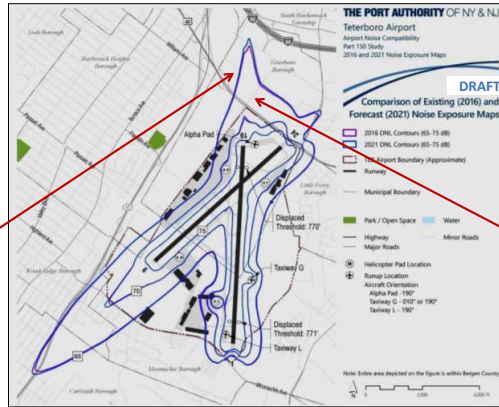
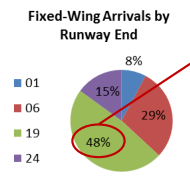


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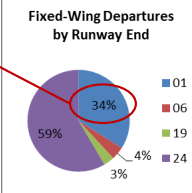
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Dominant runway use off north end of Runway 1/19

Primarily affected by Runway 19 arrivals; result in relatively sharp, pointed lobe that is typical signature of arrival noise.



Runway 1 departures also contribute, but to a lesser extent due to lower utilization; adds bulge in contour lobe nearer runway end.



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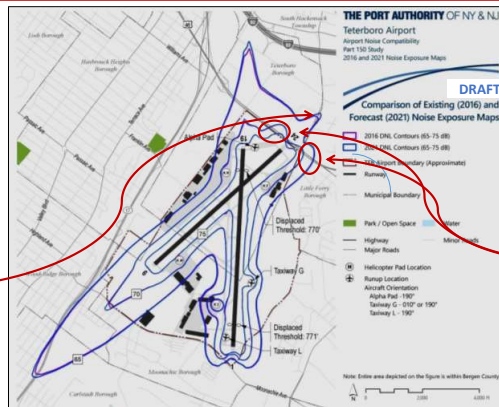
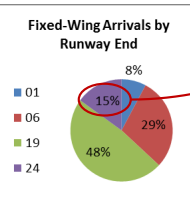


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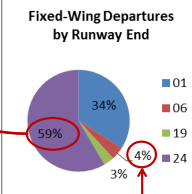
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Dominant runway use off north end of Runway 6/24

Primarily affected by Runway 24 arrivals; results in relatively sharp, pointed lobe. Lower use than on Runway 19 results in shorter contour lobe.



Runway 24 start-of-takeoff-roll produces lobes to the sides of the runway end.



Runway 6 departures have little effect due to very low utilization.

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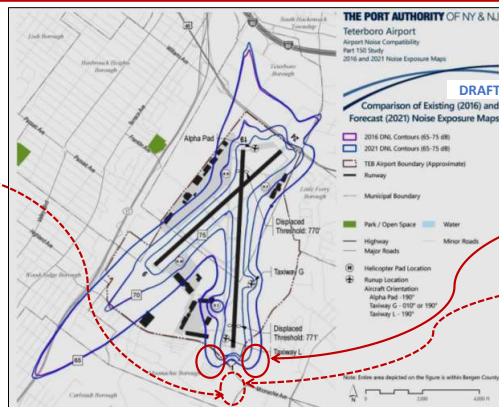
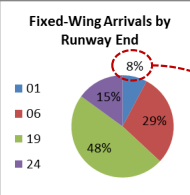


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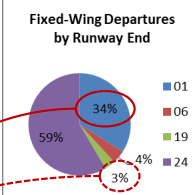
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Dominant runway use off south end of Runway 1/19

Least use of any runway end for arrivals is reflected by *absence* of pointed arrival lobe.



Runway 1 start-of-takeoff-roll produces lobes to the sides of the runway end



Least use of Runway 19 for departures is reflected by *absence* of departure lobe.

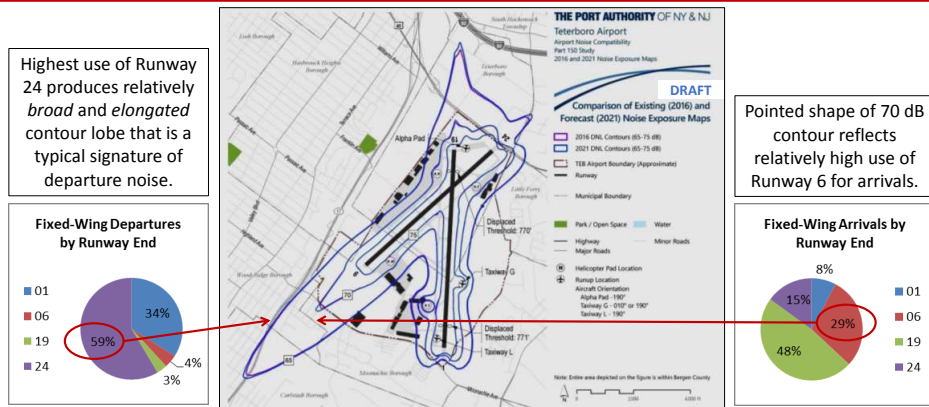
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Dominant runway use off south end of Runway 6/24



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Day and Night Complaint Graphics

- Each figure depicts combined numbers of complaints received in 2014 and 2015
- At the TAC's request, they are presented for day (7 am - 10 pm) and night (10 pm - 7 am) time periods (24-hour totals were provided in the TAC 6 presentation)
- Prepared for four categories of operations:
 - Jets, props, helicopter, and "unspecified" (where complainant did not identify a specific type)
- Small numbers of complaints fall outside the Study Area and the boundaries of the subsequent figures

Complaint Statistic	Jets		Propeller		Helicopter		Unspecified	
	Day	Night	Day	Night	Day	Night	Day	Night
Number of complaints within the Study Area	562	783	1,345	23	13	36	61	15
Number of complaints shown on the figure	572	785	1,357	23	13	36	61	15
Number of complaints <i>not</i> shown on the figure	21	15	36	0	1	1	2	0

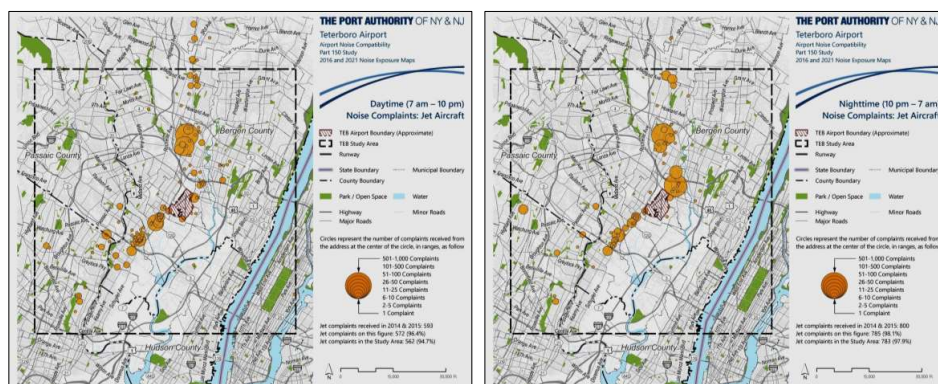
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2014 and 2015 Day and Night Jet Complaints



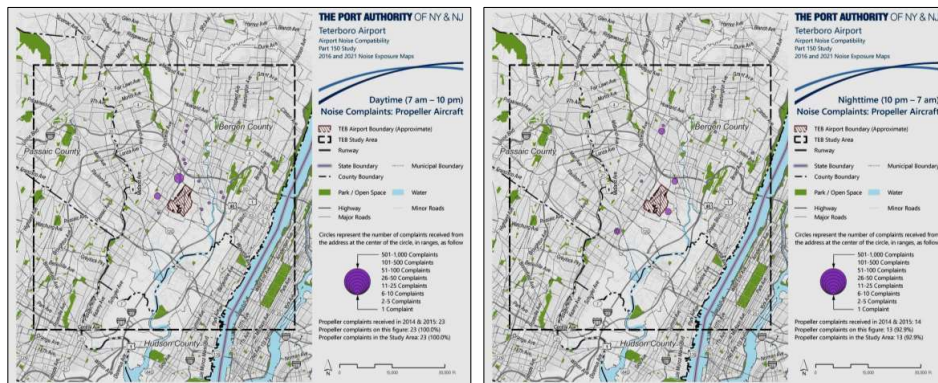
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2014 and 2015 Day and Night Propeller Complaints



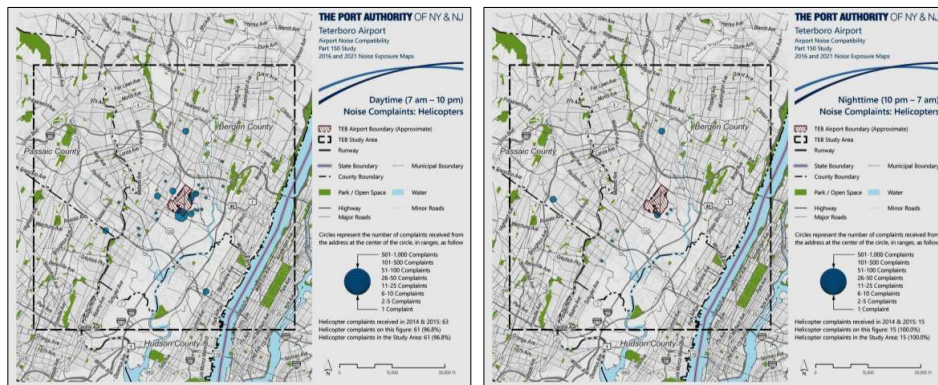
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2014 and 2015 Day and Night Helicopter Complaints



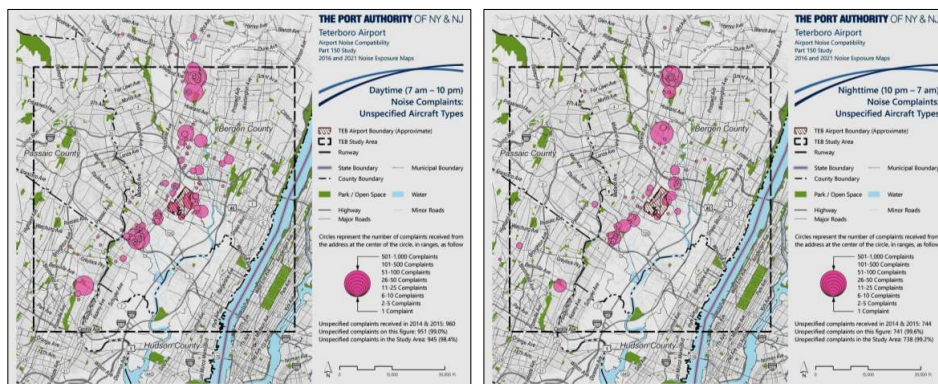
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2014 and 2015 Day and Night Unspecified Complaints



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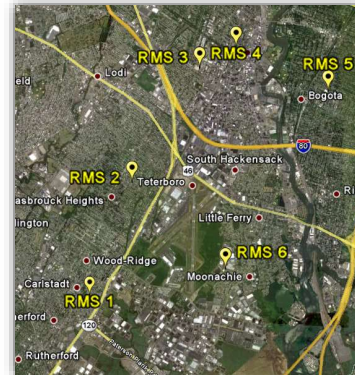


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TEB Noise Monitoring Site (RMS) Locations

- TEB has six RMS installations
- Noise modeling results were compared to 2014 measurements at TAC #6
- We have made two revisions:
 - The modeling elevation of RMS 3 was revised to take into account its placement on the roof of Hackensack Hospital, approximately 210' above mean sea level, 202' above airport elevation
 - *Led to improved between measured and modeled DNL*
 - Measured data were obtained for 2015, to supplement 2014 data



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2016 Modeled DNL vs. 2014 and 2015 Measured DNL

RMS #	2016 Modeled DNL [Note 1]	2014 Measured DNL	2016 Modeled-2014 Measured
1	62	58	+4
2	47	40	+7
3	61	61	0
4	55	52	+3
5	50	48	+2
6	53	52	+1

1. RMS 3 value updated from TAC 6 to take into account RMS elevation of 210'. Prior ground-elevation modeled estimate was 59 dB. Adjustment led to same measured and modeled values.

RMS #	2016 Modeled DNL [Note 1]	2015 Measured DNL [Note 2]	2016 Modeled-2015 Measured
1	62	58	+4
2	47	39	+8
3	61	62	-1
4	55	53	+2
5	50	45	+5
6	53	52	+1

2. 2015 data were not available for TAC 6 presentation. Measured and modeled agreement at RMS 3 is within 1 dB.

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Comparison of Modeled and Measured DNL

- Adjustment of modeled height at RMS 3 improved agreement
- The 2014 and 2015 measured values relate to the 2016 modeled values in a very similar fashion
- Modeled is greater than measured in 5 out of 6 sites
- Greatest variation (7 - 8 dB) is at the site with least aircraft noise (RMS 2)
- These types of differences are not unusual when measuring well outside DNL 65, where aircraft DNL is close to or below non-aircraft DNL
- Automated monitoring systems have significant difficulty separating aircraft and non-aircraft noise at these types of locations
- Agreement within 2 dB is unusually close, even where aircraft noise dominates

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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Provided in this presentation

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Let's discuss

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Initial identification of noise abatement alternatives

- At TAC 6, committee discussed existing 11 pm - 6 am voluntary curfew
 - Taking steps to improve compliance
 - Consideration of extending hours
- At TAC 2, committee discussed existing preferential runway measures
 - Runway 1 is the preferred arrival runway when landing to the north between 10 pm and 7 am
 - Runway 19 is the preferred departure runway when departing to the south between 10 pm and 7 am
- Focus on nighttime operations offers two potential advantages
 - Lower activity levels at night at TEB, EWR, and other airports reduce potential operational conflicts
 - Each night operation has ten times the effect of the same day operation
- Recent counts of hour operations and runway use provide a basis for considering potential adjustments to both the voluntary curfew and runway use*

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2014 night jet departure runway use - hourly and total

Hour	Runway End				Total
Starting	01	06	19	24	
2200	467	150	75	877	1,569
2300	272	101	67	498	938
0000	163	71	55	254	543
0100	91	34	20	124	269
0200	43	20	10	54	127
0300	34	19	17	34	104
0400	63	23	13	53	152
0500	117	66	35	221	439
0600	444	132	86	565	1,227
Total	1,694	616	378	2,680	5,368

Note: 5,368 night jet departures represent approximately 8% of approximately 71,000 total annual jet departures (day and night).

Hour	Runway End				Total
Starting	01	06	19	24	
2200	30%	10%	5%	56%	100%
2300	29%	11%	7%	53%	100%
0000	30%	13%	10%	47%	100%
0100	34%	13%	7%	46%	100%
0200	34%	16%	8%	43%	100%
0300	33%	18%	16%	33%	100%
0400	41%	15%	9%	35%	100%
0500	27%	15%	8%	50%	100%
0600	36%	11%	7%	46%	100%
Total	32%	11%	7%	50%	100%

Notes: Voluntary night curfew hours are in bold. Percentages may not add to 100% due to rounding.

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2014 night jet arrival runway use - hourly and total

2014 Night Jet Arrival Runway Use From Compuland Numbers of Night Jet Arrivals over the Entire Year					
Hour	Runway End				
Starting	01	06	19	24	Total
2200	115	686	932	429	2,162
2300	92	466	601	320	1,479
0000	64	381	397	207	1,049
0100	38	248	205	115	606
0200	36	161	108	48	353
0300	18	120	66	38	242
0400	11	90	61	28	190
0500	26	112	93	45	276
0600	57	235	261	98	651
Total	457	2,499	2,724	1,328	7,008

Note: 7,008 night jet arrivals represent approximately 10% of approximately 71,000 total annual jet arrivals (day and night).

2014 Night Jet Arrival Runway Use From Compuland Percentages of Night Jet Arrivals over the Entire Year					
Hour	Runway End				
Starting	01	06	19	24	Total
2200	5%	32%	43%	20%	100%
2300	6%	32%	41%	22%	100%
0000	6%	36%	38%	20%	100%
0100	6%	41%	34%	19%	100%
0200	10%	46%	31%	14%	100%
0300	7%	50%	27%	16%	100%
0400	6%	47%	32%	15%	100%
0500	9%	41%	34%	16%	100%
0600	9%	36%	40%	15%	100%
Total	7%	36%	39%	19%	100%

Notes: Voluntary night curfew hours are in bold. Percentages may not add to 100% due to rounding.

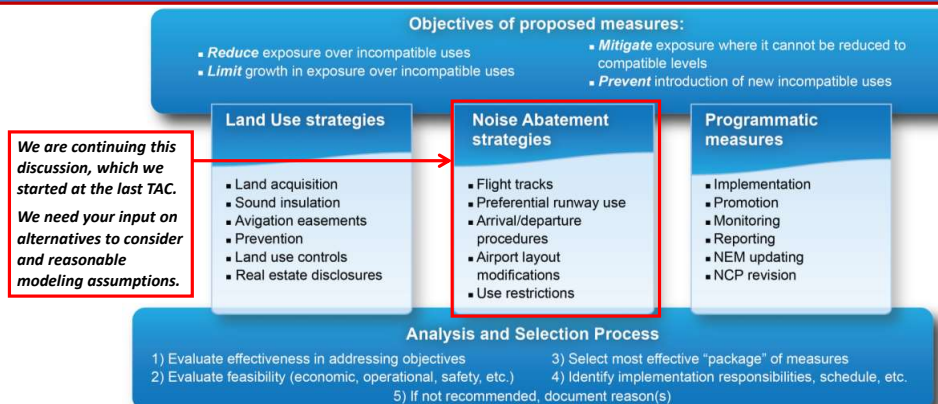
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Noise Compatibility Program Development Process



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Noise abatement discussion: Follow-up from last TAC

- What can we do to improve compliance with the voluntary curfew?
 - Would operations simply shift to the "shoulder hours" (10-11 pm and 6-7 am)?
 - If so, there would be no change in DNL. Would people notice the improvement?
- Is it feasible to extend the hours of the voluntary night curfew?
 - Matching the DNL definition of night (10 pm - 7 am) would produce a benefit, if operations shifted to the day
- What could be done to increase night use of Runway 1 for arrivals and Runway 19 for departures?
- How can we develop reasonable modeling assumptions?
- What other noise abatement ideas can you suggest?

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Projected TAC & Public Meeting Topics, 2015-16

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Today	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 (6 - 9 pm)	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 (9 am - noon)	Present first-round noise abatement alternative analysis
3 rd quarter 2016	NEM comment period	30-day period will overlap Workshop 2

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 (1 - 4 pm)	Present second-round noise abatement alternative analysis
January 2017	TAC 10	Present first-round compatible land use alternatives
March 2017	TAC 11	Present second-round compatible land use alternatives
May 2017	TAC 12	Recommend abatement and compatibility measures
June 2017	Workshop 3	Present draft NCP recommendations
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Review NCP recommendations
September 2017	TAC 15	Discuss Draft NCP and public input
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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Wrap-Up

- Next meeting dates and topics
 - 2nd Workshop - September 22, 2016 (6-8 pm)
 - Multi-purpose room at the Bergen County Complex in Hackensack
 - 8th TAC - September 23, 2016
 - Presentation and discussion of noise contours, land use analyses, and factors related to first round of noise abatement alternatives. Solicitation of further TAC abatement suggestions.
- TAC member questions, comments, and discussion?
- Public comments?
- Thanks for attending!

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Teterboro Airport
14 CFR Part 150 Noise Compatibility Study
Technical Advisory Committee Meeting #8
September 23, 2016

1



TEB Part 150 Study | TAC Meeting #8

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Meeting Agenda

- Welcome and introductions
- Current status of Part 150 process
- Draft Noise Exposure Map report availability and comment period
- Overview of second public workshop - September 22, 2016
- Overview of NEM report
- Review of NCP discussions from prior TAC meetings
- Discussion of NY/NJ metropolitan airspace relative to TEB operations and abatement measures
- Upcoming Part 150 milestones
- TAC member discussion
- Study schedule update
- Public comment opportunity
- Adjournment

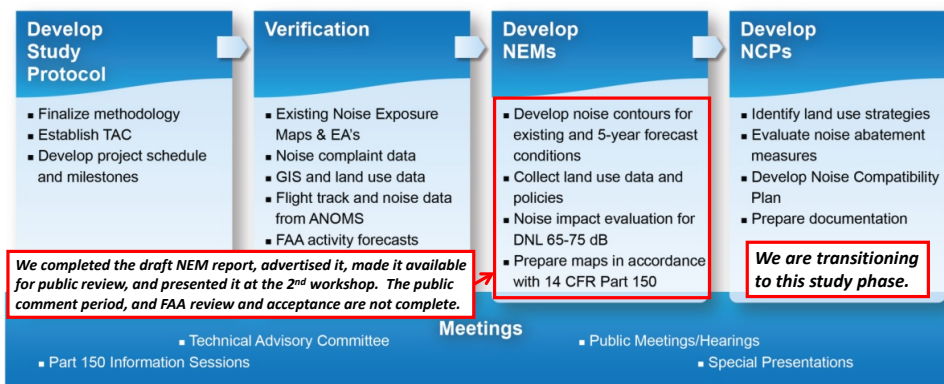
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Generalized Part 150 Study Process / Schedule



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Draft NEM Report Availability and Comment Period

- Comment period on draft NEM report is from September 15 - October 16
- Draft NEM report is available
 - On the Port Authority website, at: http://panynjpart150.com/TEB_DNEM.asp
 - At two physical locations:
 - TEB Manager's office, 90 Moonachie Avenue, 9:30 am to 4:00 pm (Mon to Fri)
 - Bergen County Plaza, 1st Fl. Multi-Purpose Room, Hackensack, 9:30 am to 4:00 pm (Mon to Fri)
- Draft NEM report availability and comment period advertised through:
 - Legal advertisements in English, Spanish, and Korean newspapers
 - Emailed notices to elected officials
 - Workshop (which was advertised in the above notices, 3rd newsletter, and flyers)
 - TAC meeting



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Legal advertisements (September 15 issues except as noted)

- Newark Star Ledger
- Bergen Record
- Hasbrouck Heights Observer (*September 24th issue*)
- Hasbrouck Heights Gazette (*September issue distributed late August*)
- El Especialito (in Spanish)
- Korea Daily (in Korean)
- North Jersey TEB area weeklies
 - Community News (covers Hasbrouck Heights and Woodridge),
 - Little Ferry/Bogota/Ridgefield Hackensack Chronicle
 - South Bergenite



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Legal Advertisements

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NOTICE OF DRAFT NOISE EXPOSURE MAP (NEM) REPORT
NOTICE OF PUBLIC INFORMATION WORKSHOP
 14 Code of Federal (CFR) Part 150
 Airport Noise Compatibility Study for
Teterboro Airport

teletour airport

As part of an on-going 14 CFR Part 150 Airport Noise Compatibility Planning Study, the Port Authority of NY & NJ has completed the Draft Noise Exposure Map (NEM) for the 14 CFR Part 150 requirements. A notice herein is given that the copies of the Draft Noise Exposure Map (NEM) are available for public review and comment.

<p>LOCATION 1: The Port Authority of NY & NJ 100 Montross Avenue 90 Montross Avenue Teletour, NJ 07068 Tel: (201) 992-2000 Hours: 8:30 AM to 4:30 PM (Mon to Fri)</p>	<p>LOCATION 2: Bergen County Four Multiple Purposes One Bergen County Plaza Hackensack, NJ 07601 Tel: (201) 261-2000 Hours: 9:30 AM to 4:00 PM (Mon to Fri)</p>
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The Draft NEM Map will be available at these locations until the close of the comment period, which is 5:00 PM on October 17, 2016. In addition, a copy of this document may be obtained from the teletourairport.com.

All comments on the Draft Noise Exposure Map (NEM) Report should be sent to: The Port Authority of NY & NJ, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, New York 10038. Comments may also be sent to the Port Authority of New York and New Jersey, 100 Montross Avenue, Teletour, NJ 07068. Comments may be emailed to NUPART150@panynj.gov.

TELEPHONE AIRPORT (TEB) PUBLIC INFORMATION WORKSHOP

Additional information regarding the Part 150 Study, and an opportunity to ask questions and comment on the Draft NEPA Report will be available to the Public through an information Session. The details of the date, time, and location of the workshop are listed below.

DATE: Thursday, September 22, 2016
TIME: 6:00 pm to 8:00 pm
LOCATION: Bergen County Plaza, 1st Floor Multi-Purpose Room
One Bergen County Plaza, Hackensack, NJ 07601

The workshop will be held in an "open house" format from 6 p.m. to 8 p.m. in order to provide the public with the maximum opportunity for one-on-one interaction and sharing of information and concerns. The workshop will be held in the Multi-Purpose Room of the Bergen County Plaza, 1st Floor, 100 Bergen County Plaza, Hackensack, NJ 07601.

The Public will be able to obtain information regarding the workshop. The workshop will be held in the Multi-Purpose Room of the Bergen County Plaza, 1st Floor, 100 Bergen County Plaza, Hackensack, NJ 07601.

Language interpretation services are available upon advance request. To make arrangements for these services please contact the PANYNJ Noise Office at 212-435-3777 or via email at noise@panynj.gov.

For more information, please call the PANYNJ Noise Office at 212-435-3777 or visit the project website at: http://panynjairport50.com/TEB_homepage.asp

THE PORT AUTHORITY OF NY & NJ
소용노출지도(NEM) 보고서 초안 발표 공지
공공 정보 워크숍 개최 안내
미국연방규정집 제14권 제150부

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THE PORT AUTHORITY OF NY & NJ
Aviso del Borrador del Informe del Mapa de
Exposición al Ruido (NEM, por sus siglas en inglés)
Aviso de Taller Informativo Público

Código Federal (CFR) 14 Parte 150
Estudio de Compatibilidad de Ruido de Aeronaves para el
Aeropuerto Teodoro

Como parte de un estudio de planificación de compatibilidad de ruido de aeronaves 14 CFR Parte 150, la Autoridad Portuaria de Nueva York y Nueva Jersey, el Puerto de Nueva York y Nueva Jersey (NYNJPA) ha completado el desarrollo de un estudio de ruido de acuerdo a los requisitos del 14 CFR Parte 150. El propósito del presente informe es que las copias del Borrador del Informe de Mapas de Exposición de Ruido de este estudio disponibles para revisión y comentarios en las siguientes ubicaciones:

UBICACIÓN 1: The Port Authority of NY & NJ Aeronautics Building 30 Monticane Avenue, Newark, NJ 07102 Horario: Lunes a viernes de 8:30 a.m. a 4:30 p.m.	UBICACIÓN 2: Bergen County Plaza 100 West 3rd Street, Suite 200 One Bergen County Plaza, Hackensack, NJ 07601 Horario: Lunes a viernes de 9:00 a.m. a 4:00 p.m.
--	--

El Borrador del Informe NEM estará disponible en estos lugares hasta el cierre del periodo de comentario, es decir, el 15 de mayo de 2014. La Autoridad Portuaria de Nueva York y Nueva Jersey, puede ver una copia de este documento en línea en: http://www.panynj.gov/PortDev_TNEM.asp.

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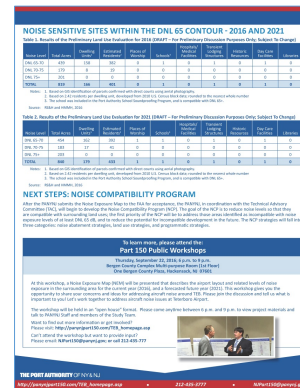
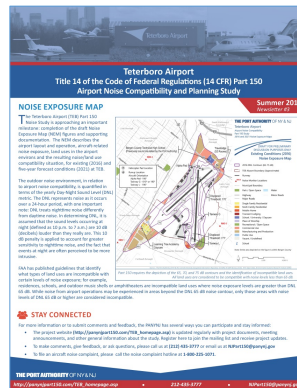
TEB Part 150 Study | TAC Meeting #8

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Third Newsletter

- Advertised 2nd workshop
- Distributed late August
- Distributed to all parties who have signed up via the website or other methods, and others the PA has added to the website based on prior involvement/interest

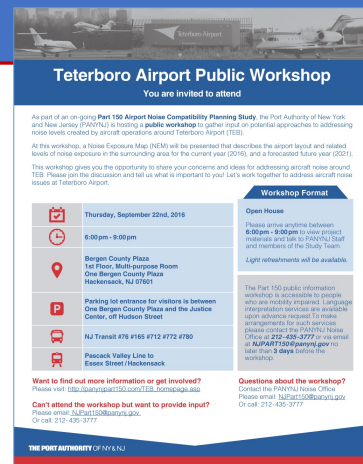


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Workshop Flyer

- Re-advertised second workshop
- Distributed mid-September
- Distributed to all parties who have signed up via the website or other methods, and others the PA has added to the website based on prior involvement/interest
- English, Korean, and Spanish versions



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Overview of 2nd Public Workshop

- Thursday, September 22, 2016 from 6 - 9 p.m.
- Bergen County Plaza, 1st Floor Multi-purpose room, Hackensack
- Seven "stations" (in addition to "Welcome/Sign-In")
 1. Part 150 Overview and Process
 2. Forecast
 3. Land Use
 4. Noise Exposure Map
 5. Where's My House?
 6. Port Authority Flight Tracking and Noise Information System
 7. Next Steps/Public Comments/Document
- Discussion of attendance and other observations by TAC attendees



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Organization of Draft NEM Report

Main Body

- Executive Summary
- Sponsor's Certification (Executed in final submission)
 - FAA Checklist
 - Glossary
- 1. Introduction
- 2. Background
- 3. Land Use
- 4. Development of Noise Exposure Maps
- 5. 2016 and 2021 Noise Exposure Maps
- 6. Stakeholder Engagement

Appendix Volume

- A. Fundamentals of Characterizing Sound, Noise Effects, and Metrics
- B. Noise Complaints
- C. Land Use
- D. Memorandum for Continued Use of INM and Noise Modeling Inputs
- E. Supplemental Contours
- F. Advisory Committee
- G. Public Outreach
- H. Comments (Will be included and addressed in final submission to FAA)

Let's take a quick look at the workshop boards that were used last night to summarize the draft NEM.

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Workshop Boards

- We will review the workshop boards at this point in the presentation
- For those who wish to review them outside of the TAC meeting, they are available on line at: http://panynjpart150.com/TEB_PIW.asp

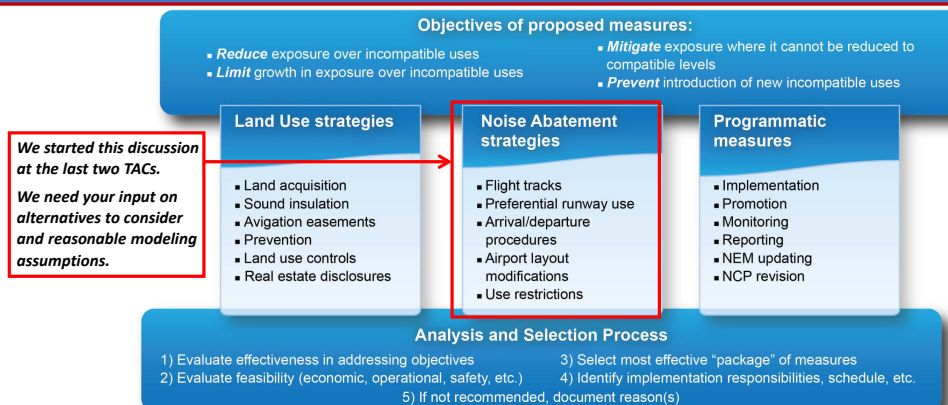
11



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Noise Compatibility Program Development Process



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Review of NCP Discussions from Prior TAC meetings

- Existing 11 pm - 6 am voluntary curfew
 - What can we do to improve compliance with the voluntary curfew?
 - Would operations simply shift to the “shoulder hours” (10-11 pm and 6-7 am)?
 - If so, there would be no change in DNL. Would people notice the improvement?
 - Is it feasible to extend the hours of the voluntary night curfew?
 - Matching the DNL definition of night (10 pm - 7 am) would produce a benefit, if operations shift to the day
- Existing preferential runway measures
 - Runway 1 is the preferred arrival runway when landing to the north from 10 pm to 7 am
 - Runway 19 is the preferred departure runway when departing to the south from 10 pm to 7 am
 - Can we increase night use of Runway 1 for arrivals and Runway 19 for departures?
- How can we develop reasonable modeling assumptions for these alternatives?
- *What other noise abatement ideas can you suggest?*

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Discussion of NY/NJ Metropolitan Airspace

- Implications relative to TEB operations and abatement measures
- FAA staff will lead the presentation and follow-up discussion

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TAC & Public Meeting Topics, 2015-16 *to-date*

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period	Please review the draft NEM and provide any comments!

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 (1 - 4 pm)	Present noise abatement alternative analysis
January 2017	TAC 10	Present additional noise abatement analyses and first-round compatible land use alternatives
March 2017	TAC 11	Present second-round compatible land use alternatives
May 2017	TAC 12	Recommend abatement and compatibility measures
June 2017	Workshop 3	Present draft NCP recommendations
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Review NCP recommendations
September 2017	TAC 15	Discuss Draft NCP and public input
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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Wrap-Up

- Next meeting date and topics
 - 9th TAC - November 17, 2016, 1 - 4 p.m.
 - Presentation and discussion of noise contours, land use analyses, and factors related to first round of noise abatement alternatives.
 - We need your noise abatement analysis suggestions.
- TAC member questions, comments, and discussion?
- Public comments?
- Thanks for attending!

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Teterboro Airport
14 CFR Part 150 Noise Compatibility Study
Technical Advisory Committee Meeting #9
November 17, 2016

1



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Meeting Agenda

- Welcome and introductions
- Review current status of Part 150 process
- NEM Status
- NCP noise abatement discussion
- Upcoming Part 150 milestones
- TAC member discussion
- Study schedule update
- Public comment opportunity
- Adjournment

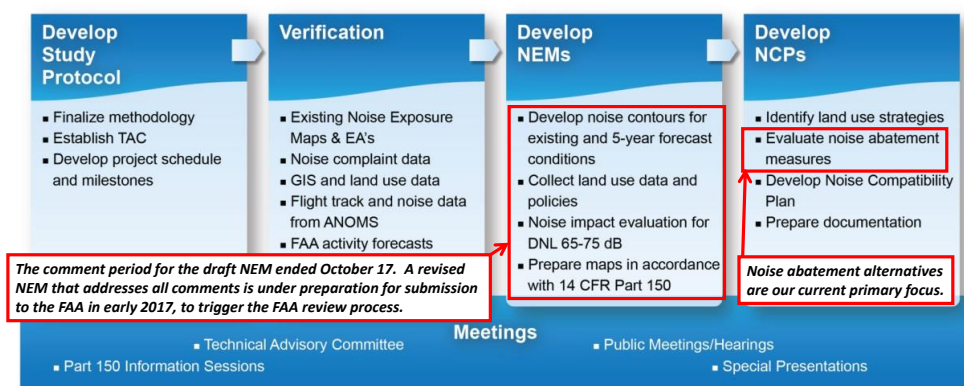
2



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Generalized Part 150 Study Process / Schedule



3



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Draft NEM comment period ended at 5 pm on Oct. 17, 2016

- 22 comments were received *during* the comment period
 - 10 comment forms were submitted at or following the September 22, 2016 workshop
 - One letter was submitted at the September 22, 2016 workshop
 - 11 emails were submitted via the Port Authority's Part 150 website
- Two comments were submitted via the Part 150 website *prior* to the comment period; their content was similar to those received during the comment period
 - These comments also will be documented in the NEM
- A petition supporting the Runway 19 Quiet Visual Approach was submitted with a request that it provided to the FAA for their consideration in that separate study
 - 28 full or partial pages of signatures
 - The petition will not be treated as an Part 150 comment; however other Part 150 comments raised similar issues, so the topic of Runway 19 approaches is covered

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General comment categories

- Two comments present detailed questions regarding the preparation of the NEM and requests for related documentation
- Most comments offer observations regarding the effects of aircraft noise, including low, loud, and frequent operations, and request consideration of a range of compatibility measures, such as:
 - Support for the Runway 19 Quiet Visual approach
 - Other noise abatement flight paths
 - "Rotational" or "switched" runway use
 - Noise fees
 - Mandatory restrictions
 - Reduce frequency of operations
 - New runway between Runways 19 and 24
 - Close airport
 - Noise barriers
 - Residential and school sound insulation
 - Payments to residents
 - Other variants of these
- We will provide a detailed summary of these suggestions at the next TAC meeting
- Three comments note the interaction of TEB and EWR operations and noise

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Review of NCP Discussions from Prior TAC meetings

- Existing 11 pm - 6 am voluntary restraint from operation
 - What can we do to improve compliance with the voluntary restraint from operation?
 - Would operations simply shift to the "shoulder hours" (10-11 pm and 6-7 am)?
 - If so, there would be no change in DNL. Would people notice the improvement?
 - Is it feasible to extend the hours of the voluntary restraint from operation?
 - Using DNL's 10 pm - 7 am definition of night would only produce a benefit if operations shift to the day
- Existing preferential runway measures
 - Runway 1 is the preferred arrival runway when landing to the north from 10 pm to 7 am
 - Runway 19 is the preferred runway for departures to the south from 10 pm to 7 am
 - Can we increase night use of Runway 1 for arrivals and Runway 19 for departures?
- How can we develop reasonable modeling assumptions for these alternatives?

6



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Analyses requested at TACs and Workshops, and in comments

- Prepare contours presenting the contributions of specific categories of operations to the total DNL, to assist in focusing analyses
 - These types of contours are commonly called “partial” DNL contours
- Consider runway use changes to shift nighttime operations from the southwest end of Runway 6/24 to the south end of Runway 1/19
- Consider daytime use of the Runway 19 Quiet One Visual approach
- Consider a Runway 24 noise abatement departure turn to south
- Consider distributions of operations by day of week and hour of the day
- Review recently approved NCP measures (FAA presentation)
- Minimum scope of NCP analyses identified in Part 150

Note: These requests reflect overlapping input from a variety of TAC members, workshop attendees and commenters. They are not suggestions from any specific individuals or groups.

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“Partial” DNL Contributed by Specific Categories of Operations

Categories Considered

- Jet operations only
- Day (7 pm - 10 am operations only
- Night (10 pm - 7 am) operations only
- Departures only
 - Day departures only
 - Night departures only
- Arrivals only
 - Day arrivals only
 - Night arrivals only

Notes Regarding the Figures

- Each figure compares the *partial* contribution of the specified category of operations to the *total* annual DNL
- We are presenting the results for 2021, since the 2016 and 2021 contours are very similar, with the 2021 contours being slightly larger
- *As noted on the figures, the contours are not Noise Exposure Map figures and are presented for discussion purposes only*

8

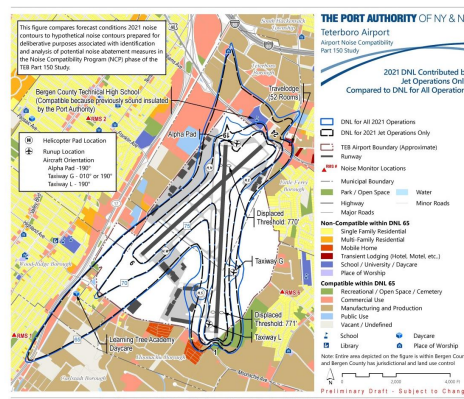


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Contribution of Jets Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for jet operations only.



9



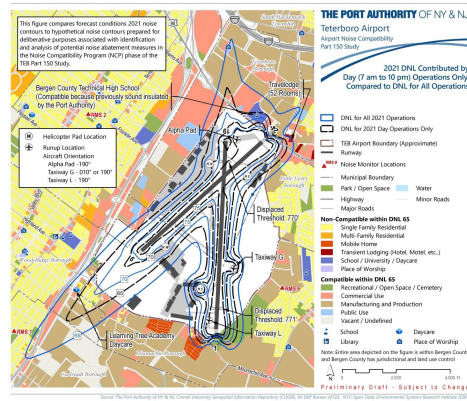
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Contribution of Day Operations Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for day (7 am - 10 pm) operations only.



10

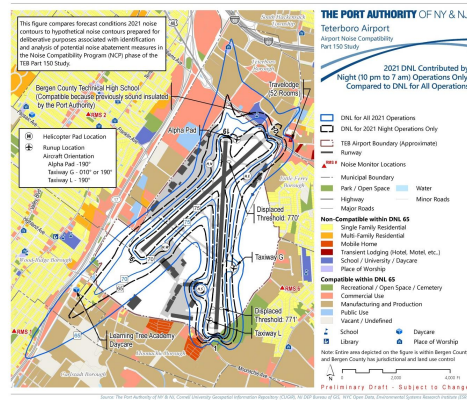


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Contribution of Night Operations Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for night (10 pm - 7 am) operations only.



11

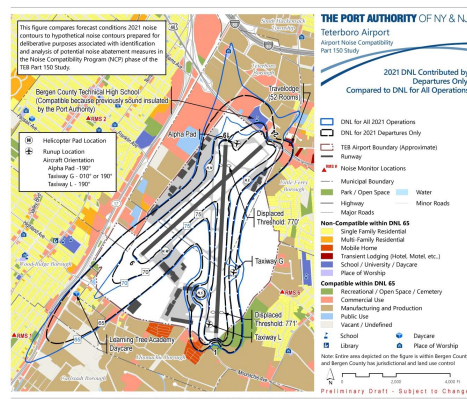


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Contribution of Departures Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for departure operations only.



12



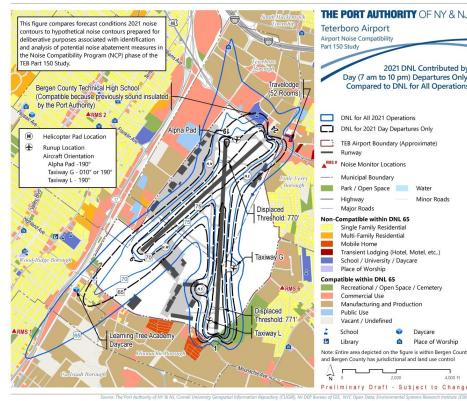
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Contribution of Day Departures Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for day (7 am - 10 pm) departure operations only.



13

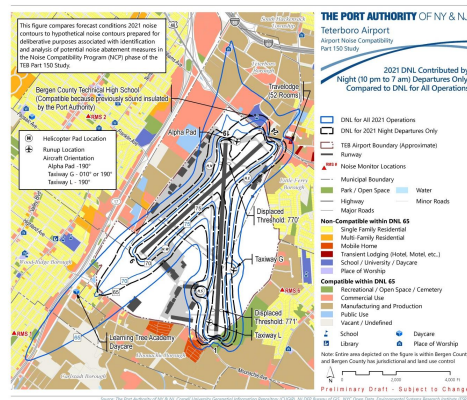


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Contribution of Night Departures Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for night (10 pm - 7 am) departure operations only.



14

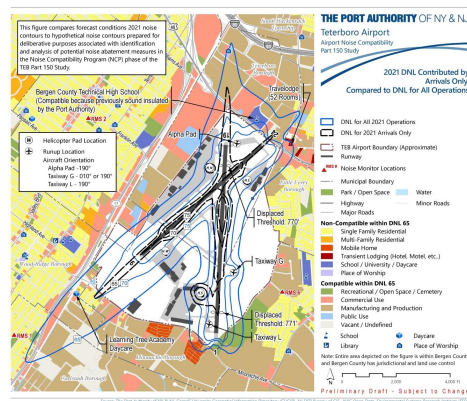


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Contribution of Arrivals Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for arrival operations only.



15

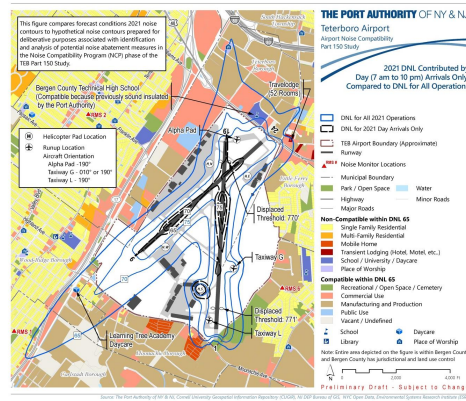


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Contribution of Day Arrivals Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for day (7 am - 10 pm) arrival operations only.



16

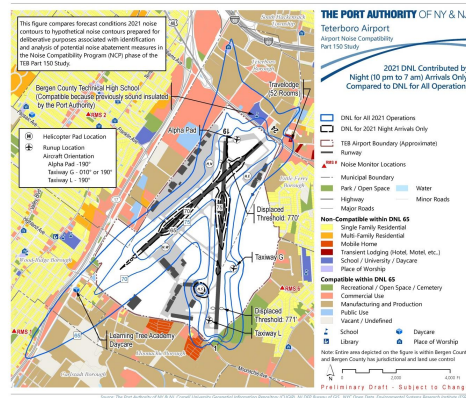


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Contribution of Night Arrivals Only

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL for night (10 pm - 7 am) arrival operations only.



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Observations Regarding Partial Contributions to Total Annual DNL

- Jet operations overwhelmingly dominate total DNL
- Departures contribute far more to total DNL than arrivals
- The contributions of daytime and nighttime operations are nearly equal
 - Daytime operations contribute slightly more than nighttime
 - 10 dB night weighting is roughly balanced by larger number of daytime operations
- To obtain a significant change in the DNL 65 contour
 - Must affect jet departures
 - Minimal DNL benefit from changes in arrivals or non-jet operations
 - Changes in night jet departures will provide the greatest benefit relative to the number of operations affected

18



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Analyses requested at TACs and Workshops

- Consider runway use changes to shift night (10 p.m. - 7 a.m.) operations from the southwest end of Runway 6/24 to the south end of Runway 1/19
 - Shift Runway 6 arrivals to Runway 1
 - Shift Runway 24 departures to Runway 19
 - Combine these two shifts
 - In each case, we have tested 10% and 25% shifts in all aircraft types on a 24-hour basis
- Consider the Runway 19 Quiet One Visual approach
 - We have tested use of the procedure by 25% and 50% of daytime jet arrivals on Runway 19
- Consider a Runway 24 turn to south (195°) for all jet departures

Note: The following contours that were prepared in response to these requests are for use in assessing potential changes in noise exposure only; the analyses are not meant to imply that the proposed changes are operationally feasible.

19



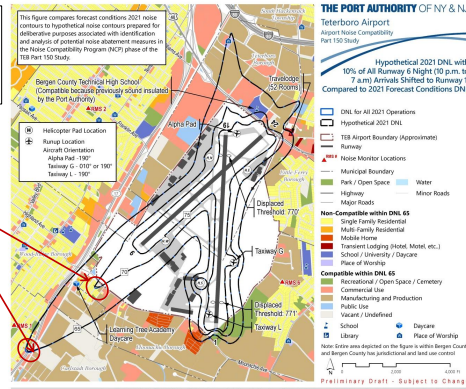
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Shift 10% of Runway 6 Night (10 pm - 7 am) Arrivals to Runway 1

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.

Very slight reduction in contour extent at "tips" of contours



20



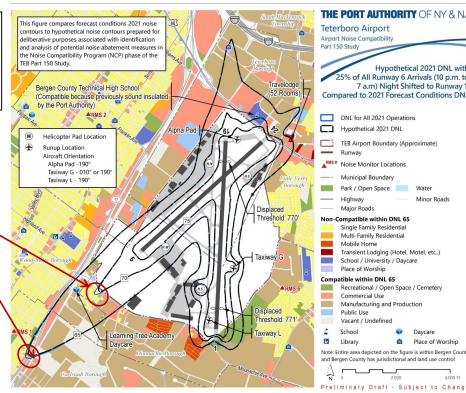
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Shift 25% of Runway 6 Night (10 pm - 7 am) Arrivals to Runway 1

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.

More noticeable reduction in contour extent at "tips" of contours



21



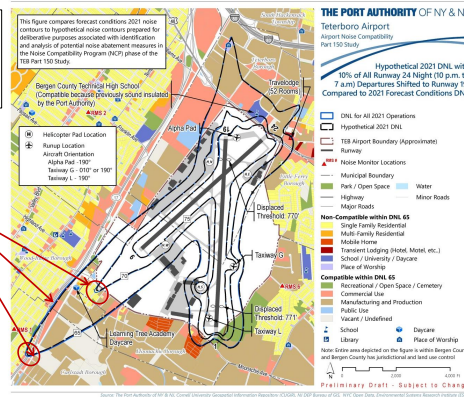
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Shift 10% of Runway 24 Night (10 pm - 7 am) Departures to Runway 19

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.

Slight reduction in contour extent at "tips" of contours and along sides of contours



22



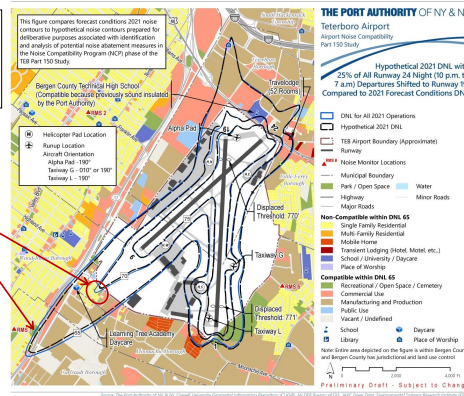
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Shift 25% of Runway 24 Night (10 pm - 7 am) Departures to Runway 19

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.

Reduction in contour extent at "tips" of contours and along sides of contours



23



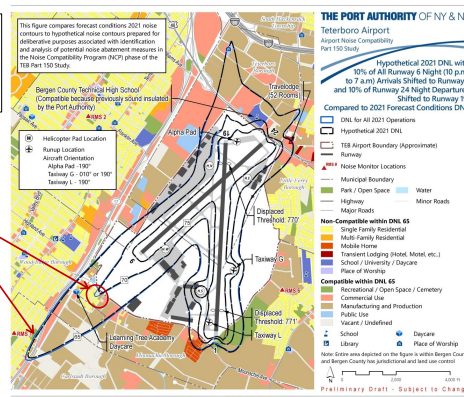
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Shift 10% of Runway 6 Night (10 pm - 7 am) Arrivals to Runway 1 and 10% of Runway 24 Night Departures to Runway 19

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.

Reduction in contour extent at "tips" of contours and along sides of contours



24



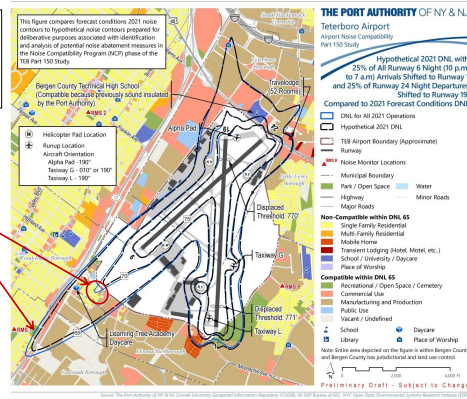
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Shift 25% of Runway 6 Night (10 pm - 7 am) Arrivals to Runway 1 and 25% of Runway 24 Night Departures to Runway 19

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.

More noticeable reduction in contour extent at "tips" of contours and along sides of contours



25



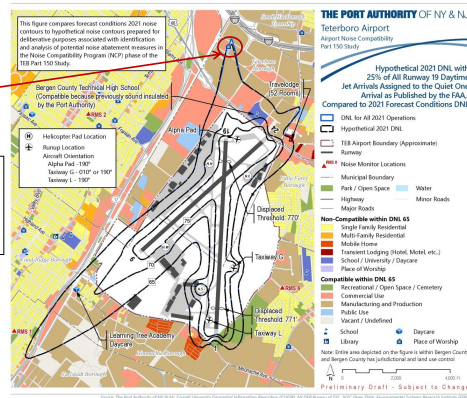
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Shift 25% of Runway 19 Day (7 am - 10 pm) Jet Arrivals to Quiet One Visual

Very slight reduction
in contour extent at
"tip" of contours

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.



26



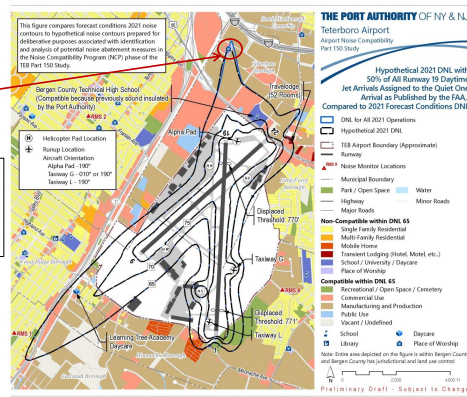
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Shift 50% of Runway 19 Day (7 am - 10 pm) Jet Arrivals to Quiet One Visual

Very slight reduction
in contour extent at
"tip" of contours

These noise contours are not official Noise Exposure Maps. They compare forecast 2021 DNL for all operations to forecast 2021 DNL assuming operations are shifted as noted.



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Operations by Day of Week and Hour of Day

- In response to requests for consideration of:
 - Share of operations occurring during DNL night hours (10 pm - 7 am)
 - Share of operations occurring during voluntary restraint hours (11 pm - 6 am)
 - Share of operations occurring during “shoulder” hours (10 - 11 pm and 6 - 7 am)
- Observations:
 - Nearly all night operations are in jets (with the exception of roughly two turboprop operations each weeknight)
 - The operations during the shoulder hours just before and after voluntary restraint hours (10 - 11 pm and 6 - 7 am) **do not** reflect a shift from the voluntary restraint period; the decline in operations in the evening and the increase in the morning do not show any “jump” due to the voluntary restraint from operation

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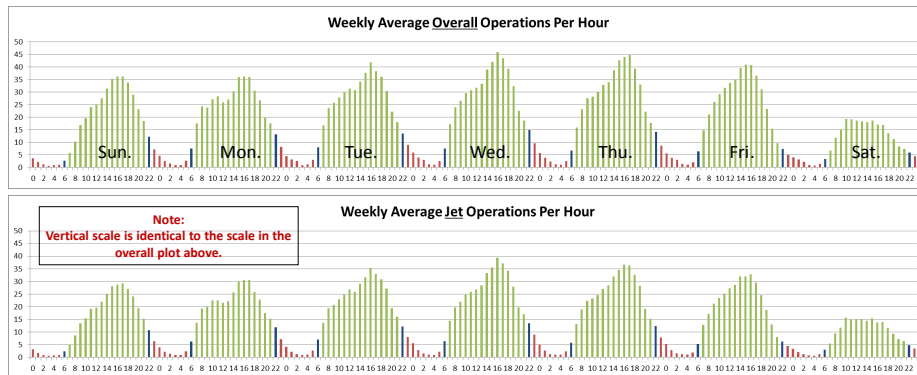


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Average Annual Oper’ns by Hour Throughout the Week - Total vs. Jets

The 11 pm - 6 am voluntary restraint from operation hours are red. The two DNL night hours outside that restraint period are blue. DNL day hours are green.



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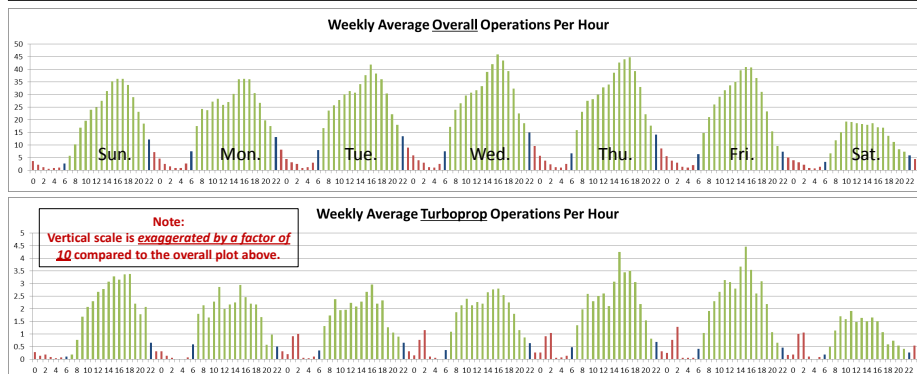


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Average Annual Oper’ns by Hour Throughout the Week - Total vs. Turboprops

The 11 pm - 6 am voluntary restraint from operation hours are red. The two DNL night hours outside that restraint period are blue. DNL day hours are green.



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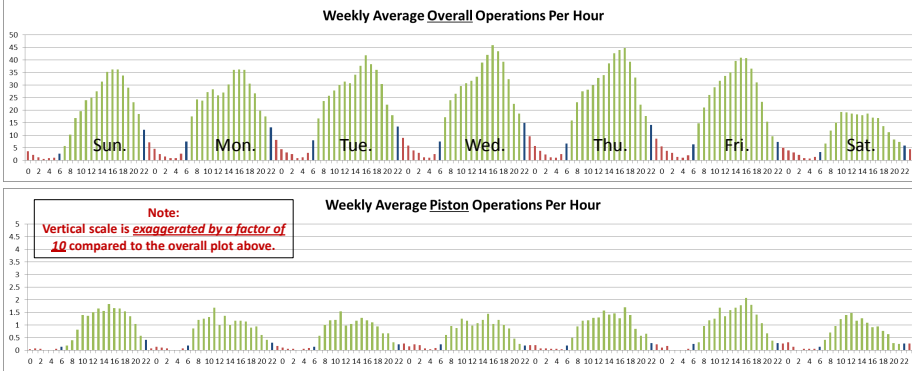


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Average Annual Oper'ns by Hour Throughout the Week - Total vs. Piston Props

The 11 pm - 6 am voluntary restraint from operation hours are red. The two DNL night hours outside that restraint period are blue. DNL day hours are green.



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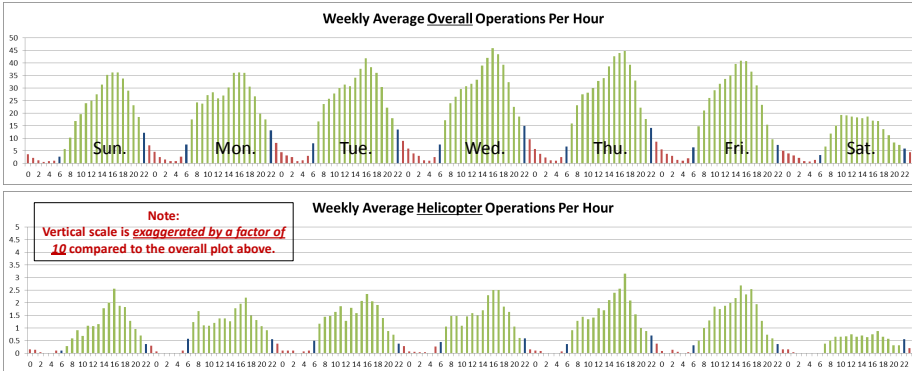


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Average Annual Oper'ns by Hour Throughout the Week - Total vs. Helicopters

The 11 pm - 6 am voluntary restraint from operation hours are red. The two DNL night hours outside that restraint period are blue. DNL day hours are green.



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Recently Approved NCP Measures - FAA

- FAA to provide information.

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Minimum Scope of NCP Alternatives (Part 150 Sec. B150.7)

Highlighted categories are noise abatement measures

- Acquisition of land and interests, including at least air rights, easements, and development rights
- **Barriers** and acoustical shielding, including soundproofing of public buildings
- **Implementation of a preferential runway system**
- **Use of flight procedures (including modification of flight tracks)**
- **Restriction on the use of aircraft based on their noise characteristics, including at least:**
 - [Note: Part 161 has added further notice, review, and approval requirements for use-restriction proposals.]
 - **Denial of use of the airport to aircraft types or classes which do not meet Federal noise standards**
 - **Capacity limitations based on the relative noisiness of different types of aircraft**
 - **Required use of noise abatement takeoff or approach procedures previously approved as safe by the FAA**
 - **Landing fees based on FAA certificated or estimated noise emission levels or on time of arrival**
 - **Partial or complete curfews**
- Other actions or combinations of actions which would have a beneficial noise impact
- Other actions recommended for analysis by the FAA for the specific airport

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Where do we go from here?

- Further TAC recommendations are encouraged
- FAA and operator input on operational issues is requested

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TAC & Public Meeting Topics, 2015-16 to-date

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 - Complete	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period - Complete	

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Today	Present initial noise abatement alternative analyses
January 2017	TAC 10 - <i>Date and time to be determined</i>	Present additional noise abatement analyses and first-round compatible land use alternatives
March 2017	TAC 11	Present second-round compatible land use alternatives
May 2017	TAC 12	Recommend abatement and compatibility measures
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Review NCP recommendations
September 2017	TAC 15	Discuss Draft NCP and public input
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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Wrap-Up

- Next meeting date and topics
 - **10th TAC - January 2017 (*specific date and time to be determined*)**
 - Presentation and discussion of noise contours, land use analyses, and factors related to first round of noise abatement alternatives
 - We continue to need your noise abatement analysis suggestions
- TAC member questions, comments, and discussion?
- Public comments?
- Thanks for attending!

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Teterboro Airport
14 CFR Part 150 Noise Compatibility Study
Technical Advisory Committee Meeting #10
January 27, 2017

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Meeting Agenda

- Welcome and introductions
- TEB Part 150 process status
- Major NCP proposals raised to date in TEB Part 150 process
- Feedback / questions on recent NCP approvals that FAA presented at TAC 9
- NCP land use / noise mitigation alternatives
- FAA guidance regarding mitigation measures
- Present noise abatement alternatives requested at TAC 9
- Upcoming Part 150 milestones and TAC Meetings
- TAC member discussion
- Public comment opportunity
- Adjournment

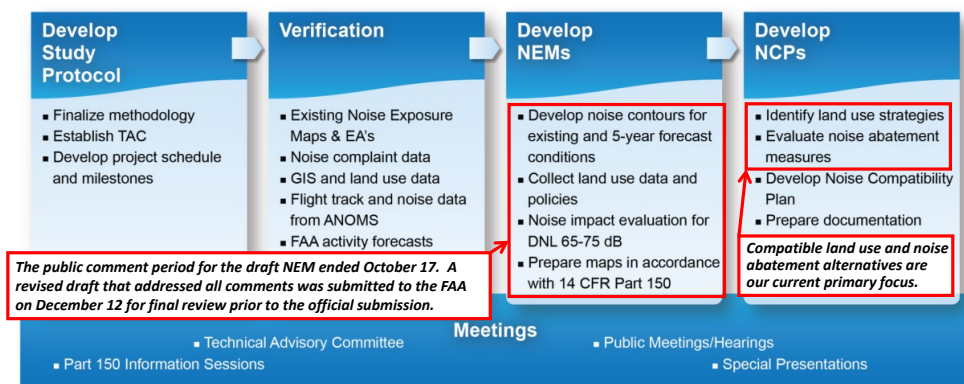
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Generalized Part 150 Study Process / Schedule



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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map



Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

We started the analysis of noise abatement strategies at TAC 9.

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

We are introducing land use strategies at this meeting.

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Programmatic strategies are a topic for a later meeting.

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers
- Runup enclosures
- Use restrictions
- Other actions proposed by stakeholders

Land Use Strategies

- Mitigation
 - Land acquisition
 - Sound insulation
 - Avigation easements
- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

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Minimum Scope of Possible NCP Alternatives (Part 150 Sec. B150.7)

- Acquire land and interests, including at least air rights, easements, and development rights
- Barriers and acoustical shielding, including soundproofing of public buildings
- Implementation of a preferential runway system
- Use of flight procedures (including modification of flight tracks)
- Restriction on the use of aircraft based on their noise characteristics, including at least:
 - [Note: Part 161 has added further notice, review, and approval requirements for use-restriction proposals.]
 - Denial of use of the airport to aircraft types or classes which do not meet Federal noise standards
 - Capacity limitations based on the relative noisiness of different types of aircraft
 - Required use of noise abatement takeoff or approach procedures previously approved as safe by the FAA
 - Landing fees based on FAA certificated or estimated noise emission levels or on time of arrival
 - Partial or complete curfews
- Other actions or combinations of actions which would have a beneficial noise impact
- Other actions recommended for analysis by the FAA for the specific airport

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Major NCP Proposals Raised to Date in TEB Part 150

- Noise abatement departure procedures - *addressed at this TAC*
- Noise abatement flight paths, including:
 - Runway 19 Quiet Visual approach - *addressed at TAC 9*
 - Runway 24 noise abatement departure turn to south - *addressed at this TAC*
- New runway between Runways 19 and 24
 - Would largely provide same benefit as Runway 24 turn to the south - *addressed at this TAC*
 - Preferential runway use - *addressed initially at TAC 9 and further at this TAC*
- Land use measures - *addressed in initial land use discussion at this TAC*
 - Mitigation via sound insulation
 - Compensation via easements, tax abatement or other payments to residents
- Noise barriers - *addressed at this TAC*
- Mandatory restrictions, noise fees, limit numbers or frequency of operations
 - Cannot be considered until all non-restrictive strategies have been considered and rejected

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Recently Approved NCP Measures - FAA

- FAA provided an overview of recently approved NCP measures at TAC 9
- Copy of FAA spreadsheet was emailed to TAC members
 - First tab lists Operational Measures, which we have discussed at prior TACs
 - Second tab lists Land Use Measures, which we will start discussing at this TAC
 - Third tab lists Program Management Measures, which we will discuss at future TACs
 - Fourth tab lists Part 161 Measures, which we discuss at future TACs, if necessary
- ***Do you have feedback or questions on this material?***

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New Topic: *Land Use / Noise Mitigation Measures*

- Land use measures are intended to prevent introduction of new incompatible land uses
 - Local jurisdictions typically have implementation and enforcement responsibilities of these measures
- Noise mitigation measures are intended to correct existing incompatible land uses
 - The owner and operator of an airport (the Port Authority) typically is responsible for implementation of these measures
- Both are essential to obtaining and maintaining compatible land use surrounding TEB

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Land Use NCP Measures - Introduction

- The following seven strategies are typical preventive land use measures
 - Require real estate disclosures
 - Modify land use zoning
 - Develop land use zoning overlays
 - Amend State building codes
 - Prepare cooperative land use development agreements
 - Participate in community planners forums
 - Distribute noise and land use mitigation information to community groups

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NJ Assoc'n of Realtors "Seller's Property Condition Disclosure Statement"

- Mechanism for informing buyers of property in airport vicinity about aircraft noise (providing "disclosure")
- Requirement that sellers and/or real estate brokers must inform buyers
- Part of the sales agreement
- Disclosure of this type is generally enacted at the state level
- Applicable to properties within a specific noise contour or within a certain distance from an airport

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Land Use Zoning

- Enacted by local jurisdiction with land use and zoning authority
- Rezone properties within specific noise contours to be compatible with aircraft operations
- Intent of zoning is to prevent development of incompatible land uses near an airport
- Rezoning promotes compatible land uses in airport vicinity
- Rezoning allows for "grandfathering" of existing uses

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Land Use Zoning Overlays

- Enacted by local jurisdiction with land use and zoning authority
- Adoption of a separate overlay zone that works in tandem with underlying zone
- Intent is to prevent incompatible land uses from being developed near an airport
- Provides greater details regarding what is allowable in the overlay zone (e.g., height limits that may be different)

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Building Codes

- Enacted at the state level in partnership with the local jurisdiction
- Intended to raise minimum building standards in vicinity of an airport
- Intended to promote compatible land uses in airport vicinity

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Cooperative Land Use Agreements

- Enacted by airport sponsor (e.g., Port Authority) and jurisdictions with local land use authority
- Agreements are focused on land use, redevelopment, and infrastructure in airport vicinity
- Intended to prevent incompatible land uses from being developed in airport vicinity

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Community Planners Forums

- Established by airport sponsor (e.g., Port Authority) to bring together various jurisdictions in airport vicinity
- Share information pertaining to comprehensive planning, land use issues, zoning issues, and noise mitigation efforts
- Intended to provide a “level playing field” for all jurisdictions in airport vicinity

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Distribution of Noise Mitigation Information

- Enacted by the airport sponsor (e.g., the Port Authority)
- Intended to inform jurisdictions in airport vicinity about what has been and will be implemented, schedule for implementation, etc.
- Program to distribute noise mitigation information to all jurisdictions in the airport vicinity
- Information distributed on a periodic basis (e.g., monthly, bi-annually, annually, etc.)

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Major Categories of Noise Mitigation Measures

- The most typical categories of land use measures considered for mitigating incompatible noise levels include the following strategies
 - Sound insulation
 - Positive ventilation
 - Land acquisition
 - Easement acquisition
 - On-airport noise barriers

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Sound Insulation

- Purpose is to provide a compatible indoor living environment through installation of acoustical treatments (e.g., acoustical doors and windows) to obtain at least a 5 dB improvement in exterior-to-interior noise-level reduction
- Results in the parcel being considered compatible within 65 DNL contour
- Potentially incompatible buildings (where existing interior level is ≥ 45 DNL)
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (on a case by case basis)

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Positive Ventilation

- Purpose is to provide the ability to keep windows closed to achieve a compatible indoor living environment without acoustical treatments
- Applies where:
 - Homes are not eligible for sound insulation treatment because interior level is below 45 DNL with windows shut and
 - Homes do not have existing positive ventilation
- Results in the parcel being considered compatible within the 65 DNL contour
- Potentially incompatible buildings
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (on a case by case basis)

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Land Acquisition

- Purpose is to acquire incompatible parcels and make them compatible with airport operations by either:
 - Redeveloping the property for a non-noise-sensitive use, e.g., commercial or industrial
 - Installing sound-insulation treatments and reselling the property as compatible through programs such as purchase assurance
- Results in the parcel being considered compatible with aircraft noise
- Potentially incompatible parcels
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (on a case by case basis)

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Easement Acquisition

- Purpose is to achieve compatibility through the purchase from the property owner of an easement that goes with the deed, to show the owner's acceptance of being within an area of excessive aircraft noise
- Results in the parcel being considered compatible with aircraft noise
- Potentially incompatible parcels
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (case by case)

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On-Airport Noise Barriers

- Purpose is to reduce exposure of incompatible land uses to aircraft noise
 - Almost exclusively used to address noise from aircraft ground operations
 - Must result in incompatible uses receiving at least a 5 dB reduction in aircraft noise
- Typical projects include:
 - Noise barriers
 - Earth berms
 - Wall structures
 - Hush houses
 - Ground run-up enclosures
 - Other devices to shield land uses that are incompatible with aircraft noise

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Implementation of Noise Mitigation Measures

Measure	Eligibility Requirements	Implementation Responsibility	Typical Implementation Duration (See Note 1)	Typical Implementation Costs (See Note 2)
Sound Insulation (typically acoustic doors and window)	<ul style="list-style-type: none"> • Located within 65 DNL • Interior noise 45 dB or greater • No existing code violations 	Port Authority	2-3 decades	<ul style="list-style-type: none"> • Residential: \$50,000/unit single family, \$25,000/unit multifamily • Institutional unknown, likely over \$1 million per property
Positive Ventilation	<ul style="list-style-type: none"> • Located within 65 DNL • Interior noise 45 dB or greater • No existing code violations 	Port Authority	2-3 decades; generally conducted at same time as sound insulation	<ul style="list-style-type: none"> • Residential: \$20,000/unit • Institutional: Unknown
Land Acquisition	<ul style="list-style-type: none"> • Located within 65 DNL 	Port Authority	Less than one decade	<ul style="list-style-type: none"> • Residential: \$275,000/single family parcel, \$340,000/multi-family parcel • Institutional: Unknown
Easement Acquisition	<ul style="list-style-type: none"> • Located within 65 DNL 	Port Authority	2-3 decades; generally conducted at same time as sound insulation	<ul style="list-style-type: none"> • \$7,500/parcel or 15% of fair market value
Barriers	<ul style="list-style-type: none"> • Provides 5 dB reduction to properties within 65 DNL 	Port Authority	2-5 years	<ul style="list-style-type: none"> • Depends on barrier length and height

Note 1: Typical implementation durations given for sound insulation, positive ventilation, land acquisition, and easements are for the completion of full programs covering all incompatible parcels. Noise exposure can change over that period, necessitating NEM updates that may result in revision of implementation areas.

Note 2: Estimated costs are based on similar projects at other airports. Estimates will be refined to reflect local conditions during the TEB NCP process.

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Noise Abatement Analyses Presented at TAC 9

- Shift night operations from southwest end of Rwy 6/24 to south end of Rwy 1/19
 - Benefit off the southwest end of Runway 6/24 is offset by increases off south end of Runway 1/19
 - A shift in the start-of-takeoff roll point for nighttime departures on Runway 1 considered at this TAC could mitigate the increased exposure off the south end of Runway 1/19
- Consider the Runway 19 Quiet Visual approach
 - No reduction in incompatible land
- See figures on the next page

Notes:

1. **Contours shown at TAC 9 and in this presentation are for use in assessing potential changes in noise exposure only; the analyses are not meant to imply that the potential changes are operationally feasible.**
2. The 2021 forecast case was used in the contour analyses, since the 2016 and 2021 contours are very similar, with the 2021 contours being slightly larger.

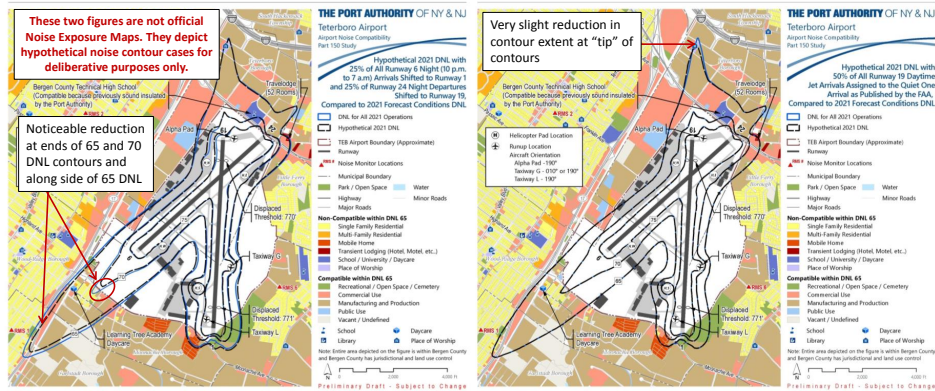
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Contours presented at TAC 9 shifting night oper'ns from southwest end of Rwy 6/24 to south end of Rwy 1/19 (left) and 50% day use of Quiet One by Rwy 19 jet arrivals Rwy 19 (right)



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NCP Analyses Beyond those Presented at TAC 9

- Abate noise from engine runups through use of barriers or other means
 - Present noise contours for all operations except runups (shows maximum potential benefit of abating runup noise)
- Reduce the effect of Runway 1 start-of-takeoff-roll noise on the mobile home park south of Moonachie Avenue
 - Evaluate the potential noise reduction and obstruction implications of raising the height of the existing barrier
 - Present DNL contours with 10% and 25% of all Runway 1 night departures shifted to Runway 6 (two cases)
 - Present DNL contours with 10%, 25%, and 100% of all Runway 1 jet departures starting at Taxiway K intersection
- Potential benefit of high compliance with updated NBAA noise abatement departure procedure (NADP) for high-density airports (developed primarily for TEB)
 - Present DNL contours with all jet departures modeled using CNA750, GIV, and Lear 35 INM aircraft types that are not otherwise held at or below 3,000' use the NBAA high-density NADP (These three INM aircraft types are used because the NBAA selected them for use in their evaluation of the new procedure)
- Evaluate a southerly turn on departure from Runway 24
 - Present DNL contours with all Runway 24 jet departures assigned an initial 235° heading, to maintain the minimum 15° divergence from approaches to Runways 22R/22L at EWR

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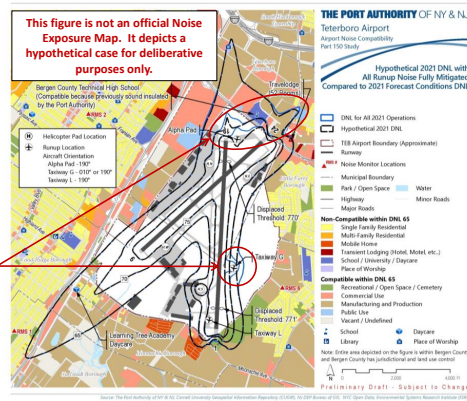


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Would fully abating runway noise produce a significant benefit in terms of DNL?

Most changes in contours are on airport property or over compatible off-airport land uses. **Therefore, even total abatement of runway noise would not reduce incompatible land within contours.**



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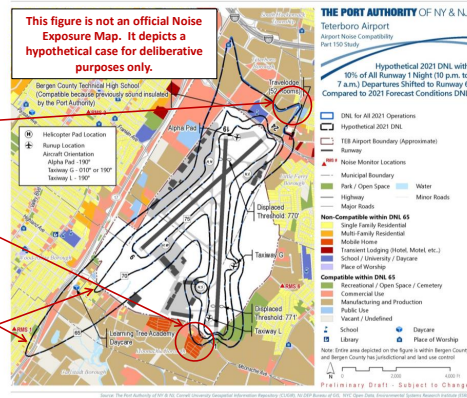
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Would shifting 10% of Runway 1 night departures to Runway 6 produce a significant benefit to the mobile home park in terms of DNL?

Slight **increase** in contour off the northeast end of Runway 6/24 into a residential area.

No noticeable **reduction** of contour extent over mobile home park.

No noticeable change in contour extent over residential areas off the southwest end of Runway 6/24



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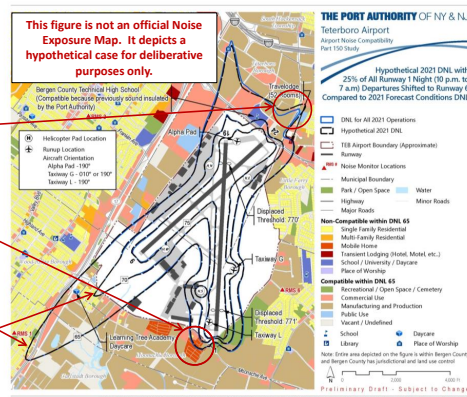
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Would shifting 25% of Runway 1 night departures to Runway 6 produce a significant benefit to the mobile home park in terms of DNL?

Slight **increase** in contour off the northeast end of Runway 6/24 into a residential area.

No noticeable **reduction** of contour extent over mobile home park.

No noticeable change in contour extent over residential areas off the southwest end of Runway 6/24



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Would shifting the start-of-takeoff-roll point at night north to the Taxiway K intersection produce a significant benefit to the mobile home park in terms of DNL?

- Would lose approximately 550' of takeoff distance, but takeoff distance is still longer than Runway 6
- Voluntary procedure would permit aircraft to use full runway length if needed
- Cannot shift north to Taxiway J because aircraft queuing for takeoff would block entry to FBO ramp
- Requesting its use only at night minimizes potential queueing issue



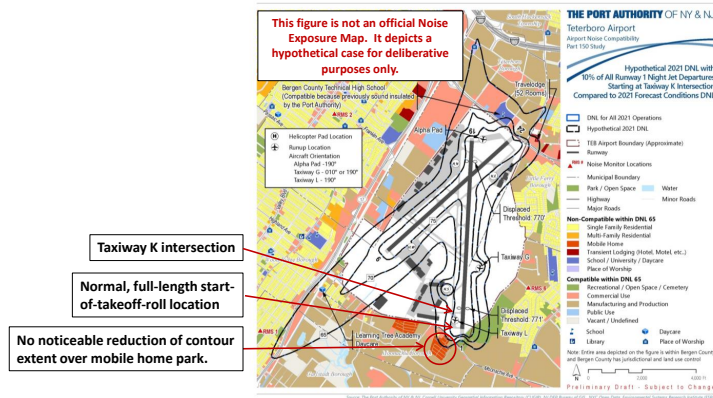
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Would shifting the start-of-takeoff-roll point to the Taxiway K intersection for 10% of Runway 1 jet departures at night produce a significant benefit in terms of DNL?



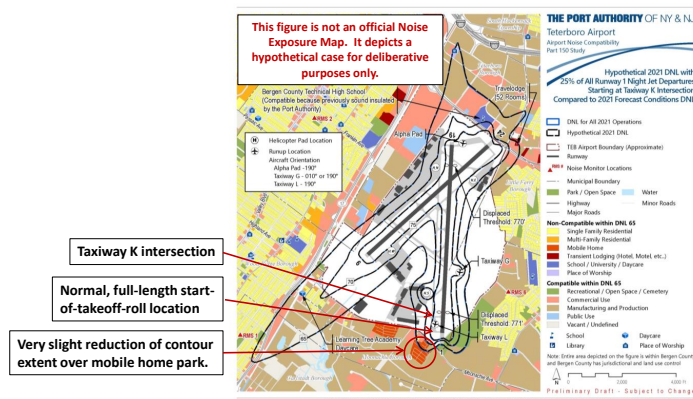
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Would shifting the start-of-takeoff-roll point to the Taxiway K intersection for 25% of Runway 1 jet departures at night produce a significant benefit in terms of DNL?



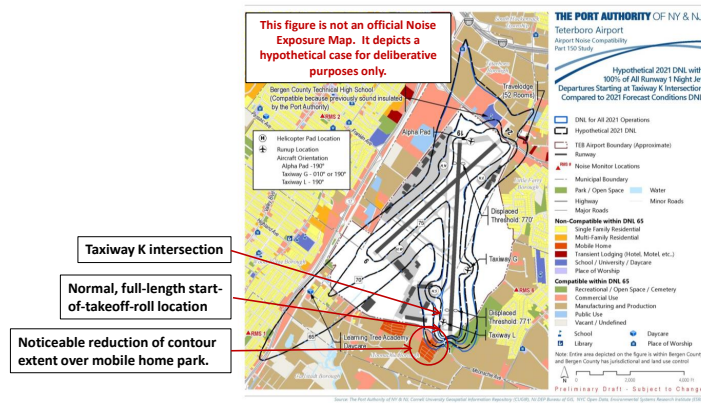
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Would shifting the start-of-takeoff-roll point to the Taxiway K intersection for all Runway 1 jet departures at night produce a significant benefit in terms of DNL?



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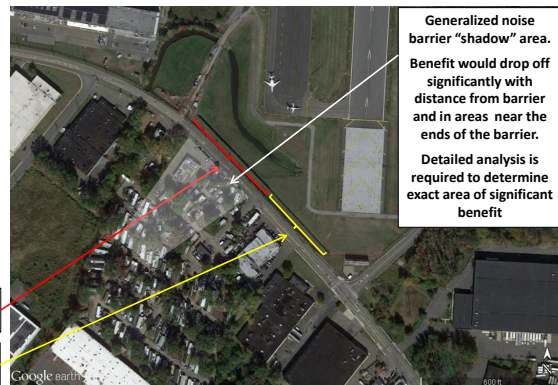


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Would raising the height of the existing berm at the south end of Runway 1/19 produce a significant benefit in terms of DNL?

- Existing barrier is low at the east end and is unlikely to provide benefit. Height may be limited by Runway Safety Area obstruction limits.
- Raising the higher section to the west may benefit the western portions of the mobile home park.
- A detailed noise and obstruction analysis is merited.



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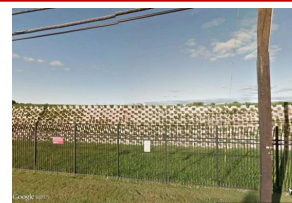
Barrier Photos



The higher northwestern section of the barrier across from the mobile home park shields residents from line-of-sight views of engines; only vertical stabilizers are visible as a rule.



The lower eastern section provides residents with unobstructed views of aircraft and engines on the southernmost end of Runway 1/19; negligible barrier effectiveness.



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Noise Abatement Departure Procedure (NADP)

- What is a Noise Abatement Departure Procedure (NADP)?
 - A flight technique designed to minimize departure noise, by:
 - Adjusting power settings, rates of climb, speeds, etc.
 - Cutting thrust at defined altitudes and speeds
- Since the 1970s, NBAA has taken a leadership role in developing, recommending, and promoting NADPs for general aviation jets
- In 2015 NBAA published updated NADPs
 - An NADP designed for application at airports in “high-density” airspaces was included for the first time
 - TEB operations were the primary driving force behind this new option

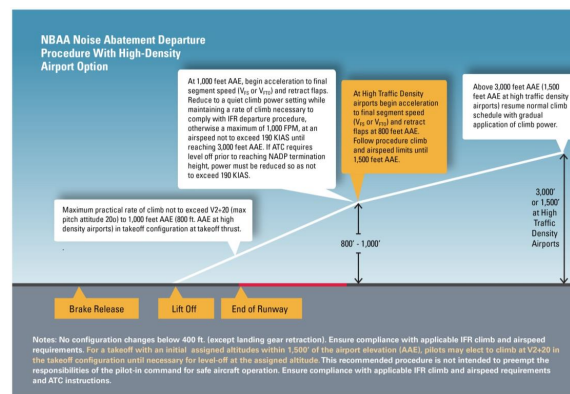
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NBAA High-Density NADP



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Noise Evaluation of High-Density NADP

- The new procedures were developed by the NBAA and vetted by several NBAA committees and staff
- In 2015, NBAA asked HMMH to evaluate how the new procedures would be used in typical airport noise studies
- Three representative aircraft were selected to be modeled and INM profiles were developed for each
- New procedures were compared to the standard INM procedure and NBAA's prior “close-in” and “distant” NADPs

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Analysis Considered Three Aircraft Types

- Learjet 35
 - Small business jet
 - Approximate takeoff weight – 18,000 lbs
 - Mid-1970's era aircraft
- Citation X (Cessna 750)
 - Medium business jet
 - Approximate takeoff weight – 36,000 lbs
 - Mid-1990s era aircraft
- Gulfstream IV
 - Large business jet
 - Approximate takeoff weight – 63,000 lbs
 - Mid-1980s era aircraft



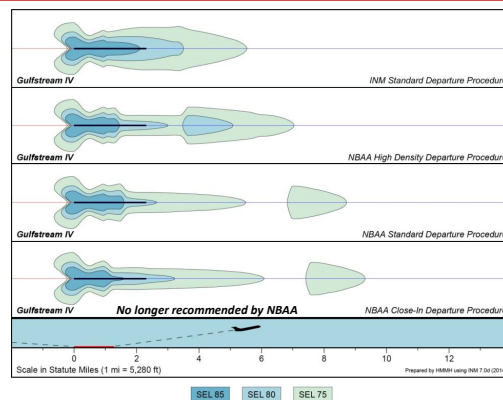
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Analysis Used Single Event Noise Contours



- The amount of noise reduction depends on where you are under the flight path
- The NBAA high-density and standard procedures produce noise reduction close in to the airport, in the area within the 65 DNL and higher contours
- Noise levels may be increased farther from the airport

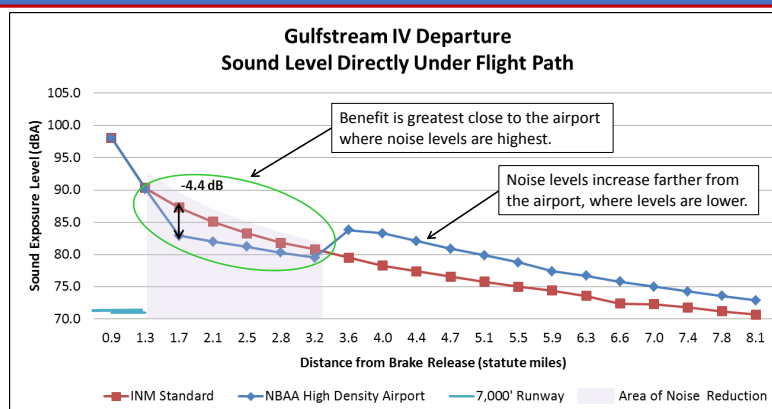
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How Do the High-Density and Standard INM Procedures Compare?



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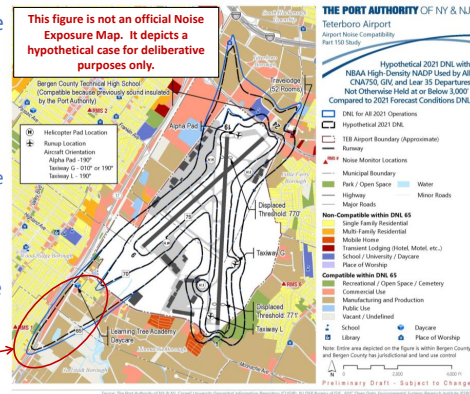
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DNL Contours for Potential Implementation of the High-Density NADP

- Aircraft held at or below 3,000' on departure already cut back power close to the airport, so the NADP would not apply
- Contours assume the NADP is used by all CNA750, GIV, and Lear 35 departures not already held at or below 3,000'
 - Represent approx. 28% of departures in the three INM types and 16% of all jet departures
- Measure mitigates noisiest operations
- While 100% compliance is unlikely, application to all jet models would offset the effect of partial non-compliance
- Reduces residential land within the 65 and 70 DNL contours under Rwy 24 departures



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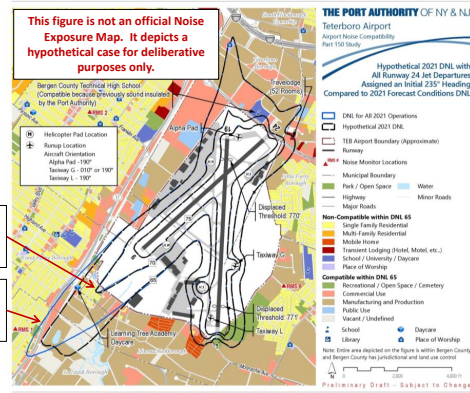
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Evaluate a Southerly Turn on Departures from Runway 24

Turn is limited to approximately five degrees, from runway heading (240°) to 235°, to ensure at least 15° of divergence from approaches to EWR Runway 22L, which are at a 220° heading

No noticeable reduction in residential areas off the departure end of Runway 24 within the 70 DNL contour

Slight reduction in residential areas off the departure end of Runway 24 within the 65 DNL contour



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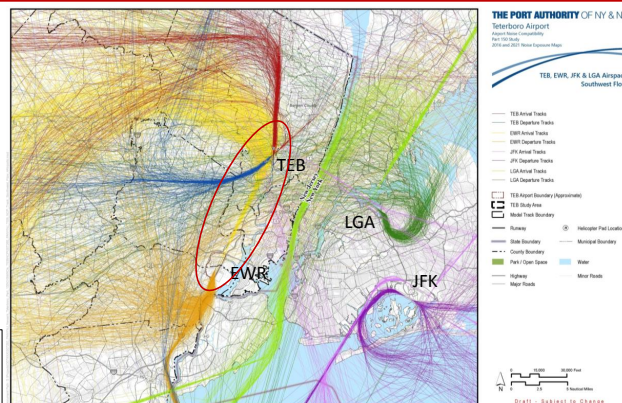
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Air Traffic Concerns Related to Rwy 24 Southerly Departure Turn

- Arrivals to EWR Runway 22L (yellow) pass directly over TEB at a 220° heading
- TEB Runway 24 departures (blue) following runway heading (240°) diverge approximately 20° from EWR Runway 22 arrivals
- Only a five degree turn is possible to maintain the minimum 15° divergence

Figure shows arrival and departure tracks for TEB, EWR, LGA, and JFK on June 16, 2014, when all TEB and EWR operations were in southwest flow.



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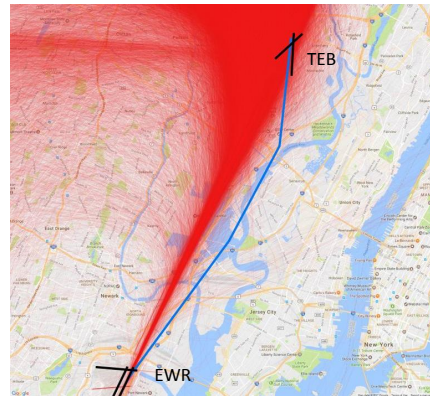


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Air Traffic Concerns Related to Rwy 24 Southerly Departure Turn

- Air traffic concerns may be reduced by EWR Part 150 proposal to consider an approach to Runway 22L that is offset to the east - *if proposal is approved*



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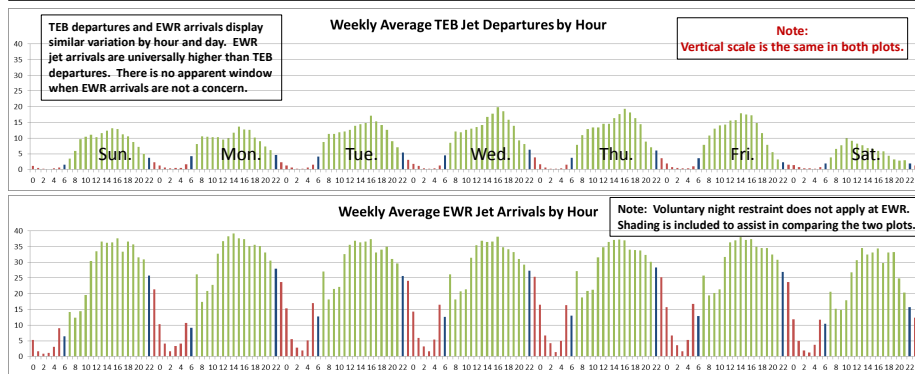


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Are there times when EWR operations are less of a concern?

TEB's 11 pm - 6 am voluntary restraint from operation hours are red. The two DNL night hours outside that restraint period are blue. DNL day hours are green.



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Where do we go from here?

- Further TAC recommendations are encouraged
- FAA and operator input on operational issues is requested

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TAC & Public Meeting Topics, 2015-16 *to-date*

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 - Complete	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period - Complete	

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Complete	Present initial noise abatement alternative analyses
January 27, 2017	TAC 10 - Today	Present additional noise abatement analyses Present first-round compatible land use alternatives
March 31, 2017	TAC 11	Present third-round noise abatement analyses Present second-round compatible land use alternatives
May 18, 2017	TAC 12	Recommend noise abatement and compatible land use measures
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Finalize input to PANYNJ on NCP recommendations
Summer 2017	Workshop 3	Review NCP results and recommendations
September 2017	TAC 15	Discuss Draft NCP document and public input from Workshop
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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Wrap-Up

- Next meeting date and topics
 - **11th TAC - Friday, March 31, 2017, 9 a.m. - noon**
 - Further presentation and discussion of noise abatement alternatives
 - Based on results of this (January 27, 2017) meeting, potential presentation and discussion of noise contours with combinations of noise abatement alternatives
 - Incompatible land use and population analysis results for alternatives
 - Further presentation and discussion of land use mitigation alternatives
 - Briefing on results of meetings with land use control jurisdictions
- TAC member questions, comments, and discussion?
- Public comments?
- Thanks for attending!

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Teterboro Airport
 14 CFR Part 150 Noise Compatibility Study
 Technical Advisory Committee Meeting #11
 March 31, 2017

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Meeting Agenda

- Welcome and introductions
- TEB Part 150 process status
- Presentation and discussion of final noise abatement alternatives
- Presentation and discussion of noise contours with combinations of noise abatement alternatives
- Incompatible land use results for alternatives
- Further presentation and discussion of land use mitigation alternatives
- Briefing on results of meetings with land use control jurisdictions
- Upcoming Part 150 milestones and TAC meetings
- TAC member discussion
- Study schedule update
- Public comment opportunity
- Adjournment

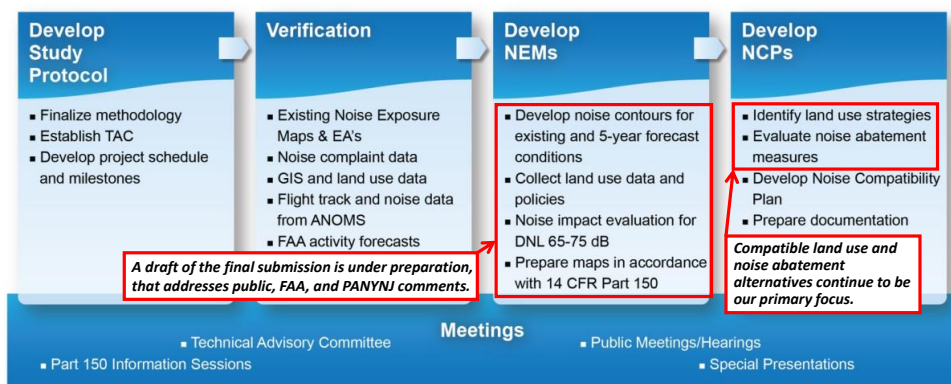
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Generalized Part 150 Study Process / Schedule



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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

We continue discussion of noise abatement strategies at this TAC.

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

We continue discussion of land use strategies at this TAC.

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Programmatic strategies are a topic for a later TAC.

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers (*under investigation*)
- Runup enclosures
- Use restrictions
- Other actions proposed by stakeholders

Investigated to date

Land Use Strategies

- Mitigation
 - Land acquisition
 - Sound insulation
 - Aviation easements
- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders

All have been introduced.

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

Topics for later meetings.

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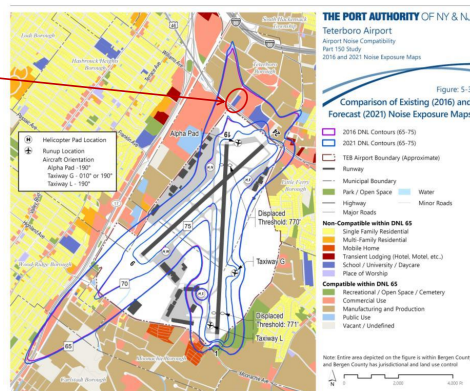
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Note: Additional Potential Sensitive Receptor Identified

The **Jersey College School of Nursing** has been identified. It falls within the 65-70 DNL contour interval for both 2016 and 2021.

The school moved into this location in March of 2013 and only made interior modifications to the building.



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Major NCP Proposals Raised to Date in TEB Part 150

- **Noise abatement flight paths**
 - Runway 19 Quiet Visual approach - *addressed at TAC 9*
 - Runway 24 noise abatement departure turn to south - *addressed at TAC 10 and this TAC*
- **Preferential runway use**
 - Shift Runway 6 night arrivals to Runway 1 - *addressed at TAC 9 and this TAC*
 - Runway 24 night departures to Runway 19 - *addressed at TAC 9 and this TAC*
 - Shift Runway 1 night departures to Runway 6 - *addressed at TAC 10 and this TAC*
- **Noise abatement departure procedures** - NBAA high-density NADP addressed at TAC 9 and this TAC
- **Noise abatement arrival procedures** - Runway 19 Quiet Visual addressed at TAC 9
- **Airport layout** - New runway between Runways 19 and 24 suggested
 - Largely provides same benefit as Runway 24 turn to south - *addressed at TAC 10 and this TAC*
- **Noise barriers** - introduced at TAC 10; currently under investigation for discussion at TAC 12
- **Corrective and preventive land use measures** - addressed at TAC 10 and this TAC
- **Mandatory restrictions, noise fees, limit numbers or frequency of operations**
 - *Cannot be considered until all non-restrictive strategies have been considered and rejected*

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Additional Noise Abatement Alternatives

- Extend application of NBAA High-Density NADP to more jet types
 - Consider ten most active INM types, representing 88% of overall jet departures
 - Compare to prior case considering only CNA750, GIV, and Lear 35 INM types
- Consider assigning 235° heading to Runway 24 jet departures at night only
 - Lighter traffic at night might increase feasibility from an air traffic perspective
 - Compare to prior case considering assignment to all Runway 24 jet departures
- Combine NBAA High-Density NADP and 235° heading
 - Consider ten most active INM types, representing 88% of overall jet departures
 - Consider both 24-hour and night only assignment of 235° heading
- Noise barrier analysis (*under investigation for discussion at TAC 12*)
 - Raise height of barrier at south end of Runway 1/19
 - Evaluate potential benefit of existing buildings along airport property line on Little Ferry

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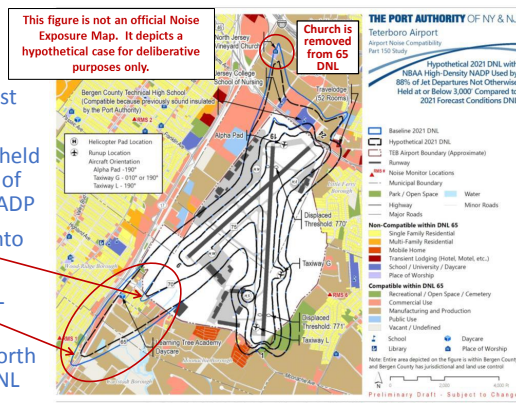


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New Alternative: Expand Application of NBAA High-Density NADP to Jet Departures Not Held at or Below 3,000'

- Modeling inputs developed for ten most active INM jet types
- Limiting application to departures not held at 3,000' results in approximately 52% of all jet departures using high-density NADP
- Essentially pulls the 70 DNL contour onto airport property
- Reduces residential land within 65 DNL under Runway 24 departures
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL



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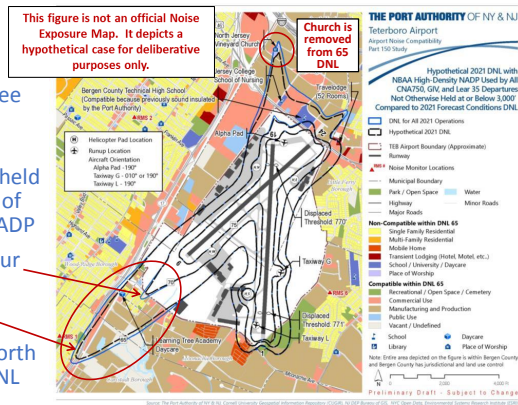
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Previous Analysis for Comparison: CNA750, GIV, and Lear 35 Departures Not Held at 3,000' Use High-Density NADP

- Original analysis took advantage of three sets of user-defined modeling inputs developed for NBAA
- Limiting application to departures not held at 3,000' results in approximately 16% of all jet departures using high-density NADP
- Also essentially pulls the 70 DNL contour onto airport property
- Less reduction within 65 DNL contour
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL

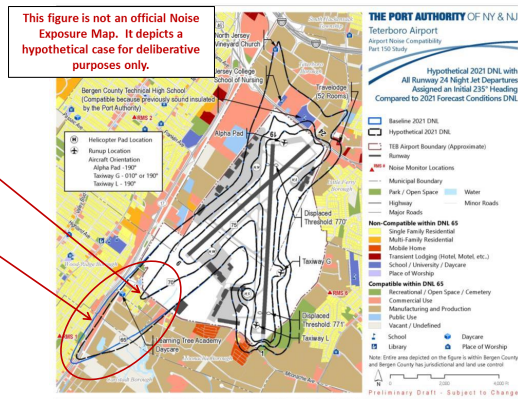


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New Alternative:
All Night Jet Departures on Runway 24 Assigned 235° Heading

- No reduction in residential land within the 70 DNL contour
- Moderate reduction in residential land within the 65 DNL contour

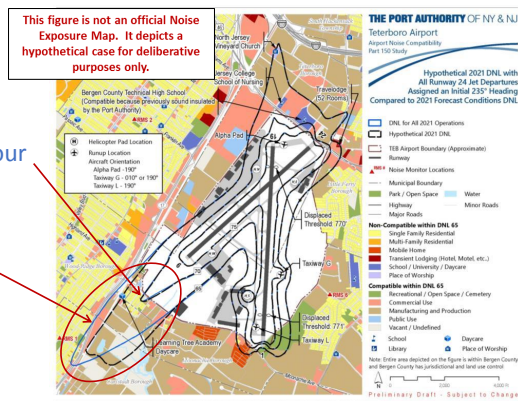


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Previous Analysis For Comparison:
All 24-Hour Jet Departures on Runway 24 Assigned 235° Heading

- Very slight shift in the 70 DNL contour
- More significant reduction in residential land within the 65 DNL contour than night-only case

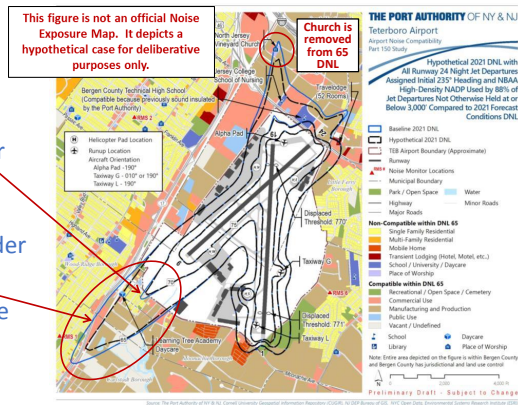


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Combination Case: All Night Runway 24 Jet Departures Assigned 235° Heading and 88% of All Jet Departures Not Held at 3,000' Use NBAA High-Density NADP

- Essentially pulls the 70 DNL contour onto airport property
- Significant reduction in residential land within the 65 DNL contour under Runway 24 departures
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL

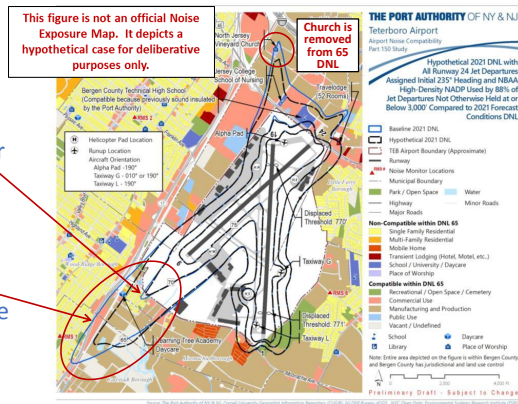


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Combination Case: All 24-Hour Runway 24 Jet Departures Assigned 235° Heading and 88% of All Jet Departures Not Held at 3,000' Use NBAA High-Density NADP

- Essentially pulls the 70 DNL contour onto airport property
- More significant reduction in residential land within the 65 DNL contour than night-only case
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL

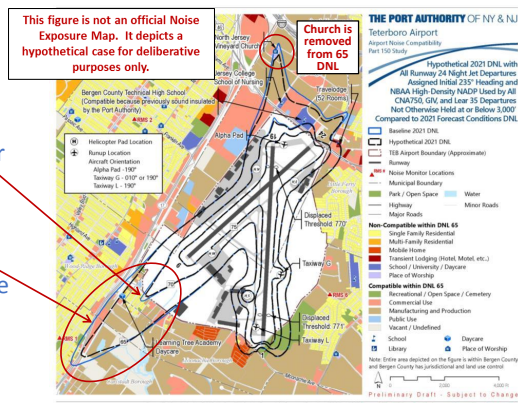


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Combination Case: All Runway 24 Jet Night Departures Assigned 235° Heading and CNA750, GIV, & Lear 35 Departures Not Held at 3,000' Use NBAA High-Density NADP

- Essentially pulls the 70 DNL contour onto airport property
- Significant reduction in residential land within the 65 DNL contour
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL

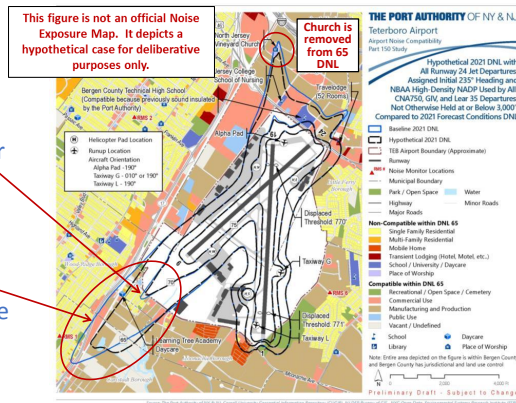


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Combination Case: All 24-Hour Runway 24 Jet Departures Assigned 235° Heading *and* CNA750, GIV, & Lear 35 Departures Not Held at 3,000' Use NBAA High-Density NADP

- Essentially pulls the 70 DNL contour onto airport property
- More significant reduction in residential land within the 65 DNL contour than night-only case
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL



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Sensitive Receptors Wholly or Largely within 65 DNL

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	North Jersey Vineyard Church	Jersey College School of Nursing (Sound insulation status unknown)
Baseline	2021 Baseline Operations	✓	✓	✓	✓
Flight Tracks	All RW 24 Jet Departures Turn to 235°	✓	✓	✓	✓
	Night RW 24 Jet Departures Turn to 235°	✓	✓	✓	✓
Runway Use	Shift 10% of RW 6 Night Arrivals to Runway 1	✓	✓	✓	✓
	Shift 25% RW 24 Night Departures to Runway 19	✓	✓	✓	✓
	Shift 10% of RW 1 Night Departures to Runway 6	✓	✓	✓	✓
	Shift 25% of RW 1 Night Departures to Runway 6	✓	✓	✓	✓
	Shift 10% of RW 6 Night Arrivals to Runway 1 and 10% of Runway 1 Night Departures to Runway 6	✓	✓	✓	✓
	Shift 25% of RW 6 Night Arrivals to Runway 1 and 25% of Runway 1 Night Departures to Runway 6	✓	✓	✓	✓
Arrival Procedures	Shift 25% RW 19 Day Jet Arr. to Quiet Visual	✓	✓	✓	✓
	Shift 50% RW 19 Day Jet Arr. to Quiet Visual	✓	✓	✓	✓



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Sensitive Receptors Wholly or Largely within 65 DNL

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	North Jersey Vineyard Church	Jersey College School of Nursing (Sound insulation status unknown)
Layout	10% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
	25% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
	100% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
NBAA High-Density NADP	Use by CNA750, GIV, and Lear35 Departures Not Held Down at or Below 3,000 ft.	✓	✓	Removed from contours	✓
	Use by 88% of Jet Departures Not Held Down at or Below 3,000 ft.	✓	✓	Removed from contours	✓
Combinations	CNA750, GIV, and Lear35 Departures Not Held Down At or Below 3,000' Use NBAA High-Density NADP and All Runway 24 Jet Departures Turn to 235°	✓	✓	Removed from contours	✓
	All CNA750, GIV, and Lear35 Departures Not Held Down at or Below 3,000' Use NBAA High-Density NADP and All Runway 24 Night Jet Departures Turn to 235°	✓	✓	Removed from contours	✓
	88% of Jet Departures Not Held Down at or Below 3,000' Use NADP and <u>All</u> Runway 24 Jet Departures Turn to 235°	✓	✓	Removed from contours	✓
	88% of Jet Departures Not Held Down at or Below 3,000' Use NADP and Runway 24 <u>Night</u> Jet Departures Turn to 235°	✓	✓	Removed from contours	✓



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Land Use / Noise Mitigation Measures

- *Land use measures* are intended to prevent introduction of new incompatible land uses
 - Local jurisdictions typically have implementation and enforcement responsibilities of these measures
- *Noise mitigation measures* are intended to correct existing incompatible land uses
 - The owner and operator of an airport (e.g., the Port Authority) typically is responsible for implementation of these measures
- Both are essential to obtaining and maintaining compatible land use surrounding TEB

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Land Use NCP Measures - Introduction

- The following seven strategies are typical preventive land use measures
 - Require real estate disclosures
 - Modify land use zoning
 - Develop land use zoning overlays
 - Amend State building codes
 - Prepare cooperative land use development agreements
 - Participate in community planners forums
 - Distribute noise and land use mitigation information to community groups

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Real Estate Disclosures

- Identifying a process for New Jersey Association of Realtors to include informing buyers of property in airport vicinity about aircraft noise in standard disclosure form
- May require decision from New Jersey legislature
- Part of the sales agreement
- Disclosure of this type is generally enacted at the state level
- Applicable to properties within a specific noise contour or within a certain distance from an airport

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Land Use Rezoning

- Enacted by local jurisdiction with land use and zoning authority
- Rezone properties within specific noise contours to be compatible with aircraft operations
- Not many opportunities exist for jurisdictions in the TEB vicinity

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Land Use Zoning Overlays

- Enacted by local jurisdiction with land use and zoning authority
- Adoption of a separate overlay zone that works in tandem with underlying zone
- Several jurisdictions in TEB vicinity have expressed interest in how the zoning overlay would work
- Potential to use the 55 DNL contour as the basis for identifying the area where an overlay zone would be applied

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Building Codes

- Enacted at the state level in partnership with the local jurisdiction
- Intended to raise minimum building standards in vicinity of an airport
- Intended to promote compatible land uses in airport vicinity

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Cooperative Land Use Agreements

- Enacted by Port Authority and jurisdictions with local land use authority
- Agreements are focused on land use, redevelopment, and infrastructure in airport vicinity
- Intended to prevent incompatible land uses from being developed in airport vicinity
- Jurisdictions in TEB vicinity have expressed interest in cooperative land use agreement with Port Authority

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Community Planners Forums

- Established by airport sponsor (e.g., Port Authority) to bring together various jurisdictions in airport vicinity
- Share information pertaining to comprehensive planning, land use issues, zoning issues, and noise mitigation efforts
- Intended to provide a “level playing field” for all jurisdictions in airport vicinity
- Jurisdictions in TEB vicinity have expressed interest in community planner forum

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Distribution of Noise Mitigation Information

- Enacted by Port Authority
- Intended to inform jurisdictions in TEB vicinity about what has been and will be implemented, schedule for implementation, and to distribute noise mitigation information
- Information distributed on a periodic basis (e.g., monthly, bi-annually, annually, etc.)
- Jurisdictions in TEB vicinity have expressed interest in receiving information regarding noise mitigation

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Meetings with Local Jurisdictions

- Conducted one-on-one meetings with:
 - Bergen County
 - East Rutherford
 - Hackensack
 - Hasbrouck Heights
 - Little Ferry
 - Moonachie
 - New Jersey Sports and Exposition Authority
 - Teterboro
 - Wood-Ridge

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Meetings with Local Jurisdictions

- Meetings focused on discussing land use and noise mitigation measures and what measures may be possible to be implemented
- Information exchange
- Jurisdictions were generally interested in the overlay zoning, cooperative land use agreements, community planners forum, and updates on noise mitigation
- Understanding of the process for implementation of NCP measures

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Where do we go from here?

- TAC member questions, comments, and discussion?
- Feedback on feasibility of operational measures?
- Suggestions for revised assumptions regarding percentage utilization?
- Suggestions for additional combinations?
- Public comments?

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TAC & Public Meeting Topics, 2015-16 *to-date*

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 - Complete	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period - Complete	

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Complete	Present initial noise abatement alternative analyses
January 27, 2017	TAC 10 - Complete	Present additional noise abatement and land use analyses
March 31, 2017	TAC 11 - Today	Present third-round noise abatement analyses Present second-round compatible land use alternatives
June 2017	TAC 12	Present noise abatement recommendations Present third-round compatible land use alternatives
September 2017	TAC 13	Recommend compatible land use measures
November 2017	TAC 14	Discuss NCP monitoring and implementation
January 2018	TAC 15	Review NCP results and recommendations
February 2018	Workshop 3	Present Draft NCP Recommendations
March 2018	TAC 16	Discuss Draft NCP document and input from Workshop
August 2018	Public Hearing on NCP	Present proposed NCP and revised NEMs

Note changes
in projected
dates

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Wrap-Up

- Next meeting date and topics
 - **12th TAC – June 2017, 9 a.m. – noon; specific date to be determined**
 - Present noise abatement recommendations
 - Present third-round compatible land use alternatives
- Thanks for attending!

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Teterboro Airport

14 CFR Part 150 Noise Compatibility Study

Technical Advisory Committee Meeting #12

June 29, 2017

1



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Meeting Agenda

- Welcome and introductions
- TEB Part 150 process status
- Discussion of final land use review
- Presentation and discussion of final noise abatement alternatives
- Discussion of combinations of noise abatement alternatives to consider in NCP
- Present noise barrier/ground noise analysis results
- Incompatible land use and population analysis results for alternatives
- Further presentation and discussion of land use mitigation alternatives
- Briefing on results of meetings with land use control jurisdictions
- Upcoming Part 150 milestones and TAC meetings
- TAC member discussion
- Study schedule update
- Public comment opportunity
- Adjournment

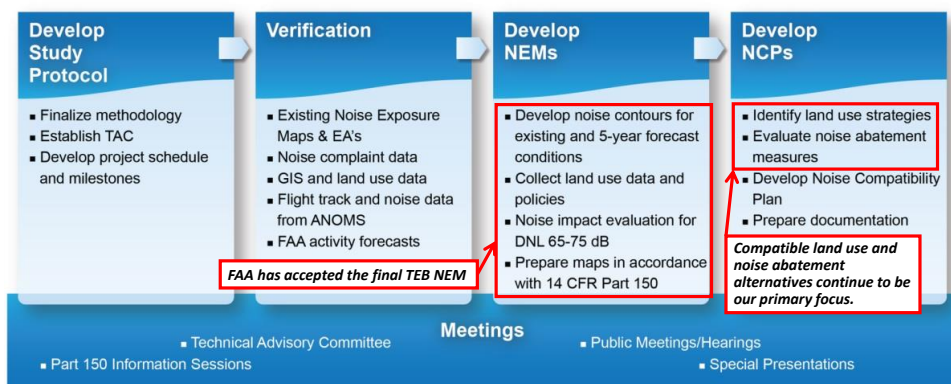
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Generalized Part 150 Study Process / Schedule



3



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FAA Acceptance of TEB NEM

- The TEB NEM was accepted by the FAA on June 15, 2017
- You can access the final TEB NEM at http://panynjpart150.com/TEB_documents.asp
- The acceptance notice from FAA was posted in the Federal Register on June 22nd
- The Port Authority will post a notice of the acceptance in 8 local papers
 - The notice will run three times in each paper

PUBLICATION
The Star Ledger
The Record
El Especialito
The Observer
The Gazette Newspaper
Hackensack Chronicle
Ridgefield Park Patriot
Korea Daily

4



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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

We continue discussion of noise abatement strategies at this TAC.

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

We continue discussion of land use strategies at this TAC.

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Programmatic strategies are a topic for a later TAC.

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers (presented today)
- Runup enclosures
- Use restrictions (will be addressed at TAC 13)
- Other actions proposed by stakeholders

Investigated to date

Land Use Strategies

- Mitigation
 - Land acquisition
 - Sound insulation
 - Avigation easements
- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders

All have been introduced.

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

Topics for later meetings.

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Discussion of Final Land Use Review

- The project team undertook a final QA/QC review of land use in March 2017
- The team wanted to verify sites and data before the final NEM submittal to FAA
- The QA/QC led to the revision of the land use designation of 21 parcels within the 2016 and 2021 65 DNL contours
 - Existing Conditions 2016: 20 of these parcels are within the 65-70 DNL band and one is within the 70-75 DNL band
 - Forecast Conditions 2021: 19 of the parcels are within the 65-70 DNL band and two are within the 70-75 DNL band.
- Resulted in changes in final land use maps, and population and housing counts
- No changes to noise contours

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Discussion of Final Land Use Review (cont'd)

Existing Conditions 2016 and Forecast Conditions 2021		
65-70 DNL	One parcel changed from commercial to school/university use (this is the Jersey College School of Nursing that we presented at TAC 11 on March 31, 2017)	
	One parcel changed from commercial to single family use	
	One parcel changed from multifamily residential to single family residential	
	One parcel changed from single family residential to vacant/undefined	
	One parcel changed from single family residential to manufacturing and production	
70-75 DNL	Three parcels changed from commercial to vacant/undefined use	
	One parcel changed from vacant/undefined to manufacturing and production	
	Existing Conditions 2016	Forecast Conditions 2021
65-70 DNL	Twelve parcels changed from single family residential to multi-family residential	Eleven parcels changed from single family residential to multi-family residential
70-75 DNL	N/A	One parcel changed from single family residential to multi-family residential

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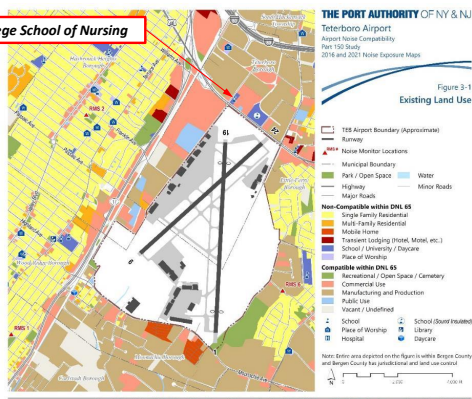
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Discussion of Final Land Use Review (cont'd)

- Final land use review for quality control and assurance resulted in updates to the land use base map and all figures based on that map including:
 - Official NEMs
 - Comparison of Existing (2016) and Forecast (2021) Noise Exposure Maps
 - Large scale flight track graphics

The Jersey College School of Nursing



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Discussion of Final Land Use Review (cont'd)

- Final land use review for quality control and assurance resulted in changes to the dwelling units, population and noise-sensitive sites

Year	Metric	Dwelling Units within DNL Contour Interval				Total Original	Total Revised
		65-70 Original	65-70 Revised	70-75 Original	70-75 Revised		
2016	Single Family	95	88	0	0	95	88
	Multi-Family	19	51	0	0	19	51
	Mobile Home	44	44	8	8	52	52
	Total	158	183	8	8	166	191
2021	Single Family	95	83	5	5	100	88
	Multi-Family	19	49	2	2	21	51
	Mobile Home ¹	48	48	10	9	58	57
	Total	162	180	17	16	179	196
Year	Metric	Population within DNL Contour Interval				Total Original	Total Revised
		65-70 Original	65-70 Revised	70-75 Original	70-75 Revised		
2016	Single Family	230	213	0	0	230	213
	Multi-Family	46	123	0	0	46	123
	Mobile Home	106	106	19	19	125	125
	Total	382	442	19	19	401	461
2021	Single Family	230	201	12	12	242	213
	Multi-Family	46	119	5	5	51	124
	Mobile Home	116	116	24	22	140	138
	Total	392	436	41	39	433	475

¹ The count of mobile homes within the 2021 contours listed changed by one unit (and the associated population accordingly) because these updated counts took advantage of more up-to-date aerial photography that has become available which depicts slight changes in park layout that were made after Hurricane Sandy.

Note: Population = 2.42 people times number of residential units

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Discussion of Final Land Use Review (cont'd)

- Final land use review for quality control and assurance resulted in changes to noise-sensitive sites
- Most receptors are within both the 2016 and 2021 contours
- One church is within only the 2021 contours (the congregation changed between the Draft and Final NEM)

	Year(s)	Noise Sensitive Site	Type	Address	Town
Original Receptors	Receptors within both the 2016 and 2021 contours	Learning Tree Academy	Daycare	150 Park Place East	Wood-Ridge
		Bergen County Technical School ^(Note 1)	School	504 US-46	Teterboro
	Receptor within the 2021 contour only	North Jersey Vineyard Church ^(Note 2)	Church	370 North St	Teterboro
Revised Receptors	Receptors within both the 2016 and 2021 contours	Learning Tree Academy	Daycare	150 Park Place East	Wood-Ridge
		Bergen County Technical School ^(Note 1)	School	504 US-46	Teterboro
		Jersey College School of Nursing (Added)	School	546 US-46	Teterboro
	Receptor within the 2021 contour only	Catalyst Agape Church ^(Note 2)	Church	370 North St	Teterboro

Note 1: The Bergen County Technical School was soundproofed as a part of the School Soundproofing Program discussed in Section 2.5.

Note 2: The North Jersey Vineyard Church changed to a different congregation – the Catalyst Agape Church – in the same location.

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Major NCP Proposals Raised to Date in TEB Part 150

- Noise abatement flight paths, arrival procedures, and departure procedures**
 - Runway 19 Quiet Visual approach - Runway 19 Quiet Visual discussed at TAC 9; FAA discontinued procedure for use after publication due to the complexity of flying it
 - Runway 24 noise abatement departure turn to south - discussed at TAC 10, TAC 11 and this TAC
 - Noise abatement departure procedures - NBAA high-density NADP discussed at TAC 10 and TAC 11
- Preferential runway use**
 - Shift Runway 6 night arrivals to Runway 1 - discussed at TAC 9 and TAC 10
 - Runway 24 night departures to Runway 19 - discussed at TAC 9 and TAC 10
 - Shift Runway 1 night departures to Runway 6 - discussed at TAC 10 and TAC 10
- Airport layout - New runway between Runways 19 and 24 suggested**
 - Largely provides same benefit as Runway 24 turn to south - discussed at TAC 10 and this TAC
 - Relocation of maintenance runups to center of airfield - discussed at TAC 10 and this TAC
- Noise barriers - introduced at TAC 10 and discussed at this TAC**
- Corrective and preventive land use measures - discussed at TAC 10, TAC 11 and this TAC**
- Mandatory restrictions, noise fees, limits on operations - will be discussed at TAC 13**

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Additional Noise Abatement Alternatives

- Consider assigning 235° heading from Runway 24 jet departures at night only
 - Further refinement of the use of procedure – 90% of night jet traffic
 - Further refinement of procedure based on TRACON input
- Consider assigning 230° heading from Runway 24 jet departures at night only
 - Further refinement of the use of procedure – 90% of night jet traffic
 - Further refinement of procedure based on TRACON input
- Consider relocating all runups to a proposed location along Taxiway Q
 - Central airport location
 - Using a 60° and 240° heading
- Noise barrier analysis (introduced in TAC 10)
 - Runway 01 barrier effects on mobile home park
 - Effects of reflections from commercial/industrial building south of mobile home park
 - Shielding from hangars and commercial/industrial buildings on Little Ferry residence

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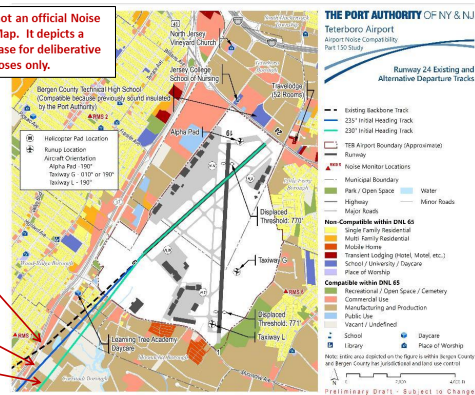
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Existing and Revised Runway 24 Departure Tracks

- Existing track shown is the jet backbone track with the highest usage
- The revised 235° departure heading track turns after the end of the runway
- The new 230° departure heading track turns after the end of the runway

This figure is not an official Noise Exposure Map. It depicts a hypothetical case for deliberative purposes only.



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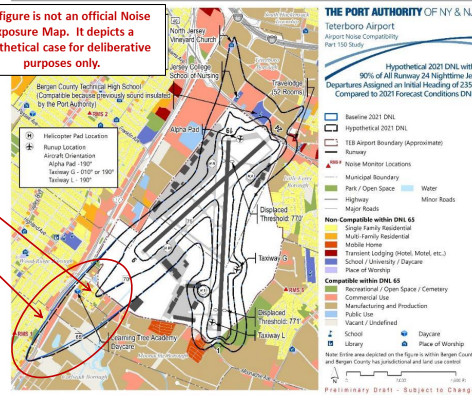
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Revised Alternative: 90% of Night Jet Departures on Runway 24 Assigned 235° Heading

- No reduction in residential land within the 70 DNL contour
- Slight reduction in residential land within the 65 DNL contour
- 90% of night jet departures could use revised flight path

This figure is not an official Noise Exposure Map. It depicts a hypothetical case for deliberative purposes only.



15

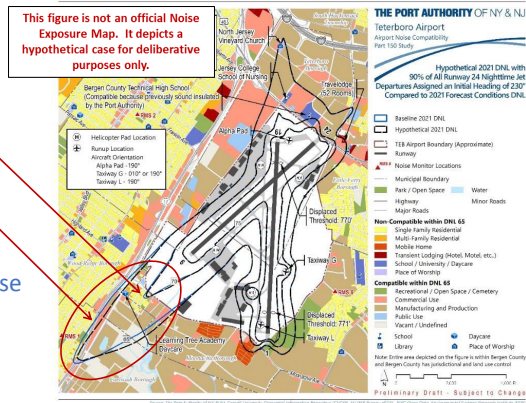


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New Alternative:
90% of Night Jet Departures on Runway 24 Assigned 230° Heading

- Slight reduction in residential land within the 70 DNL contour
- Moderate reduction in residential land within the 65 DNL contour
- 90% of night jet departures could use new flight path

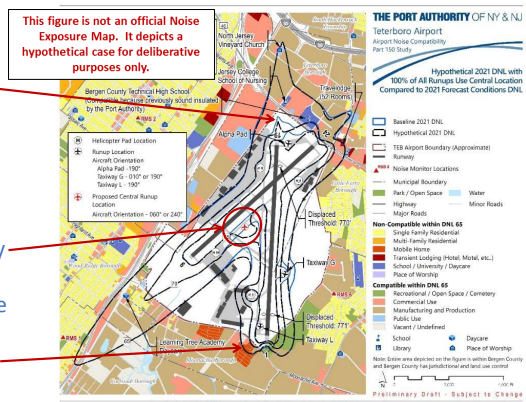


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Revised Alternative:
Location of All Maintenance Runups in the Center of the Airfield along Taxiway Q

- Provides reduction of the 70 DNL contour south of Route 46
- Provides little to no reduction north of Route 46
- No reduction in residential land within the 65 DNL contour
- Proposed runup location along Taxiway Q north of Taxiway G
- Using 60° and 240° headings – with the same split as the existing locations
- There is a slight benefit to the mobile home park



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Ground Noise Overview - Noise Barrier Analysis

- Analysis purposes
 - Runway 01 barrier effects on mobile home park.
 - Shielding from hangars and commercial/industrial buildings on Little Ferry residence.
 - **Note:** Mobile homes are not structurally suited to being made compatible through sound insulation; therefore, FAA does not consider mobile homes eligible for sound insulation funding. Acquisition and relocation is an option that can be considered under Part 150.
- Screening analysis
 - This is a preliminary screening analysis only, to consider barrier effects not captured by INM and to determine whether a full-scale Part 150 analysis is warranted.
 - The screening analysis used the industry-accepted SoundPlan™ model and Cessna Citation Excel spectrum and directivity data¹.
 - Assumed no-wind condition (best case; i.e., maximum potential benefit from barrier).
 - Analysis was only done at locations within DNL 65 where ground noise might be a factor.
 - **Note:** If further analysis under Part 150 were to be pursued, the use of SoundPlan and other details of the analysis approach would require approval from FAA Office of Environment and Energy (AEE).

¹ HMMH already had Cessna Citation Excel high-power data available for the model and it represents a medium jet in the TEB fleet.

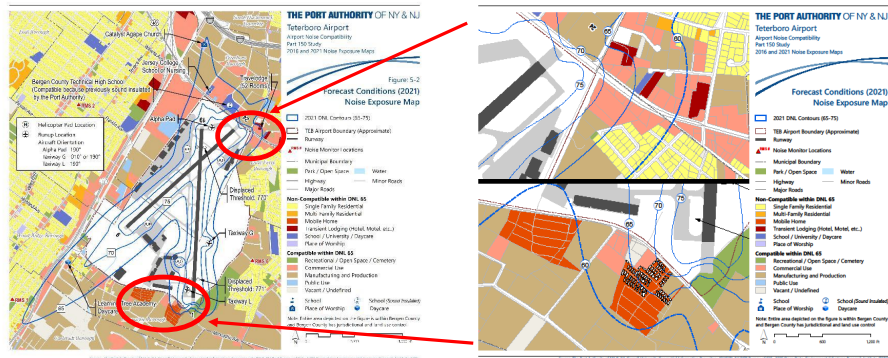


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Analysis Locations Relative to 2021 NEM



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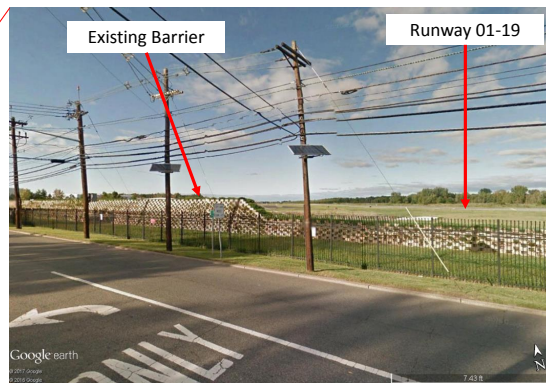
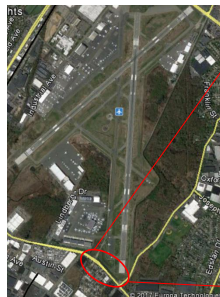


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Runway 01 Noise Barrier

- Existing noise barrier
- Mobile home park on opposite side of street



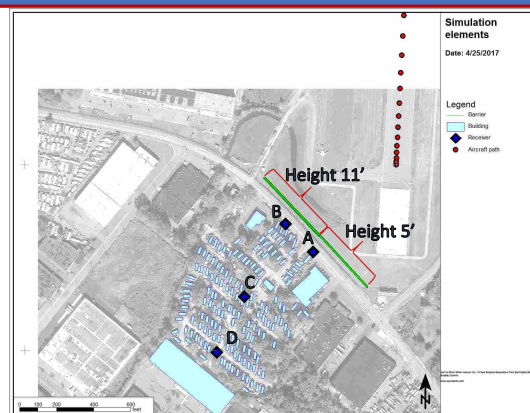
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Runway 01 Simulation Elements



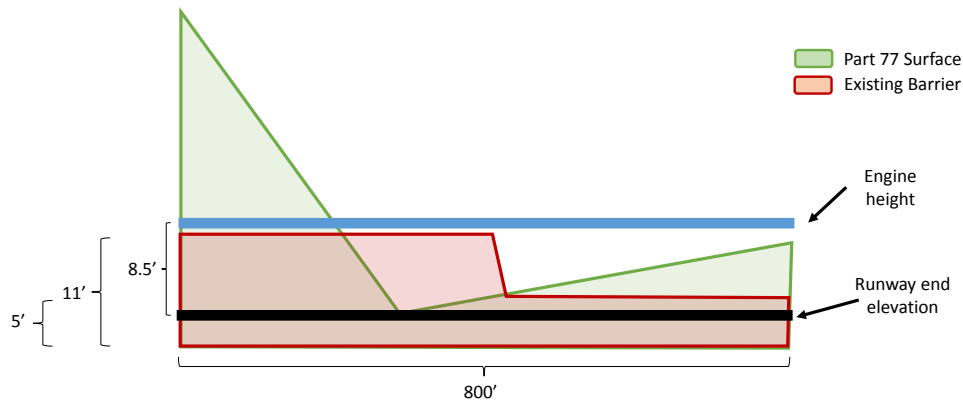
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Runway 01 Barrier Elevation



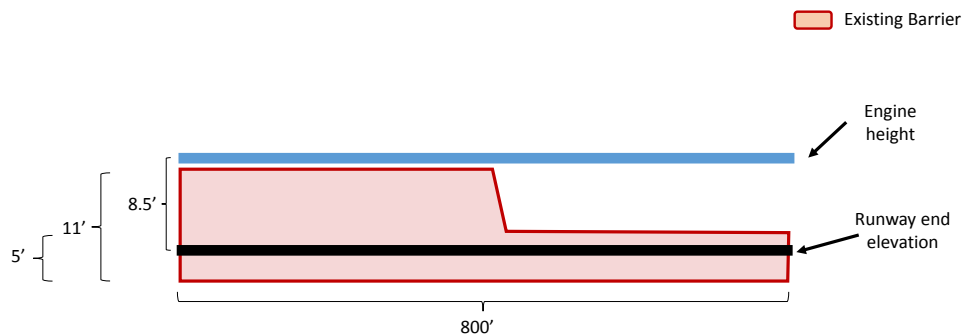
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Runway 01 – Existing Barrier



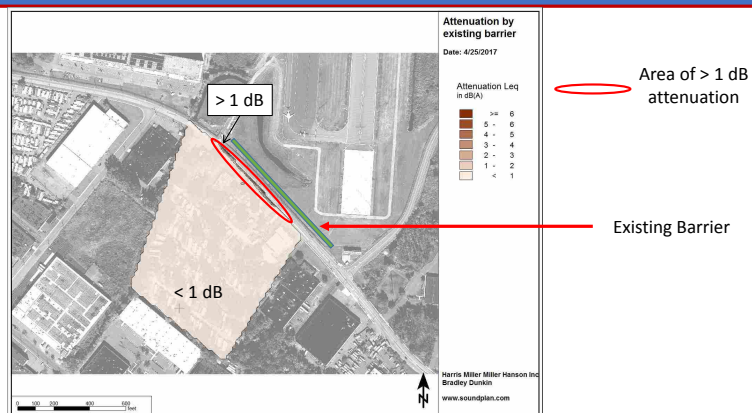
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Runway 01 – Existing Barrier (cont'd)



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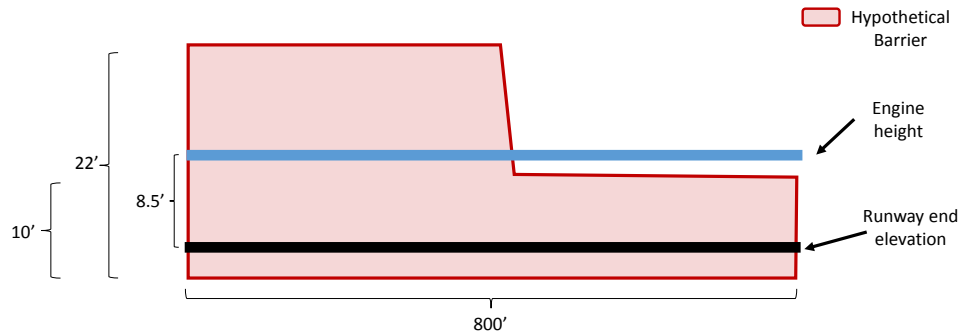
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Runway 01 – Doubled Barrier

- Modeling Scenario – Double the height of existing barrier



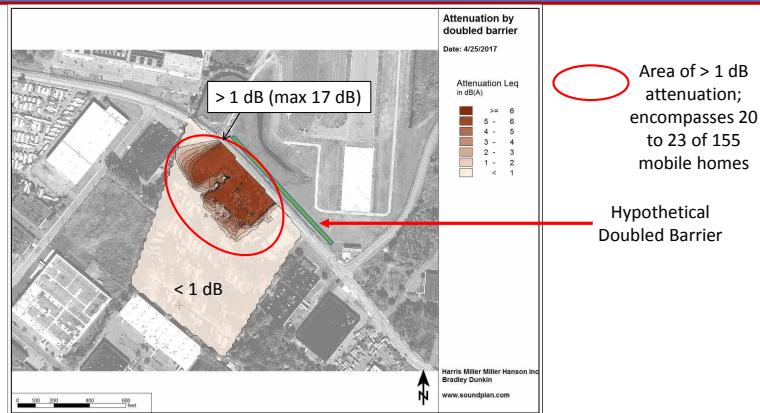
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Runway 01 – Doubled Barrier (cont'd)



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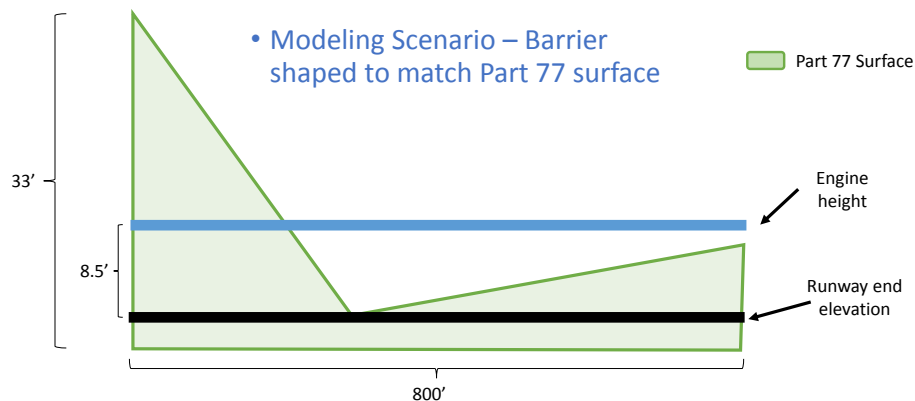


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Runway 01 – Part 77 Shaped Barrier

- Modeling Scenario – Barrier shaped to match Part 77 surface



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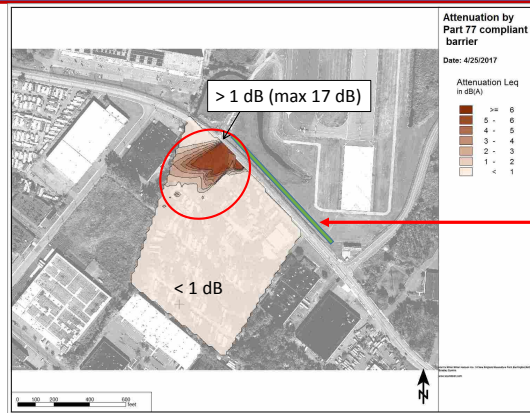


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Runway 01 – Part 77 Shaped Barrier (cont'd)



Area of > 1 dB attenuation; no mobile homes within area

Hypothetical Part 77 shaped Barrier

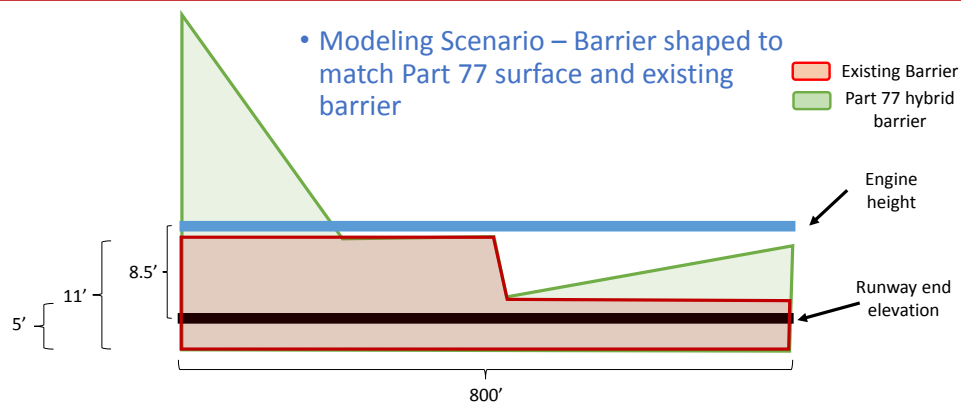
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Runway 01 – Part 77 Hybrid Barrier



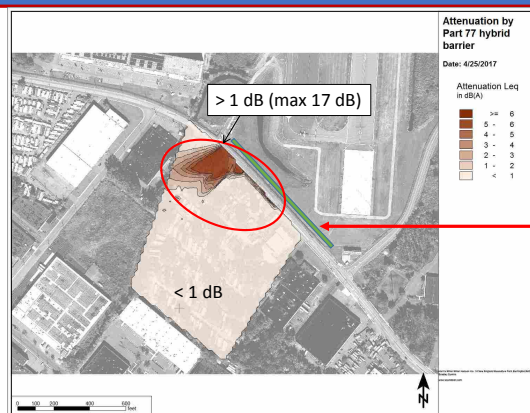
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Runway 01 – Part 77 Hybrid Barrier (cont'd)



Area of > 1 dB attenuation; no mobile homes within area

Hypothetical Part 77 Hybrid Barrier

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General Conclusions

- Existing barrier provides negligible benefit
- Part 77 surfaces severely limit opportunities for raising the barrier
- Barrier cost would be very high
 - Construction cost on the order of \$50 per square foot, ignoring design/engineering, environmental analysis, permitting, and mitigation
 - Potentially \$500,000+ for the doubled height barrier
- A raised barrier does not appear to offer sufficient benefit to justify associated costs and Part 77 implications
- Note: FAA does not consider mobile homes eligible for sound insulation
 - The most common mitigation approach for mobile home parks is acquisition and relocation

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Little Ferry Assessment

- Evaluate effect of existing building shielding and reflection on Runway 24 start-of-takeoff roll noise
- Primary effect is from hangars and commercial/industrial buildings
- Surrounding houses also included in the simulation
- Study focused on a single residence within DNL 65

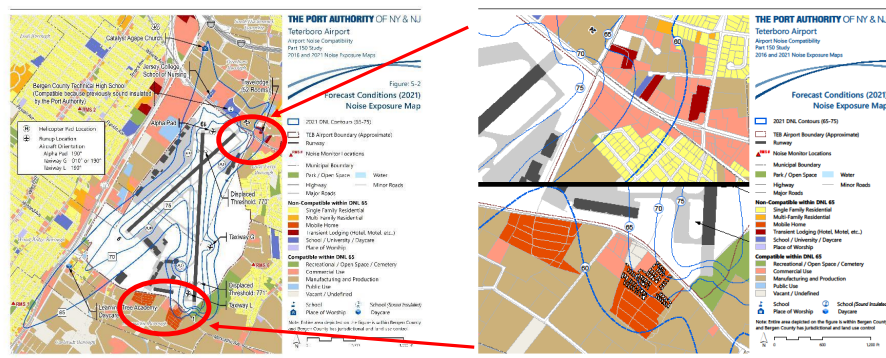
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Analysis Locations Relative to 2021 NEM



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Little Ferry Commercial Building

- Looking toward Runway 24 start-of-takeoff roll



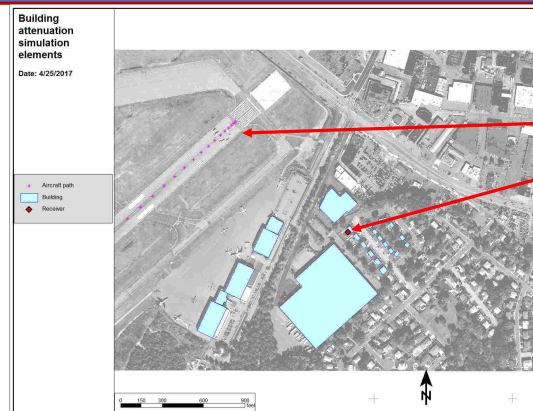
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Little Ferry Simulation Elements



Runway 24
House

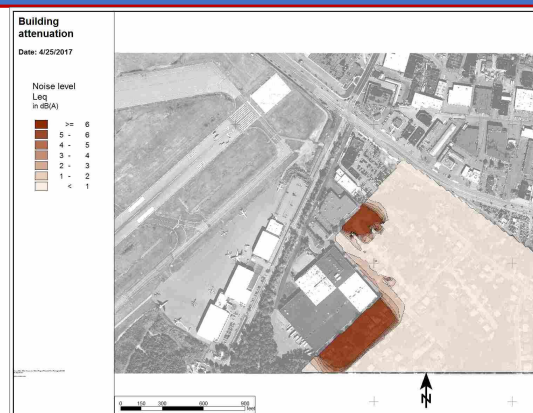
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Runway 24 Building Attenuation



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Runway 24 Building Attenuation – Study House



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Land Use Analysis of Proposed NCP Measures

- List of proposed measures to date
 - Some measures already determined not feasible
- Dwelling unit and population counts for measures evaluated
 - Compared to 2021 baseline
 - Green boxes show a net reduction
 - Red boxes show a net increase
- Noise sensitive site listing for measures evaluated
- Location noted if removed from the contour due to the proposed measure

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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
Flight Tracks	All Rwy 24 Jet Dep.s Turn to 235°	168	407	19	46	187	453	-12	3	-9	-29	7	-22
	Night Rwy 24 Jet Dep.s Turn to 235°	172	416	17	41	189	457	-8	1	-7	-20	2	-18
	90% Night Rwy 24 Jet Dep.s Turn to 235°	173	419	17	41	190	460	-7	1	-6	-17	2	-15
	90% Night Rwy 24 Jet Dep.s Turn to 230°	171	414	10	24	181	438	-9	-6	-15	-22	-15	-37
Arrival Procedures	Shift 25% RW 19 Day Jet Arr. to Quiet Vis.	180	436	16	39	196	475	-	-	-	-	-	-
	Shift 50% RW 19 Day Jet Arr. to Quiet Vis.	180	436	16	39	196	475	-	-	-	-	-	-

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented.

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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
	Shift 10% of Rwy 6 Night Arr.s to Rwy 1	177	428	14	34	191	462	-3	-2	-5	-8	-5	-13
	Shift 25% of Rwy 6 Night Arr.s to Rwy 1	179	433	9	22	188	455	-1	-7	-8	-3	-17	-20
	Shift 10% Rwy 24 Night Dep.s to Rwy 19	183	443	11	27	194	470	3	-5	-2	7	-12	-5
	Shift 25% Rwy 24 Night Dep.s to Rwy 19	189	457	10	24	199	481	9	-6	3	21	-15	6
	Shift 10% of Rwy 1 Night Departures to Runway 6	179	433	13	31	192	464	-1	-3	-4	-3	-8	-11
	Shift 25% of Rwy 1 Night Departures to Rwy 6	181	438	12	29	193	467	1	-4	-3	2	-10	-8
	Shift 10% of Rwy 6 Night Arrivals to Rwy 1 and 10% of Rwy 1 Night Dep.s to Rwy 19	183	443	10	24	193	467	3	-6	-3	7	-15	-8
	Shift 25% of Rwy 6 Night Arr.s to Rwy 1 and 25% of Rwy 1 Night Dep.s to Rwy 19	183	443	10	24	193	467	3	-6	-3	7	-15	-8

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 40



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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
	10% of RW 1 Night Departures Start at Twy K	179	433	12	29	191	462	-1	-4	-5	-3	-10	-13
	25% of RW 1 Night Departures Start at Twy K	175	424	12	29	187	453	-5	-4	-9	-12	-10	-22
	100% of RW 1 Night Departures Start at Twy K	161	390	7	17	168	407	-19	-9	-28	-46	-22	-68
Layout	All maintenance runups use central location	179	433	12	29	191	462	-1	-4	-5	-3	-10	-13
	Use by CNA750, GIV, and Lear35 Departures Not Held Down at or Below 3,000 ft.	167	404	9	22	176	426	-13	-7	-20	-32	-17	-49
	Use by 88% of Jet Departures Not Held Down at or Below 3,000 ft.	168	407	9	22	177	429	-12	-7	-19	-29	-17	-46

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 41



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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
	All CNA750, GIV, and Lear35 Departures Not Held Down At or Below 3,000' Use NBAA High-Density NADP and All Runway 24 Jet Departures Turn to 235°	165	399	9	22	174	421	-15	-7	-22	-37	-17	-54
	All CNA750, GIV, and Lear35 Departures Not Held Down at or Below 3,000' Use NBAA High-Density NADP and All Rwy 24 Night Jet Departures Turn to 235°	166	402	9	22	175	424	-14	-7	-21	-34	-17	-51
	88% of Jet Departures Not Held Down at or Below 3,000' Use NBAA and All Runway 24 Jet Departures Turn to 235°	156	378	9	22	165	400	-24	-7	-31	-58	-17	-75
	88% of Jet Departures Not Held Down at or Below 3,000' Use NBAA and Runway 24 Night Jet Departures Turn to 235°	168	407	9	22	177	429	-12	-7	-19	-29	-17	-46

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 42



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Sensitive Receptors within 65 DNL

Blue checkmark indicates site is wholly or largely within DNL 65

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	Catalyst Agape Church (formerly North Jersey Vineyard Church)	Jersey College School of Nursing (Sound insulation status unknown)
Baseline	2021 Baseline Operations	✓	✓	✓	✓
Flight Tracks	All RW 24 Jet Departures Turn to 235°	✓	✓	✓	✓
	Night RW 24 Jet Departures Turn to 235°	✓	✓	✓	✓
	90% Night Rwy 24 Jet Dep.s Turn to 235°	✓	✓	✓	✓
	90% Night Rwy 24 Jet Dep.s Turn to 230°	✓	✓	✓	✓
Arrival Procedures	Shift 25% RW 19 Day Jet Arr. to Quiet Visual	✓	✓	✓	✓
	Shift 50% RW19 Day Jet Arr. to Quiet Visual	✓	✓	✓	✓

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 43



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Sensitive Receptors within 65 DNL

Blue checkmark indicates site is wholly or largely within DNL 65

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	Catalyst Agape Church (formerly North Jersey Vineyard Church)	Jersey College School of Nursing (Sound insulation status unknown)
Baseline	2021 Baseline Operations	✓	✓	✓	✓
Runway Use	Shift 10% of RW 6 Night Arrivals to Runway 1	✓	✓	✓	✓
	Shift 25% of RW 6 Night Arrivals to Runway 1	✓	✓	✓	✓
	Shift 10% RW 24 Night Departures to Runway 19	✓	✓	✓	✓
	Shift 25% RW 24 Night Departures to Runway 19	✓	✓	✓	✓
	Shift 10% of RW 1 Night Departures to Runway 6	✓	✓	✓	✓
	Shift 25% of RW 1 Night Departures to Runway 6	✓	✓	✓	✓
	Shift 10% of RW 6 Night Arrivals to Runway 1 and 10% of Runway 1 Night Departures to Runway 19	✓	✓	✓	✓
	Shift 25% of RW 6 Night Arrivals to Runway 1 and 25% of Runway 1 Night Departures to Runway 19	✓	✓	✓	✓

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 44



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Sensitive Receptors within 65 DNL

Blue checkmark indicates site is wholly or largely within DNL 65

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	Catalyst Agape Church (formerly North Jersey Vineyard Church)	Jersey College School of Nursing (Sound insulation status unknown)
Layout	10% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
	25% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
	100% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
NBAA High-Density NADP	Use by CNA750, GIV, and Lear35 Departures Not Held Down at or Below 3,000 ft.	✓	✓	Removed from contours	✓
	Use by 88% of Jet Departures Not Held Down at or Below 3,000 ft.	✓	✓	Removed from contours	✓
Combinations	CNA750, GIV, and Lear35 Departures Not Held Down At or Below 3,000' Use NBAA High-Density NADP and <u>All</u> Runway 24 Jet Departures Turn to 235°	Removed from contours	✓	Removed from contours	✓
	All CNA750, GIV, and Lear35 Departures Not Held Down at or Below 3,000' Use NBAA High-Density NADP and <u>All</u> Runway 24 <u>Night</u> Jet Departures Turn to 235°	✓	✓	Removed from contours	✓
	88% of Jet Departures Not Held Down at or Below 3,000' Use NADP and <u>All</u> Runway 24 Jet Departures Turn to 235°	Removed from contours	✓	Removed from contours	✓
	88% of Jet Departures Not Held Down at or Below 3,000' Use NADP and Runway 24 <u>Night</u> Jet Departures Turn to 235°	✓	✓	Removed from contours	✓

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 45



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Land Use / Noise Mitigation Measures

- *Land use measures* are intended to prevent introduction of new incompatible land uses
 - Local jurisdictions typically have implementation and enforcement responsibilities of these measures
- *Noise mitigation measures* are intended to correct existing incompatible land uses
 - The owner and operator of an airport (e.g., the Port Authority) typically is responsible for implementation of these measures
- Both are essential to obtaining and maintaining compatible land use surrounding TEB

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Land Use NCP Measures

- The following seven strategies are typical preventive land use measures
 - Require real estate disclosures
 - Modify land use zoning
 - Develop land use zoning overlays
 - Amend State building codes
 - Prepare cooperative land use development agreements
 - Participate in community planners forums
 - Distribute noise and land use mitigation information to community groups

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Real Estate Disclosures

- Methods for informing buyers of property in airport vicinity about aircraft noise
- Requirement of sellers and/or real estate brokers to inform buyers
- Part of the sales agreement
- New Jersey Association of Realtors standard form
- Applicable to properties within a specific noise contour or within a certain distance from an airport

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Real Estate Disclosures (cont'd)

- Additional research determined that the standard form is text taken directly from legislation enacted by the New Jersey legislature
- Any change in the standard form would require action by the New Jersey legislature
- Most jurisdictions were skeptical as to whether such a change in the standard form would be worth the time and effort to obtain legislative action

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Land Use Rezoning

- Enacted by local jurisdiction with land use and zoning authority
- Rezone properties within specific noise contours to be compatible with aircraft operations
- Intent of rezoning is to prevent incompatible land uses from being developed near an airport
- Rezoning promotes compatible land uses in airport vicinity
- Rezoning allows for “grandfathering” of existing uses

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Land Use Rezoning (cont'd)

- Most vacant or undeveloped land near TEB under jurisdiction of NJSEA
- Most vacant or undeveloped land zoned for compatible land uses
- Very little opportunity for rezoning to be implemented
- Rezoning did not have an immediate positive reaction from most jurisdictions

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Overlay Zone

- Enacted by local jurisdiction with land use and zoning authority
- Adoption of a separate overlay zone that works in tandem with underlying zone
- Intent is to prevent incompatible land uses from being developed near an airport
- Provides greater details regarding what is allowable in the overlay zone (e.g., height limits that may be different, specific building codes to ensure compatibility)

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Overlay Zone (cont'd)

- Jurisdictions are generally interested in an overlay zone as a potential measure
- Jurisdictions requested information and examples of overlay zones that have been implemented in the vicinity of other airports

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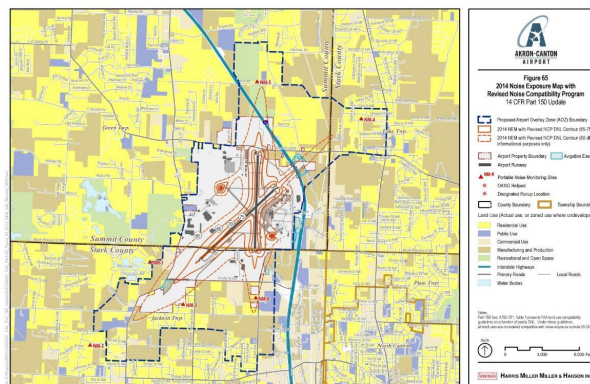


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Overlay Zone (cont'd)

- Example – Akron-Canton Airport
 - Local officials
 - provided positive feedback
 - recommended adjustments to reflect their perspectives on land use
 - Expect jurisdictions to implement during next update to their general plans



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Building Codes

- Enacted at the state level in partnership with the local jurisdiction
- Intended to raise minimum building standards in vicinity of an airport
- Intended to promote compatible land uses in airport vicinity
- Jurisdictions generally not supportive of changes in the State of New Jersey building codes
- Jurisdictions more interested in including building code requirements in an overlay zone

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Cooperative Land Use Agreements

- Enacted by airport sponsor (e.g., Port Authority) and jurisdictions with local land use authority
- Agreements are focused on land use, redevelopment, and infrastructure in airport vicinity
- Intended to prevent incompatible land uses from being developed in airport vicinity
- Entering agreement is voluntary – sharing information on proposed land use development is generally a requirement based on the agreement
- Jurisdictions in TEB vicinity generally supportive of a Cooperative Land use Agreement in concert with Community Planners Forums and Distribution of Noise Mitigation Information

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Cooperative Land Use Agreements (cont'd)

- Example –
John Wayne Airport

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

I. GOALS AND OBJECTIVES

Airport Area Compatibility. The City and County intend, through this Agreement and any subsidiary agreement that the Parties determine is necessary or appropriate to implement this Agreement, to expand their longstanding efforts to promote compatibility between operations at John Wayne Airport ("JWA" – See Exhibit A) and land uses within and in proximity to the City. The Parties intend to promote compatibility by, among other things, committing to preserve certain longstanding land use plans, such as the Santa Ana Heights Specific Area Plan ("SAHSAP"), that were designed to harmonize land uses in Santa Ana Heights with air carrier operations at JWA. The Parties also intend this Agreement to prohibit City annexation of JWA and other JWA-owned or County-owned property without County approval. The Parties also intend, through this Agreement and any subsidiary agreement that the Parties determine is necessary or appropriate to implement this Agreement, to require County compliance with a process that includes City consideration and approval prior to County acquiring property for the purpose of extending the existing air carrier runway to the south or constructing a second air carrier runway, and to require the City to become a consistent agency with respect to land uses and related planning in the airport area as specified in the Airport Environmental Land Use Plan ("AELUP").

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Community Planners Forums

- Established by airport sponsor (e.g., Port Authority) to bring together various jurisdictions in airport vicinity
- Share information pertaining to comprehensive planning, land use issues, zoning issues, and noise mitigation efforts
- Intended to provide a “level playing field” for all jurisdictions in airport vicinity
- Jurisdictions in TEB vicinity generally supportive of Community Planners Forums in concert with Cooperative Land Use Agreements and Distribution of Noise Mitigation Information

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Community Planners Forums (continued)

- Example – Oakland International Airport
 - www.flyquietoak.com
 - Noise Forum includes elected officials from each jurisdiction
 - Land use planners obtain information through elected officials and the website



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Distribution of Noise Mitigation Information

- Enacted by the airport sponsor (e.g., Port Authority)
- Intended to inform jurisdictions in airport vicinity about what has been and will be implemented, schedule for implementation, and to distribute noise mitigation information
- Information distributed on a periodic basis (e.g., monthly, bi-annually, annually, etc.)
- Jurisdictions in the TEB vicinity are generally supportive of Distribution of Noise Mitigation Information in concert with Cooperative Land Use Agreements and Community Planners Forums

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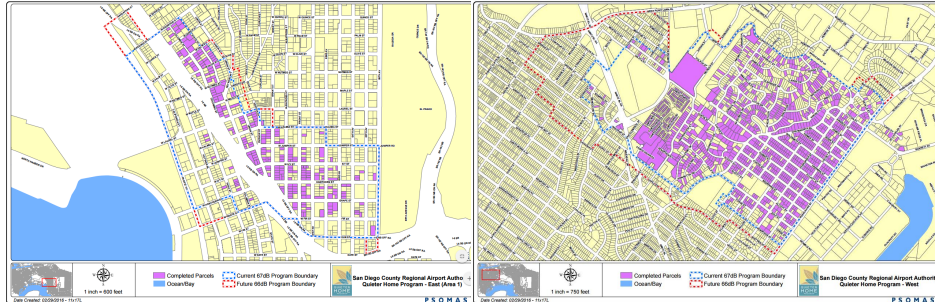
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Distribution of Noise Mitigation Information

- Example – San Diego International Airport
 - www.san.org/Airport-Noise/Quieter-Home-Program
 - Disseminated through Airport Noise Advisory Committee (ANAC)



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Additional Topics Identified by Jurisdictions

- NJSEA interested in being a partner in promoting compatible land uses in TEB vicinity
- Most local jurisdictions were interested in soundproofing programs and timing of the programs
- Borough of Teterboro interested in information on windows with sound-insulation technology

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Meetings with Local Jurisdictions

- Initial meetings
 - Introduced Part 150 at Teterboro Airport
 - Coordinated land use data collection
- Follow-up meetings
 - Discussed noise contours prepared for the NEMs
 - Reviewed potential noise abatement and land use measures
 - Discussed land use measures that could potentially be implemented in the jurisdiction

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Initial Meetings with Local Jurisdictions

Jurisdiction	Date of Meeting	Meeting Attendees ^{/a/}
Initial Meetings		
City of Hackensack	January 26, 2016	Albert Dib, Julie Barrow
Borough of Wood-Ridge	January 26, 2016	Ken Nelson, Julie Barrow
Bergen County	January 27, 2016	Peter Kortright, Dave Full, Julie Barrow
Township of South Hackensack	January 27, 2016	Brigitte Bogart, Dave Full, Julie Barrow
Borough of East Rutherford	January 28, 2016	Mark Everett, Dave Full, Julie Barrow
Borough of Carlstadt	January 28, 2016	Mark Everett, Dave Full, Julie Barrow
Borough of Hasbrouck Heights	January 28, 2016	Mark Everett, Dave Full, Julie Barrow
Borough of Teterboro	March 2, 2016	Nick Saros, Dave Full, Julie Barrow
New Jersey Sports & Exposition Authority	March 3, 2016	Dom Elefante, Ron Seelogy, Dave Full, Julie Barrow
Borough of Little Ferry	No Meeting	
Borough of Moonachie	No Meeting	

Notes: /a/ - HMMH Team includes Dave Full and Julie Barrow.

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Follow-Up Meetings with Local Jurisdictions

Jurisdiction	Date of Meeting	Meeting Attendees ^{/a/}
Follow-Up Meetings		
NJ Sports & Exposition Authority	January 23, 2017	Ron Seelogy, Mike Stepowyj, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
City of Hackensack	January 24, 2017	Albert Dib, Fran Reiner, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of East Rutherford	January 24, 2017	Mark Everett, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Hasbrouck Heights	January 24, 2017	Mark Everett, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Little Ferry	January 24, 2017	Paula Cozzarelli, Council Member Miller, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Bergen County	January 25, 2017	Peter Kortright, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Wood-Ridge	February 15, 2017	Ken Nelson, Tim Middleton, Ted Baldwin, Julie Barrow
Borough of Moonachie	February 16, 2017	Borough of Moonachie Planning Board, Tim Middleton, Ted Baldwin, Julie Barrow
Township of South Hackensack	March 30, 2017	Anthony Kurus, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Teterboro	March 30, 2017	Nick Saros, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Carlstadt	None to date	N/A

Notes: /a/ - Port Authority of NYNJ includes Tim Middleton; HMMH Team includes Gene Reindel, Ted Baldwin, Dave Full, and Julie Barrow.

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Where do we go from here?

- TAC member questions, comments, and discussion?
- Feedback on feasibility of operational measures?
- Suggestions for revised assumptions regarding percentage utilization?
- Suggestions for additional combinations?
- Public comments?

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TAC & Public Meeting Topics, 2015-16 *to-date*

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 - Complete	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period - Complete	

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Complete	Present initial noise abatement alternative analyses
January 27, 2017	TAC 10 - Complete	Present additional noise abatement and land use analyses
March 31, 2017	TAC 11 - Complete	Present third-round noise abatement analyses Present second-round compatible land use alternatives
June 2017	TAC 12 - Today	Present third-round compatible land use alternatives
November 2017	TAC 13	Present noise abatement recommendations Recommend compatible land use measures
January 2018	TAC 14	Discuss NCP monitoring and implementation
May 2018	TAC 15	Review NCP results and recommendations
August 2018	Workshop 3 Public Hearing on NCP	Present NCP Recommendations Present proposed NCP and revised NEMs
October 2018	TAC 16	Discuss Draft NCP document and input from Workshop

Note changes
in projected
dates

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Wrap-Up

- Next meeting date and topics
 - **13th TAC – Late October/Early November 2017, *specific date to be determined***
 - Present noise abatement recommendations
 - Present land use recommendations
- Thanks for attending!

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Teterboro Airport

14 CFR Part 150 Noise Compatibility Study

Technical Advisory Committee Meeting #13

November 9, 2017

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Meeting Agenda

- Welcome and Introductions
- Overall Status of TEB Part 150 process
- NCP Documentation Discussion
- NCP Noise Abatement Discussion
- Upcoming Part 150 Milestones
- Upcoming TAC Meetings
- TAC Member Discussion
- Study Schedule Update
- Public Comment Opportunity
- Adjournment

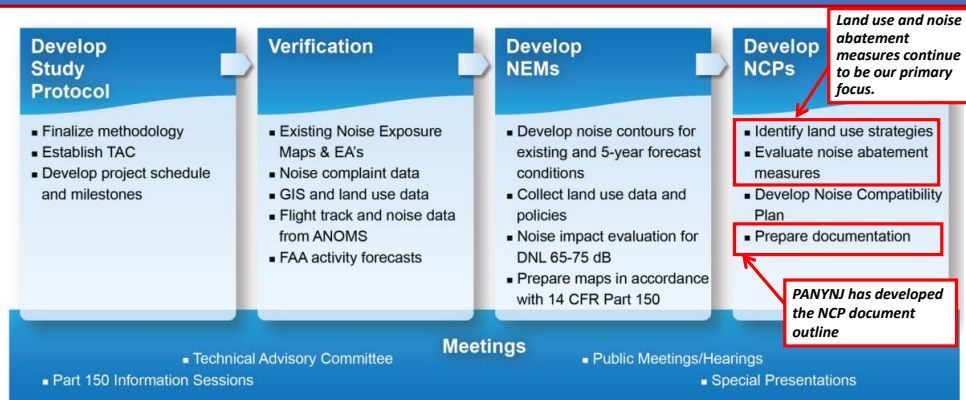
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Generalized Part 150 Study Process / Schedule



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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Final Draft Noise Abatement strategies at this TAC.

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Programmatic strategies are a topic for the next TAC meetings.

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers (presented today)
- Runup enclosures
- Use restrictions
- Other actions proposed by stakeholders

Investigated to date

Land Use Strategies

- Mitigation
 - Land acquisition
 - Sound insulation
 - Avigation easements
- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders

All have been introduced.

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

Topics for later meetings.

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NCP Document Outline

Familiar Items from the NEM Document: Introductory Materials, Appendices and Glossary



INTRODUCTION

- ☒ Project Location & Airport Setting
- ☒ Part 150 Overview
- ☒ Roles & Responsibilities
- ☒ New Items: Accepted 2016 and 2021 NEMs

Appendices

- Appendices will be included with the document similar to the NEM; an outline coinciding with the document is under development

STAKEHOLDER ENGAGEMENT

- ☒ TAC Meetings and Local Land Use Coordination
- ☒ Public Workshops, and Other Opportunity for Public Comment and Input
- ☒ Newsletters, Newspaper Articles, and the Webpage
- ☐ New Items: Public Hearing on the NCP

Glossary

- The glossary will appear at the end of the document

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NCP Document Outline

Chapters 2 through 5 – New NCP Materials



- The Chapters will be labeled as shown on the left.
- Chapters 2 through 4 will follow the same general structure of:
 - Existing Measures
 - Recommended Measures
 - Measures Considered but not Recommended
 - Summary of Recommended Measures
- Chapter 5 will summarize:
 - Responsible Parties, Cost, and Implementation

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Major NCP Proposals Raised to Date in TEB Part 150

- **Noise abatement flight paths, arrival procedures, and departure procedures**
 - Runway 19 Quiet Visual approach - Runway 19 Quiet Visual discussed at TAC 9; FAA discontinued procedure for use after publication due to the complexity of flying it
 - Runway 24 noise abatement departure turn to south - discussed at TAC 10, TAC 11, TAC 12 and this TAC ✓
 - Noise abatement departure procedures - NBAA high-density NADP discussed at TAC 10 and TAC 11
 - Taxiway Kilo Intersection departures at night – discussed at TAC 12 and this TAC ✓
 - Runway 6 approach – approach proposed by Concerned Residents Along Flight path of Teterboro (CRAFT) – this TAC ✓
- **Preferential runway use**
 - Shift Runway 6 night arrivals to Runway 1 - discussed at TAC 9 and TAC 10
 - Runway 24 night departures to Runway 19 - discussed at TAC 9 and TAC 10
 - Shift Runway 1 night departures to Runway 6 - discussed at TAC 9 and TAC 10
- **Airport layout** - New runway between Runways 19 and 24 suggested
 - Largely provides same benefit as Runway 24 turn to south - discussed at TAC 10
 - Relocation of maintenance runups to center of airfield – discussed at TAC 10, TAC 12 and this TAC ✓
- **Noise barriers** - introduced at TAC 10 and discussed at TAC 12
- **Corrective and preventive land use measures** - discussed at TAC 10, TAC 11 and TAC 12
- **Mandatory restrictions, noise fees, limits on operations** - discussed at this TAC ✓

Note: Green check means discussed at this TAC.

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Noise Abatement Measures

- NCP Noise Abatement Discussion
 - Concerned Residents Along Flight path of Teterboro (CRAFT) Approach evaluation
 - Additional evaluation of intersection departures from Taxiway K on Runway 1
 - Additional evaluations of the 230 degree heading for Runway 24 departures
 - Central maintenance run-up location evaluation
 - Evaluation of combination cases
- Use Restrictions
 - Existing TEB restrictions

Population and Dwelling Unit counts for each alternative are shown after the contour presentations

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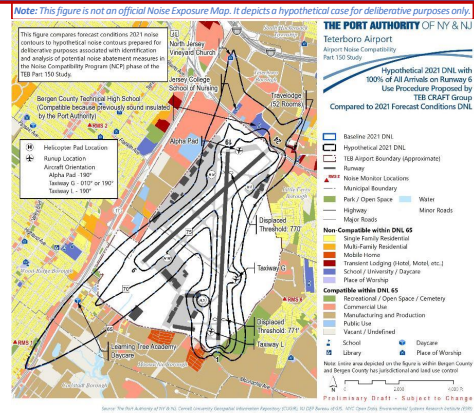
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**New Alternative:
CRAFT Approach**

- CRAFT approach includes an offset to the straight in approach
- Lines back up with the ILS approach around Patterson Plank Rd.
- All Runway 6 arrivals modeled using CRAFT approach
- No change in the DNL 65 contour



10

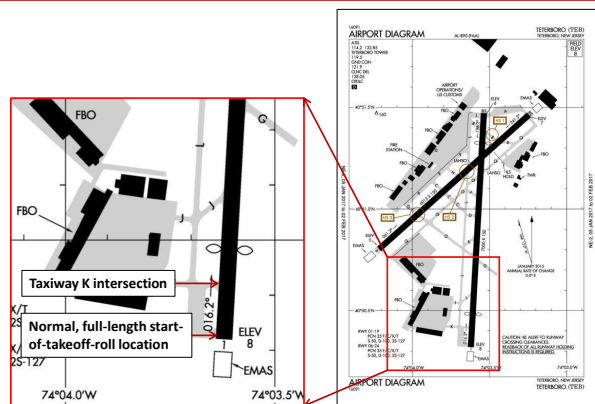


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Shift the start-of-takeoff-roll point at night north to the Taxiway K intersection

- Would lose approximately 550' of takeoff distance, but takeoff distance is still longer than Runway 6
- Voluntary procedure would permit aircraft to use full runway length if needed
- Aircraft could enter from the end of the runway and taxi to Kilo Intersection
- Requesting its use only at night minimizes potential queueing issue



11



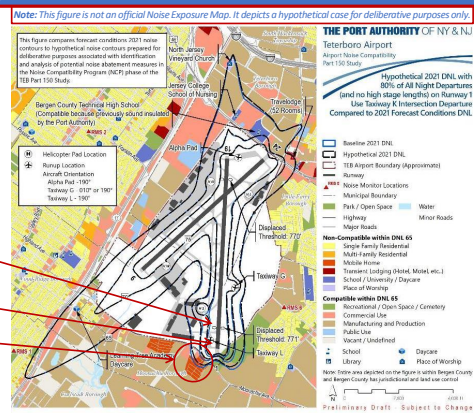
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**Revised Alternative:
80% of All Night Departures use Taxiway K Intersection**

- All higher stage length aircraft modeled using the full length of the runway (~2%)
- Approximately 18% of all other night operations¹ use the full length due to weather, pilot requests etc..

Taxiway K intersection
Normal, full-length start-of-takeoff-roll location
Noticeable reduction of contour extent over mobile home park.



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¹ 1 - 20% of all traffic (all high stage length operations and the remainder spread amongst the remaining fleet mix) – this assumption was developed between the Port Authority and the Consulting Team



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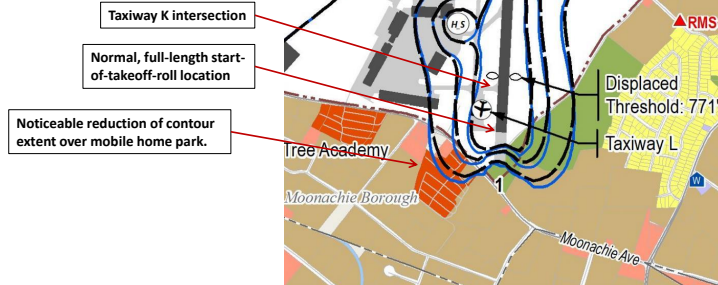
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Revised Alternative:

80% of All Night Departures use Taxiway K Intersection (Zoomed in View)

Note: This figure is not an official Noise Exposure Map. It depicts a hypothetical case for deliberative purposes only.

- Results in a decrease in the DNL contour within the mobile home park



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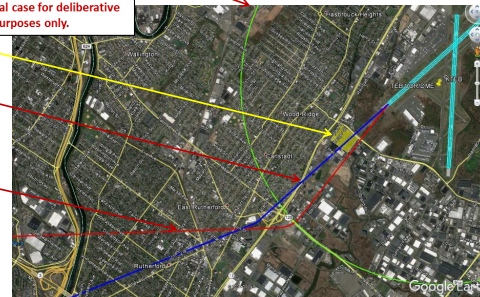
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Existing and Revised Runway 24 Departure Tracks

- Residential area south of Moonachie Avenue.
- Existing track shown is the jet backbone track with the highest usage
- The departure track turns to a 230° heading after the end of the runway then turns to 280° after 1.5 DME to keep flights east of Route 17

This figure is not an official Noise Exposure Map. It depicts a hypothetical case for deliberative purposes only.

1.5 nmi Distance Measuring Equipment (DME) ring



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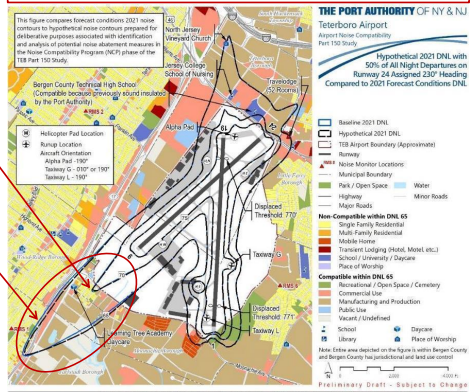
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Revised Alternative:

50% of All Night Departures on Runway 24 Assigned 230° Heading

Note: This figure is not an official Noise Exposure Map. It depicts a hypothetical case for deliberative purposes only.

- Little reduction in residential land within the 70 DNL contour
- Small reduction in residential land within the 65 DNL contour
- 50% of all night departures could use new flight path
- Procedure can only be used when there is no conflict with EWR arrivals



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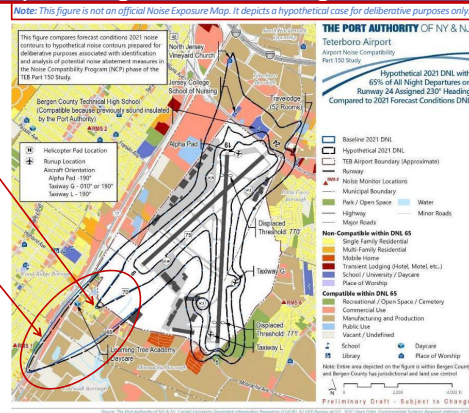
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Revised Alternative:

65% of All Night Departures on Runway 24 Assigned 230° Heading

- Slight reduction in residential land within the 70 DNL contour
- Moderate reduction in residential land within the 65 DNL contour
- 65% of all night departures could use new flight path
- Procedure can only be used when there is no conflict with EWR arrivals



16



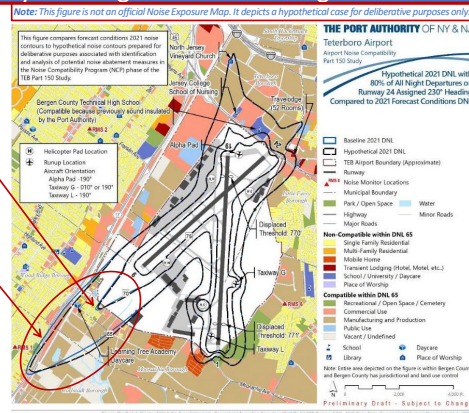
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Revised Alternative:

80% of All Night Departures on Runway 24 Assigned 230° Heading

- Slight reduction in residential land within the 70 DNL contour
- Moderate reduction in residential land within the 65 DNL contour
- 80% of all night departures could use new flight path
- Procedure can only be used when there is no conflict with EWR arrivals



17

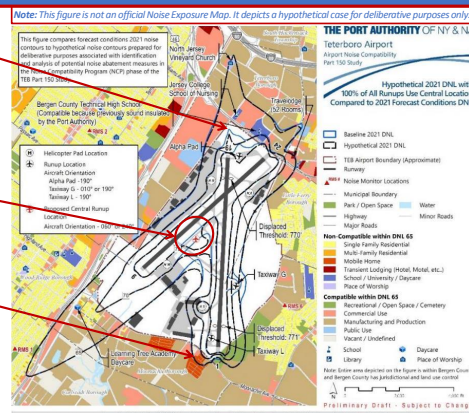


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Location of All Maintenance Runups in the Center of the Airfield along Taxiway Q

- Provides reduction of the 70 DNL contour south of Route 46
- Provides little to no reduction north of Route 46
- Proposed runup location along Taxiway Q north of Taxiway G
 - Using 60° and 240° headings – with the same split as the existing locations
- Small reduction in the mobile home park within the 65 DNL contour



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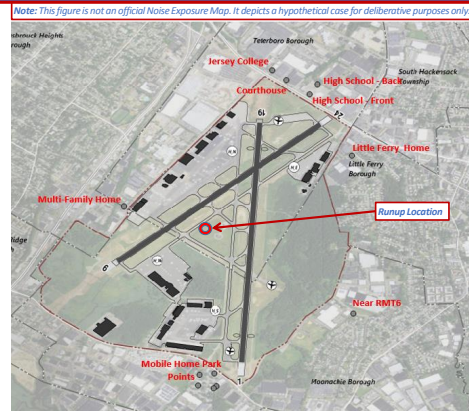
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Location of All Maintenance Runups in the Center of the Airfield along Taxiway Q

Evaluated Noise Levels at Specific Sites

Location	Centralized Runup DNL	NEM Runup DNL	Change
40 Couchon Dr. Little Ferry, NJ	65.1	65.3	-0.2
Bergen County Technical High School - Back	67.4	67.4	0
Bergen County Technical High School - Front	69.7	69.9	-0.2
Industrial Ave, Hasbrouck Heights, Multi-Family Home	63.2	62.9	0.3
Jersey College - Nursing School	67.5	67.6	-0.1
Mobile Home Park 1 - Front Middle	69.6	69.8	-0.2
Mobile Home Park 2 - Front Left	64.8	65	-0.2
Mobile Home Park 3 - Front Right	65.2	65.3	-0.1
Mobile Home Park 4 - Back Right	64.2	64.3	-0.1
Mobile Home Park 5 - Back Left	62.9	63	-0.1
Near RMT6	53.3	53.4	-0.1
Teterboro Court House (Rt. 46)	67.1	67.1	0



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Recommended Combination Cases for NCP

- Combination cases include three Noise Abatement measures
 - Night departures from Runway 24 turn to 230 degree heading
 - Night departures from Runway 1 use Taxiway K
 - Centralized Maintenance Runups
- Three versions presented each with different percent use of Runway 24 turn to 230 degree heading
 - 50 percent
 - 65 percent
 - 80 percent
- All provide reduction in non-compatible land use

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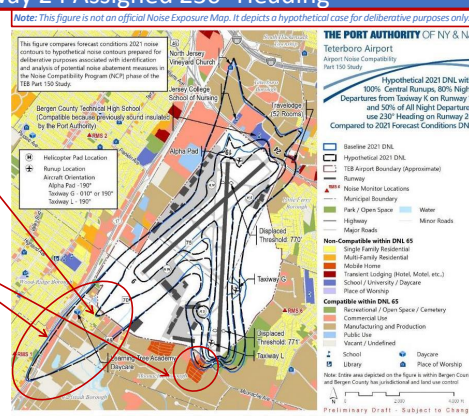


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Combination Case: 100% Centralized Runups, 80% Night Deps from Taxiway K 50% of All Night Departures on Runway 24 Assigned 230° Heading

- Slight reduction in residential land within the 70 DNL contour
- Small reduction in residential land within the 65 DNL contour
- Population and Dwelling Unit counts for each alternative are shown after the contour presentations



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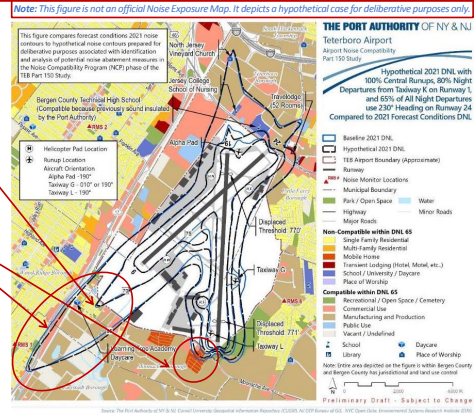


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**Combination Case: 100% Centralized Runups, 80% Night Deps from Taxiway K
65% of All Night Departures on Runway 24 Assigned 230° Heading**

- Slight reduction in residential land within the 70 DNL contour
- Moderate reduction in residential land within the 65 DNL contour
- Population and Dwelling Unit counts for each alternative are shown after the contour presentations



22

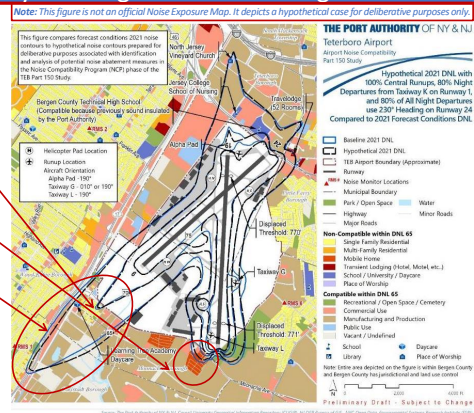


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**Combination Case: 100% Centralized Runups, 80% Night Deps from Taxiway K
80% of All Night Departures on Runway 24 Assigned 230° Heading**

- Slight reduction in residential land within the 70 DNL contour
- Larger reduction in residential land within the 65 DNL contour
- The majority of the DNL 65 contour moves east of Route 17
- Population and Dwelling Unit counts for each alternative are shown after the contour presentations



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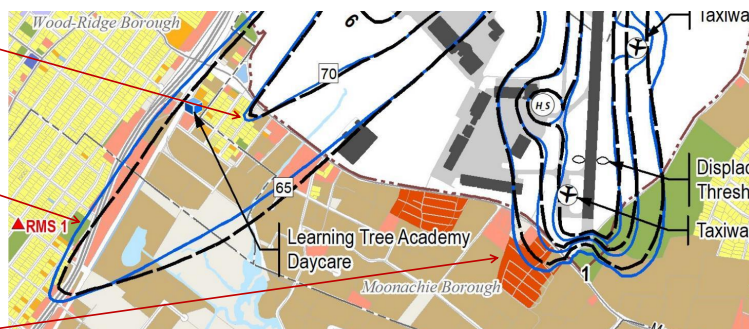


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**Combination Case: 100% Centralized Runups, 80% Night Deps from Taxiway K
80% of All Night Departures on Runway 24 Assigned 230° Heading (Zoom View)**

- Slight reduction in residential land within the 70 DNL contour
- The majority of the DNL 65 contour moves east of Route 17
- DNL 65 reduction in the Mobile home park



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Land Use Analysis of Proposed NCP Measures

- List of proposed measures to date
 - Some measures already determined not feasible
- Dwelling unit and population counts for measures evaluated
 - Compared to 2021 baseline
 - Green boxes show a net reduction
 - Red boxes show a net increase
- Noise sensitive site listing for measures evaluated
- Location noted if removed from the contour due to the proposed measure

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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
Flight Tracks	90% Night Rwy 24 Jet Dep.s Turn to 230°	171	414	10	24	181	438	-9	-6	-15	-22	-15	-37
	50% Night Rwy 24 All Dep.s Turn to 230°	175	424	14	34	189	458	-5	-2	-7	-12	-5	-17
	65% Night Rwy 24 All Dep.s Turn to 230°	176	426	11	27	187	453	-4	-5	-9	-10	-12	-22
	80% Night Rwy 24 All Dep.s Turn to 230°	175	424	10	24	185	448	-5	-6	-11	-12	-15	-27
Arrival Procedures	All Runway 24 Arrivals use CRAFT Approach	180	436	16	39	196	475	0	0	0	0	0	0
Layout	80% of RW 1 Night Departures Start at Twy K	166	402	7	17	173	419	-14	-9	-23	-34	-22	-56
	All maintenance runups use central location	179	433	12	29	191	462	-1	-4	-5	-3	-10	-13

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented.

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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
Combination Cases	All Maintenance Runups use Central location, 80% of Rwy 1 Night departures use Taxiway K and 50% of all Runway 24 Departures Turn to 230°	158	382	5	12	163	394	-22	-11	-33	-54	-27	-81
	All Maintenance Runups use Central location, 80% of Rwy 1 Night departures use Taxiway K and 65% of all Runway 24 Departures Turn to 230°	158	382	4	10	162	392	-22	-12	-34	-54	-29	-83
	All Maintenance Runups use Central location, 80% of Rwy 1 Night departures use Taxiway K and 80% of all Runway 24 Departures Turn to 230°	159	385	1	2	160	387	-21	-15	-36	-51	-37	-88

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented.

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Sensitive Receptors within 65 DNL

Blue checkmark indicates site is wholly or largely within DNL 65

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	Catalyst Agape Church (formerly North Jersey Vineyard Church)	Jersey College School of Nursing (Sound insulation status unknown)
Baseline	2021 Baseline Operations	✓	✓	✓	✓
Flight Tracks	90% Night Rwy 24 Jet Dep.s Turn to 230°	✓	✓	✓	✓
	50% Night Rwy 24 All Dep.s Turn to 230°	✓	✓	✓	✓
	65% Night Rwy 24 All Dep.s Turn to 230°	✓	✓	✓	✓
	80% Night Rwy 24 All Dep.s Turn to 230°	✓	✓	✓	✓
Arrival Procedures	All Runway 24 Arrivals use CRAFT Approach	✓	✓	✓	✓
	80% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
Layout	All maintenance runups use central location	✓	✓	✓	✓

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 28



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Sensitive Receptors within 65 DNL

Blue checkmark indicates site is wholly or largely within DNL 65

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	Catalyst Agape Church (formerly North Jersey Vineyard Church)	Jersey College School of Nursing (Sound insulation status unknown)
Baseline	2021 Baseline Operations	✓	✓	✓	✓
Combination Cases	All Maintenance Runups use Central location, 80% of Rwy 1 Night departures use Taxiway K and 50% of all Runway 24 Departures Turn to 230°	✓	✓	✓	✓
	All Maintenance Runups use Central location, 80% of Rwy 1 Night departures use Taxiway K and 65% of all Runway 24 Departures Turn to 230°	✓	✓	✓	✓
	All Maintenance Runups use Central location, 80% of Rwy 1 Night departures use Taxiway K and 80% of all Runway 24 Departures Turn to 230°	✓	✓	✓	✓

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 29



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Use Restriction Measures

- Use Restriction Measures are intended to prevent introduction of new incompatible land uses
- Of note, TEB adopted mandatory measures prior to the passage of the federal Airport Noise and Capacity Act of 1990 ("ANCA"); these are a part of TEB's Existing Fly Quiet Program
 - Mandatory noise rules at TEB are "grandfathered" by ANCA as they were in effect at the time the Act was passed.
- TEB also has several voluntary measures within the existing Fly Quiet program



- **Noise Limits:** Teterboro Airport uses A-weighted decibel (dBA) measurements to enforce a “Maximum Noise Level” (MNL)
 - These limits apply to takeoffs and vary according to runway end and time of day, as follows:
 - 80 dBA departure limit on Runway 24 from 10 p.m. to 7 a.m. local time
 - 90 dBA departure limit on Runway 24 from 7 a.m. to 10 p.m. local time
 - 95 dBA departure limit on Runways 01, 19 and 06 at all times
 - 95 dBA departure limit for helicopters at all times
- **Mandatory Requirement for *Approval to Operate Jet Aircraft***
 - No jet-powered aircraft may operate at TEB without prior approval obtained through the submittal of a “Permission to Operate” form to the Airport Manager, shown to the right.

- [illegible]



- Voluntary Use of Close-in Take-off Noise Abatement Procedure

- Voluntary Restraint in Use of Reverse Thrust
 - **Request:** Operators avoid reverse thrust at power settings other than idle, except when necessary for operational safety.

- Voluntary Preferential Runway Use

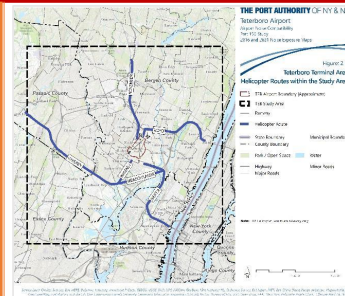
- **Request:** Between 10 pm and 7 am, pilots operating aircraft with high noise levels request Rwy 01 for arrivals when airport traffic is landing to the north and Rwy 19 for departures when airport traffic is departing to the south

- Voluntary Restraint from Overnight Flights

- **Request:** Operators restrain from operating any aircraft type between the hours of 11 pm and 6 am

- Voluntary IFR and VFR Approach and Landing Procedures

- **Request:** Pilots comply with the voluntary IFR and VFR procedures found in the TEB Flight Crew Handbook



- Voluntary Helicopter Routes
 - **Request:** Helicopter operators voluntarily follow the helicopter routes in the Figure to the right



- TAC member questions, comments, and discussion?
- Feedback on feasibility of operational measures?
- Suggestions for revised assumptions regarding percentage utilization?
- Suggestions for additional combinations?
- Public comments?



TAC & Public Meeting Topics, 2015-16 *to-date*

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 - Complete	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period - Complete	

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Projected TAC & Public Meeting Topics, 2016-18

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Complete	Present initial noise abatement alternative analyses
January 27, 2017	TAC 10 - Complete	Present additional noise abatement and land use analyses
March 31, 2017	TAC 11 - Complete	Present third-round noise abatement analyses Present second-round compatible land use alternatives
June 2017	TAC 12 - Complete	Present third-round compatible land use alternatives
November 2017	TAC 13 - Today	Present final noise abatement measures Discuss NCP documentation
January 2018	TAC 14	Discuss NCP monitoring and implementation
May 2018	TAC 15	Review NCP results and recommendations
August 2018	Workshop 3 Public Hearing on NCP	Present NCP Recommendations Present proposed NCP and revised NEMs
October 2018	TAC 16	Discuss Draft NCP document and input from Workshop

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Wrap-Up

- Next meeting date and topics
 - **14th TAC – January 2018, *specific date to be determined***
 - Program Management discussion
- Thanks for attending!

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From: [Kristen Ahlfeld](#)
Cc: [Robert C. Mentzer](#); [Jessica C. Spencer](#); [Middleton, Timothy](#)
Subject: UPDATE: TEB Part 150 TAC Meetings
Date: Thursday, December 13, 2018 3:52:18 PM
Importance: High

Greetings TEB TAC members,

The Port Authority of New York and New Jersey (the Port Authority) continues to advance the 14 CFR Part 150 Noise Compatibility Planning (Part 150) Studies for Teterboro Airport (TEB), Newark Liberty International Airport (EWR), John F. Kennedy International Airport (JFK), and LaGuardia International Airport (LGA).

The last meeting of the Technical Advisory Committee (TAC) for the TEB Part 150 Study was held in November 2017. As of that meeting the Project Team had completed the analysis of all draft proposed noise abatement measures, and discussed potential programmatic and land use measures. Since that time, the Project Team, in coordination with the Port Authority, has been working on a variety of items to continue to advance the TEB Part 150 Study.

The development of draft Noise Compatibility Program (NCP) report is under way with Port Authority reviewing the proposed programmatic and land use strategies for recommendation. Once this process is complete, a TAC meeting will be scheduled to present the Port Authority-recommended NCP measures. The TAC meeting after that will be the final meeting presenting the FAA approved NCP recommendations and wrapping up the Part 150 Study.

The Port Authority and the Study Team are also in the process of updating the overall project schedule. Please look out for more information on the NCP and a TAC meeting invite in early 2019. The Port Authority expects the Draft NCP to be released for public review and comment in 2019. Additional public workshops presenting the draft NCP, similar to those held for the Noise Exposure Map (NEM), will also be conducted in 2019.

The Port Authority appreciates your continued support and involvement in the TEB Part 150 Study and will provide further updates as they become available. For TEB Part 150 related questions, please contact Timothy Middleton at tmiddleton@panynj.gov or (212) 435-3754.

Kristen Ahlfeld, PP, AICP
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Senior Project Manager | Associate
kahlfeld@fhiplan.com

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Cherry Hill, NJ 08002
t: 201-377-2325





Teterboro Airport

14 CFR Part 150 Noise Compatibility Study

Technical Advisory Committee Meeting #14

October 25, 2019

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Meeting Agenda

- Welcome and introductions
- Part 150 process status – *review*
- Noise Compatibility Program (NCP) development process – *review*
- Presentation of Port Authority Draft NCP Recommendations
- Next steps
- TAC member discussion
- Project Schedule – *review*
- Public comment

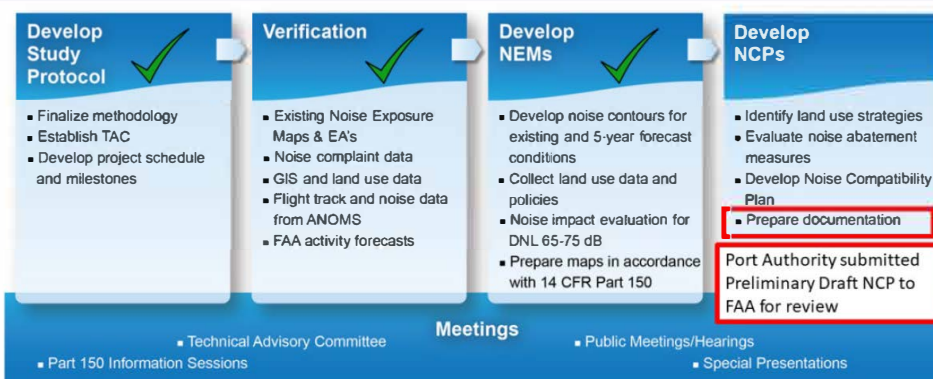
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Generalized Part 150 Study Process



3



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2016 Noise Exposure Map Completion

- Public review of the Draft 2016 NEM Document
 - September 15 to October 17, 2016
- Public Workshop held to present the Draft 2016 NEM Document
 - September 22, 2016
- Submit the Final 2016 NEM Document to the FAA
 - May 2017
 - http://panynjpart150.com/TEB_FNEM.asp
- FAA accepted the Final 2019 NEM Document
 - June 15, 2017

4



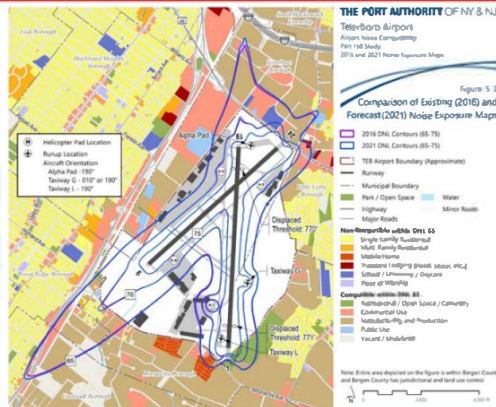
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2016 Noise Exposure Map Summary

NEM Results	NEM Year	65-70 DNL	70-75 DNL	>75 DNL	Total
Population	2016	442	19	0	461
	2021	436	39	0	475
Dwelling Units	2016	183	8	0	191
	2021	180	16	0	196
Noise Sensitive Sites	2016	3	0	0	3
	2021	4	0	0	4

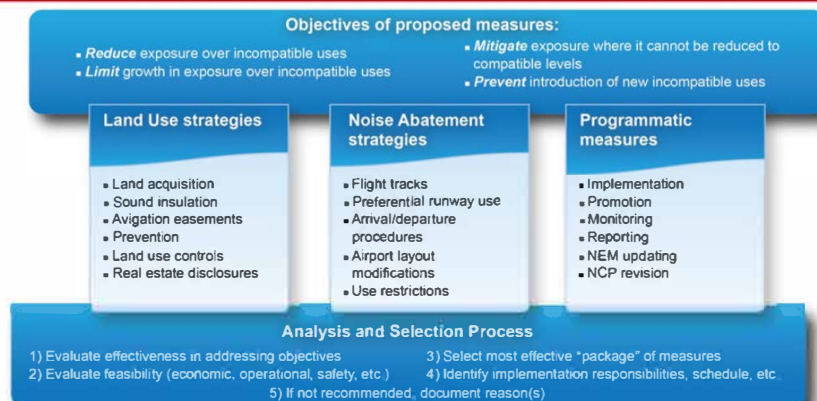
Noise-sensitive sites include: Learning Tree Academy, Bergen County Technical High School, Jersey College School of Nursing, and Catalyst Agape Church



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Noise Compatibility Program Development Process



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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Measures

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Step 3: Consider Land Use Measures

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Program Management Measures

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing **objectives**
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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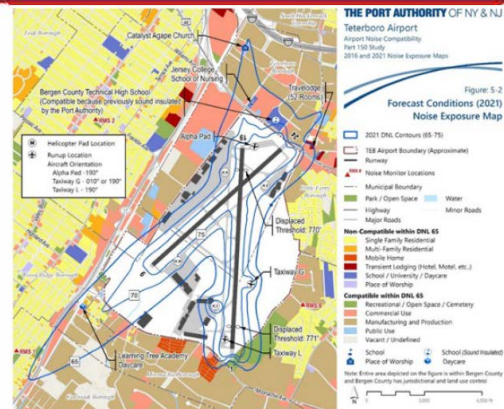


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TEB NCP: Identify Noncompatible Land Uses

- According to the FAA-accepted 2021 Noise Exposure Map:
 - **196 dwelling units** are potentially noncompatible
 - **4 noise-sensitive sites** are potentially noncompatible



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Preliminary and subject to change

TEB NCP Measures Analyzed

- Noise Abatement measures
 - 20 considered
 - **17 recommended**
- Land Use (noise mitigation) measures
 - 10 considered
 - **5 recommended**
- Program Management measures
 - 13 considered
 - **12 recommended**

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Noise Abatement Measures

Noise abatement measures are measures that control noise at the source. These measures may include airport layout modifications, flight path changes, preferential runway use, and arrival and departure procedures. The intention of noise abatement measures in the NCP is to reduce the number of people and noise-sensitive sites exposed to aircraft noise of 65 DNL and greater.

Recommended Noise Abatement Measures for Inclusion in this NCP

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TEB Noise Abatement Measures Summary

Noise Abatement Measures Recommended for Inclusion in this NCP	
New Measures	Existing Measures
Implement a Runway 24 Departure Turn to 230 degrees at Night	Existing Mandatory Permission to Operate Jet Aircraft
Encourage Intersection Departures from Taxiway K on Runway 1 at Night	Existing Mandatory Noise Limits
Implementation of a Centralized Aircraft Run-up Pad	Existing Mandatory Aircraft Maintenance Run-Up Restrictions
Implement an Offset Approach Procedure to Runway 19	Existing Voluntary Restraint from Operations between 11:00 p.m. and 6:00 a.m.
Implement an Offset Approach Procedure to Runway 6	Existing Voluntary Preferential Runway Use at Night
Implement a Published Approach Procedure to Runway 1	Existing Voluntary Encouragement of the Use of NOAA Noise Abatement Departure Procedures (NADP)
Implement a Published Departure Procedure from Runway 19	Existing Voluntary Restraint from the Use of Reverse Thrust
The Port Authority to Coordinate with FAA on Development and Implementation of NextGen Procedures	Existing Voluntary IFR and VFR Approach and Landing Procedures to Runway 1 at Night
	Existing Voluntary Helicopter Routes
Noise Abatement Measures Not Recommended for Inclusion in this NCP	
Construct a New North-South Runway	Noise Barriers
Increase Night Departures from Runway 6	

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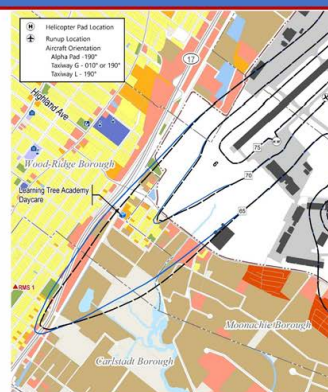
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Implement a Runway 24 Departure Turn to 230 degrees at Night

Description	<ul style="list-style-type: none"> Aircraft turn left to a heading of 230 degrees after liftoff Continue until 1.5 DME (approximately 1.3 nmi from the end of Runway 6) turn to 280 degrees Procedure would be limited to nighttime when EWR arrivals to Runway 22L can accommodate the sequencing of TEB departures from Runway 24 or EWR is operating on an arrival flow that favors use of EWR Runway 29
Benefits	Reduction of up to 27 people in 11 dwelling units exposed to 65 DNL or higher with 80 percent of the aircraft departing Runway 24 at night turning to a 230-degree heading.
Rationale	This measure could reduce noise exposure over residential land use south of Runway 6 and shift flight paths over compatible land use south of the airport.



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Encourage Intersection Departures from Taxiway K on Runway 1 at Night

Description	<ul style="list-style-type: none"> Aircraft using the intersection departure would enter Runway 1 from the end of the runway, then proceed to Taxiway K (600 feet from the end of the runway) before starting takeoff roll, instead of aircraft powering up and starting their departure from the end of the runway Reduces aircraft lining up for departure in front of ramp west of Runway 1
Benefits	Reduction of up to 56 people in 23 dwelling units exposed to 65 DNL or higher with 80 percent of the aircraft departing from Taxiway K on Runway 1 at night.
Rationale	This measure could be an effective way to reduce noise levels experienced at residential land uses south of Runway 1.



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Implementation of a Centralized Aircraft Run-up Pad

Description	<ul style="list-style-type: none"> Relocation of all aircraft maintenance run-ups to a new centralized run-up pad adjacent to Taxiway Q All run-ups restricted to daytime hours only per existing measures
Benefits	Reduction of up to 13 people in 5 dwelling units exposed to 65 DNL or higher with 100 percent of the aircraft using a centralized aircraft run-up pad.
Rationale	Reduce noise levels over residential land use south of Runway 1



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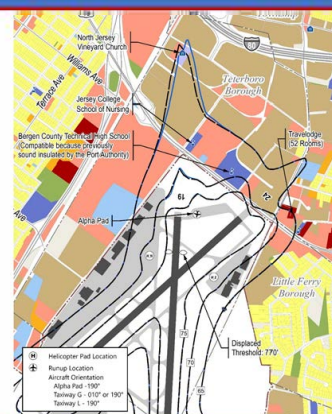
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Implement an Offset Approach Procedure to Runway 19

Description	<ul style="list-style-type: none"> Offset approach procedure to Runway 19 Assume 50% of all jet arrivals to Runway 19 utilize offset
Benefits	No reduction of people or dwelling units exposed to 65 DNL or higher with either the visual offset approach or the offset ILS approach. However, it could reduce the number of overflights of Hackensack University Medical Center and could shift aircraft overflights along Route 17 with lower population exposure.
Rationale	This measure could reduce overflights of the Hackensack University Medical Center and shift flight paths over compatible land use north of the airport.



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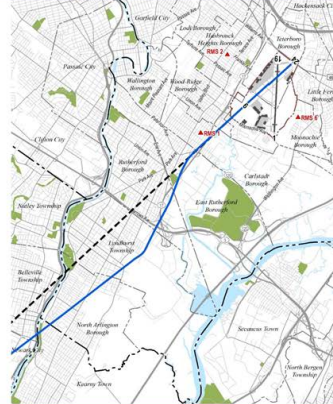
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Implement an Offset Approach Procedure to Runway 6

Description	<ul style="list-style-type: none"> Aircraft directed to fly east of Lyndhurst and Rutherford Rejoin ILS approach near intersection of Routes 17 and 120 Assume 100% of arrivals to Runway 6
Benefits	No reduction of people or dwelling units exposed to 65 DNL or higher. However, it could reduce the number of overflights of Lyndhurst and Rutherford residential areas and could shift aircraft overflights over compatible land use east of Route 17 with lower population exposure.
Rationale	This measure is shown to be an effective way to reduce overflights of Lyndhurst and Rutherford residential areas and shift flight paths over compatible land use north of the airport.



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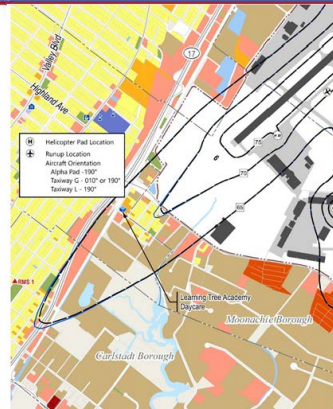
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Implement a Published Approach Procedure to Runway 1

Description	<ul style="list-style-type: none"> Aircraft directed to follow Runway 6 approach and turn east to line up with Runway 1 Assumes 25% increase in arrivals to Runway 1 at night
Benefits	Reduction of up to 20 people in eight dwelling units exposed to 65 DNL or higher with implementation of a published arrival procedure to Runway 1 by shifting arrival operations over compatible land use.
Rationale	This measure is shown to be an effective way to reduce noise levels over residential land use southwest of Runway 6 and could shift operations over compatible land use.



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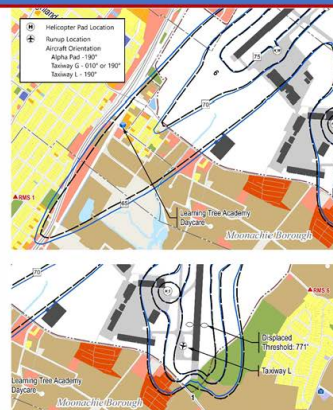
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Implement a Published Departure Procedure from Runway 19

Description	<ul style="list-style-type: none"> Aircraft departing Runway 19 turn right to 280 degree heading and remain at or below 1,300 ft. Assume 25% of night time departures to Runway 19
Benefits	Reduction of up to 5 people in 2 dwelling units exposed to 65 DNL or higher with a 10 percent increase in Runway 19 departures. This increase could be accommodated by implementation of a published departure procedure from Runway 19. Additionally, the measure could shift departure operations over compatible land use.
Rationale	This measure is shown to be an effective way to reduce noise levels over residential land use southwest of Runway 6 by shifting operations over compatible land use.



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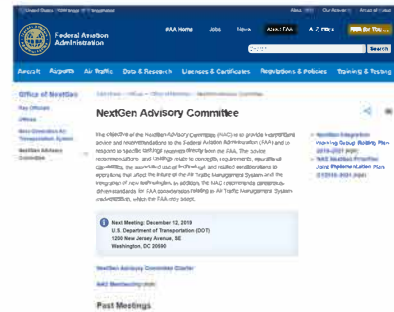
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The Port Authority to Coordinate with FAA on Development and Implementation of NextGen Procedures

Description	The Port Authority is a member of the NextGen Advisory Committee (NAC), which makes recommendations to the FAA regarding the NextGen program
Benefits	Implementation of NextGen technologies for the improvement of flight procedures in the New York/New Jersey/Philadelphia area and its potential noise benefits to noise-sensitive land uses.
Rationale	To find opportunities to reduce community noise exposure through the implementation of NextGen technologies in the airspace. The Port Authority would only support NextGen procedures that would not result in an increase in noise over residential areas.



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Existing Noise Abatement Measures

- Existing abatement measures are being recommended for continuation

Existing Mandatory Permission to Operate Jet Aircraft	<ul style="list-style-type: none"> Jet aircraft require approval from Airport Manager Jet operators required to acknowledge awareness of and commitment to compliance with the TEB Quiet Flying Program
Existing Mandatory Noise Limits	<p>The Port Authority operates Remote Noise Monitoring Sites at six locations around TEB to track compliance with the following limits on departure noise:</p> <ul style="list-style-type: none"> 80 dBA on Runway 24 (10:00 p.m. to 7:00 a.m.) 90 dBA on Runway 24 (7:00 a.m. to 10:00 p.m.) 95 dBA on Runways 01, 19, and 06 (all times) 95 dBA for helicopters (all times)



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Existing Noise Abatement Measures

Existing Mandatory Aircraft Maintenance Run-Up Restrictions	<ul style="list-style-type: none"> Turbine engine run-ups prohibited on ramp areas Piston engine aircraft must obtain approval from Airport Operations prior to conducting run-ups on ramp areas All maintenance run-ups are conducted between the hours of 8:00 a.m. and 8:00 p.m., Monday through Saturday, or between the hours of 12:00 p.m. and 6:00 p.m. on Sundays.
Existing Voluntary Restraint from Operations between 11:00 p.m. and 6:00 a.m.	<ul style="list-style-type: none"> Port Authority requests aircraft operators to refrain from operating any aircraft between 11:00 p.m. and 6:00 a.m. Operators not in compliance receive a letter to remind them of the program
Existing Voluntary Preferential Runway Use at Night	<p>Between hours of 10:00 p.m. and 7:00 a.m. all aircraft over 12,500 lbs, jets, and aircraft with high noise levels should request designated preferential runway:</p> <ul style="list-style-type: none"> Runway 1 for landing to the north Runway 19 for departures to the south

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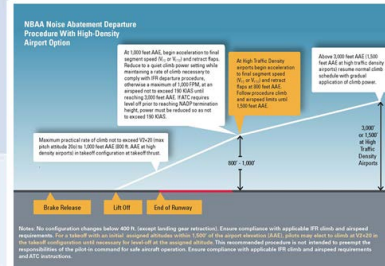
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Existing Noise Abatement Measures

Existing Voluntary Encouragement of the Use of NBAA Noise Abatement Departure Procedures (NADP)	Aircraft operators are encouraged to cutback thrust at 800 ft. AFE and then resume normal climb at 1,500 ft. AFE upon departure
Existing Voluntary Restraint from the Use of Reverse Thrust	The Port Authority recommends operators of all turbojet aircraft to voluntarily restrict the use of reverse thrust activity except when necessary for operational safety.



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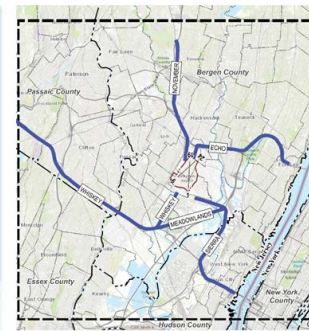
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Existing Noise Abatement Measures

Existing Voluntary IFR and VFR Approach and Landing Procedures to Runway 1 at Night	<p>Instrument Flight Rules (IFR)</p> <ul style="list-style-type: none"> • Maintain airspeed and altitude as indicated by approach control or flight manual • Use applicable minimum flaps to final approach fix • Extend landing gear no more than 4 miles from runway threshold • Reverse thrust should be avoided when possible <p>Visual Flight Rules (VFR)</p> <ul style="list-style-type: none"> • Maintain highest altitude for as long as practical • Extend landing gear no more than 4 miles from runway threshold • Reverse thrust should be avoided when possible
Existing Voluntary Helicopter Routes	The Port Authority requests helicopter operators continue to voluntarily follow FAA's VFR Helicopter Routes



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Noise Abatement Measures

Considered but Not Recommended Noise Abatement Measures for Inclusion in this NCP

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Construct a new North-South Runway

- Description
 - Construct a new North-South runway
- Reason to not recommend
 - Would disrupt airfield operations
 - Requires environmental study
 - Would potentially expose new areas of noncompatible land uses to 65 DNL
 - Potential environmental affect on nearby wetlands
 - Cost

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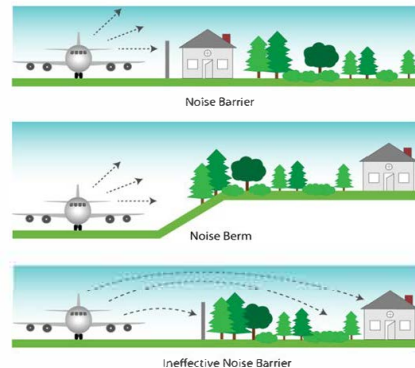
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Noise Barriers

- Description
 - Raise or lengthen noise barrier to southwest of Runway 1
- Reason to not recommend
 - Obstruction restrictions
 - Relocation of run-ups is more effective option



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Increase Night Departures from Runway 6

- Description
 - Expansion of voluntary preferential runway use program
- Reason to not recommend
 - Would expose new areas of noncompatible land uses to 65 DNL north of Runway 24



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*Land use measures address aircraft noise in areas of high noise exposure that cannot be eliminated through the implementation of noise abatement measures. **Corrective** land use measures include land acquisition and sound insulation treatments of structures. In contrast, **Preventive** measures prohibit the introduction of new noncompatible land uses and/or notify potential buyers of properties affected by aircraft noise.*

Recommended Land Use Measures for Inclusion in this NCP

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Land Use Measures Summary

Land Use Measures Recommended for inclusion in this NCP	Land Use Measures Not Recommended for Inclusion in this NCP
Acquire Noncompatible Residential Parcels	Acquire Aviation Easements
Sound Insulate Eligible Residential Units	Implement Cooperative Land Use Agreements
Sound Insulate Eligible Non-Residential Noise-Sensitive Structures	Raise Minimum Building Standards
Provide Positive Ventilation to Eligible Residential and Non-Residential Noise-Sensitive Structures	Implement Rezoning of Land Uses
Port Authority Assistance with Establishing an Airport Noise Overlay Zone	Include Airport Aircraft Noise in Real Estate Disclosures

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Acquire Noncompatible Residential Parcels

Description	<ul style="list-style-type: none"> This corrective measure involves acquiring noncompatible residential parcels then changing the designated land use so that it is compatible with aircraft noise, or modifying residential structures so that they are compatible without a change in land use Note: The Port Authority has not identified any parcels for acquisition at this time
Benefits	Acquisition of noncompatible residential parcels results in removing noncompatible land uses and people exposed to noise that is 65 DNL or higher.
Rationale	Effective way to reduce noncompatible land use.

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Sound Insulate Eligible Dwelling Units

- | | |
|--------------------|---|
| Description | <ul style="list-style-type: none"> This corrective measure involves insulating noncompatible residential units to reduce average interior noise to DNL 45 and provide at least a 5 dB improvement to the structures' noise level reduction. Approximately 121 dwelling units are potentially eligible^{1,2} for sound insulation treatments The Port Authority anticipates that it would take decades to complete the insulation of all eligible residential units in the communities near TEB due to availability of FAA funding, the length of the construction season in the region, and other factors that limit the pace of construction. To be eligible for federal funding, the FAA requires that the residential unit be within the DNL 65 contour and that the average interior noise level of habitable rooms with windows closed be at or above DNL 45¹. An avigation easement would be required in exchange for sound insulation |
|--------------------|---|

¹ Eligibility determination is set forth in FAA Order 5100.38 Airport Improvement Program Handbook (AIP Handbook), Appendix R.

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Sound Insulate Eligible Dwelling Units (continued)

- | | |
|--------------------|---|
| Description | <ul style="list-style-type: none"> Other factors that influence eligibility may include, but are not limited to²: <ul style="list-style-type: none"> Previous sound reduction treatments Ambient and self generated noise levels Whether a given use is considered temporary or permanent Time frame within which the structure was constructed DNL contours for TEB were first published on June 15, 2017.³ Properties constructed within those DNL contours after June 15, 2017 would not be eligible for federally funded noise mitigation⁴ Compliance with the local building code⁵ |
| Benefits | Installation of sound insulation treatments provides adequate noise reduction inside people's homes for compatibility with indoor activities. Once treated, a property is considered compatible with aircraft noise. |
| Rationale | This measure may reduce noncompatible land use in the 65 DNL contour for areas in the vicinity of TEB. |

² Eligibility determination is set forth in FAA Order 5100.38 Airport Improvement Program Handbook (AIP Handbook), Appendix R.

³ Port Authority of New York and New Jersey, "Teterboro Airport, Title 14 Code of Federal Regulations (CFR) Part 150, Noise Exposure Map Report, May 2017.

⁴ Final Policy on Part 150 Approval of Noise Mitigation Measures: Effect on the Use of Federal Grants for Noise Mitigation Projects. 63 FR 16409.

⁵ Areas within a structure that do not meet the local building code are not "habitable" under FAA requirements and therefore are not eligible for sound insulation under the AIP. Example: "A resident has converted part of a basement to a bedroom and the bedroom conversion does not meet the building code requirements to be categorized as a bedroom. The converted bedroom is not considered habitable space."

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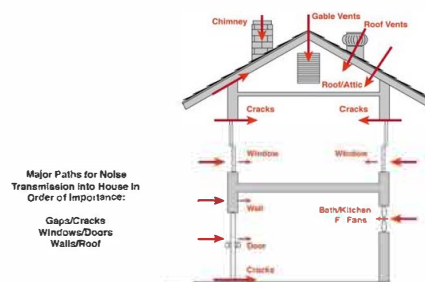
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Sound Insulation

- Sound Insulation provides a compatible indoor living environment through installation of acoustical treatments (e.g., acoustical doors and windows) to obtain at least a 5 dB improvement in exterior to interior noise level reduction
- As a result the parcel becomes "compatible" with airport operations and a better interior living environment
- Examples of sound insulation treatments
 - Acoustical windows
 - Acoustical doors
 - Central air conditioning*
 - Ventilation upgrade*
 - Ceiling/closet/wall modifications*
 - Attic insulation*

* Depending on existing conditions



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Residential Sound Insulation Program (RSIP)

- RSIP Process
 - Program Development
 - Acoustical Measurements
 - Design Assessment
 - Preliminary Design
 - Design Review/ Approval
 - Construction

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Sound Insulate Eligible Non-Residential Noise-Sensitive Structures

Description	<ul style="list-style-type: none"> • This corrective measure involves insulating noncompatible non-residential noise sensitive structures to reduce average interior noise levels to DNL 45 and provide at least a 5 dB improvement to the structures' noise level reduction. Examples include schools, places of worship, healthcare facilities, day care facilities, and libraries. • Approximately three facilities may be eligible¹ for sound insulation. • To be eligible for federal funding, the FAA requires that the structure be within the DNL 65 contour <u>and</u> that the average interior noise level of noise sensitive rooms with windows closed be at or above DNL 45 during the times of day when the facility is in use¹ • An avigation easement would be required in exchange for sound insulation
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¹ Eligibility determination is set forth in FAA Order 5100.38 Airport Improvement Program Handbook (AIP Handbook) Handbook, Appendix R.

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Sound Insulate Eligible Non-Residential Noise-Sensitive Structures (continued)

Description	<ul style="list-style-type: none"> • Other factors that influence eligibility may include, but are not limited to²: <ul style="list-style-type: none"> • Previous sound reduction treatments • Ambient and self generated noise levels • Whether a given use is considered temporary or permanent • Time frame within which the structure was constructed • DNL contours for TEB were first published on June 15, 2017.³ Properties constructed within those DNL contours after June 15, 2017 would not be eligible for federally funded noise mitigation⁴ • Compliance with the local building code
Benefits	Installation of sound insulation treatments provides noise reduction inside noise-sensitive structures for compatibility with indoor activities. Once treated, the property is considered compatible.
Rationale	This measure may reduce noncompatible land use in the 65 DNL contour for areas in the vicinity of TEB.

² Eligibility determination is set forth in FAA Order 5100.38 Airport Improvement Program Handbook (AIP Handbook) Handbook, Appendix R.

³ Port Authority of New York and New Jersey, "Teterboro Airport, Title 14 Code of Federal Regulations (CFR) Part 150, Noise Exposure Map Report, May 2017.

⁴ Final Policy on Part 150 Approval of Noise Mitigation Measures: Effect on the Use of Federal Grants for Noise Mitigation Projects. 63 FR 16409.

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Provide Positive Ventilation to Eligible Residential and Non-Residential Noise-Sensitive Structures

Description	<ul style="list-style-type: none"> This corrective measure involves providing ventilation systems to allow for air circulation inside structures that have been sealed for noise mitigation purposes. These could include structures that do not qualify for sound insulation, but obtain necessary noise level reduction when their existing doors and windows are fully closed. For the 121 residential units and three facilities that may be eligible for sound insulation, positive ventilation may be provided to units/facilities that do not have existing positive ventilation systems. Some residential units and non residential noise sensitive structures within the DNL 65 contour may not qualify for sound insulation but could obtain necessary noise level reduction if: <ul style="list-style-type: none"> Windows and doors are closed Positive ventilation is provided
Benefits	Installation of positive ventilation provides noise reduction inside noise-sensitive structures for compatibility with indoor activities. Once treated, the property is considered compatible.
Rationale	Provide noise-sensitive structures with improved interior environmental conditions necessary for other sound insulation treatments to be effective in reducing interior noise levels.

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Port Authority Assistance with Establishing an Airport Noise Overlay Zone

Description	<ul style="list-style-type: none"> An airport noise overlay zone is a preventive measure intended to prevent noncompatible land uses from being developed near an airport. Recommend local land use planning jurisdictions implement an airport noise overlay zone to prevent noncompatible land uses from being developed Include building codes for sound insulation treatments to ensure noise compatibility for noise-sensitive structures permitted within the overlay zone
Benefits	Airport noise overlay zones could help prevent the introduction of new noncompatible land uses.
Rationale	Deter the introduction of new noncompatible land uses as required by the FAA Grant Assurances

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Land Use Measures

Considered but Not Recommended Land Use Measures for
Inclusion in this NCP

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Acquire Avigation Easements

- Description
 - Attach avigation easements to property deeds “right-of-flight” of aircraft to inform future property owners
 - Avigation easement acquisition will be associated with other Port Authority-recommended noise mitigation measures, such as land acquisition and sound insulation, but not for compensation to the parcel owner as a stand-alone measure.
- Reason to not recommend
 - Preference is given towards noise benefit to residents and users of the noncompatible structures

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Implement Cooperative Land Use Agreements

- Description
 - Establish preventative measures with the local jurisdictions to ensure no new introduction of noncompatible land uses
- Reason to not recommend
 - Port Authority met with local land use agencies and in general, the agencies did not support cooperative land use agreements to promote compatible land use.
 - Preference is given towards collaborative work with land use jurisdictions without implementing cooperative land use agreements

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Raise Minimum Building Standards

- Description
 - Amend building codes to include sound insulation treatments in areas of noncompatible land uses to ensure compatible interior habitable spaces
- Reason to not recommend
 - Limited number of vacant parcels within the 65 DNL contour
 - Dwelling units and nonresidential structures with noise sensitive land uses are compatible if constructed after July 15, 2017 (the date of the first publicly available aircraft noise exposure contour for TEB)
 - Preference is given to continue efforts to work collaboratively with land use jurisdictions without attempting to raise minimum standards

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Implement Rezoning of Land Uses

- Description
 - The Port Authority does not have jurisdiction over zoning codes, but would work with land use and regulatory agencies if they are interested in pursuing noise-related zoning code changes specifically focused toward new development
- Reason to not recommend
 - Port Authority met with local land use agencies and agencies were not in favor of rezoning to promote compatible land use
 - Dwelling units and nonresidential structures with noise sensitive land uses are compatible if constructed after July 15, 2017 (the date of the first publicly available aircraft noise exposure contour for TEB)

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Include Airport Noise in Real Estate Disclosures

- Description
 - Include an airport noise disclosure in real estate transactions for those properties subject to excessive noise from aircraft operations
- Reason to not recommend
 - Local land use agencies were not in favor of the inclusion of aircraft noise in real estate disclosures
 - Port Authority does not have jurisdiction over local or state-mandated real estate disclosures

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Program Management Measures

Program management measures would enable the Port Authority to monitor the implementation and compliance of the recommended noise abatement and land use measures in the NCP, as well as enhance stakeholder understanding of aircraft noise. Program management measures are critical to the success of the NCP

Recommended NCP Program Management (PM) Measures

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Program Management Measures Summary

Program Management Measures Recommended for Inclusion in this NCP

Maintain Noise Office	Establish an Airport Noise Community Planners Forum
Maintain Noise and Operations Monitoring System (NOMS)	Establish and Manage a Fly Quiet Program
Maintain Public Flight Tracking Portal	Make Aircraft Noise Contours Available in a Geographic Information System (GIS)
Maintain Noise Complaint Management System	Update the Noise Exposure Map
Maintain Noise Office Website	Update the Noise Compatibility Program
Continue Community Outreach Activities	Airfield Noise Abatement Program Signage

Program Management Measures Considered but Not Recommended for Inclusion in this NCP

Incentivize a Quieter Aircraft Fleet

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Maintain Noise Office

Description	Existing Port Authority and TEB noise abatement office is a vital link between the Airport and communities in regards to aircraft noise by providing: <ul style="list-style-type: none"> Public liaison Noise and Operation Management System management Noise complaint management
Benefits	<ul style="list-style-type: none"> Enables the Port Authority to understand, respond to, and address community concerns associated with aircraft noise from TEB operations The Noise Offices will continue to maintain the existing program management measures, facilitate the implementation of the new approved NCP measures and monitor adherence with them
Rationale	TEB Noise Office is the principal office for receiving and responding to aircraft noise complaints from the public and interfacing with stakeholder representatives, the communities, and airport users with the Port Authority Noise Office providing additional support

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Maintain NOMS, Public Flight Tracking Portal, & Noise Complaint Management System

	Maintain Noise and Operations Management System (NOMS)	Maintain Public Flight Tracking Portal	Maintain a Noise Complaint Management System
Description	Continue investigation of noise complaints and provide a means to monitor compliance with NCP noise abatement measures	Continue to support the public web portal, Webtrak, that provides aircraft operations and noise monitor data from ANOMS	Continue to use PlaneNoise to collect/manage noise complaints; Each noise complaint compiled, analyzed, & mapped for reporting
Benefits	Enables correlation of noise monitoring data with individual aircraft ops at TEB; Supports the investigation of noise complaints and communication with the public about the noise environment associated with TEB.	Enables communication to the public about aircraft ops and associated noise exposure at TEB; Supports the Noise Office function of communicating with the public about the impacts of operations at TEB.	Enables the efficient collection and reporting of noise complaints associated with aircraft ops at TEB; Supports the Noise Office function of communicating with the public about impacts of operations at TEB.
Rationale	Key tools used by the Port Authority, TEB Noise Office & community; supports the TEB Noise Office		

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Preliminary and subject to change

Maintain Existing Noise Office Website and Continue Community Outreach Activities

	Maintain Noise Office Website	Continue Community Outreach Activities
Description	Maintain a website that provides links to submitting a noise complaint, public web portal, noise monitoring, reports, and airport community roundtables	Continue to collaborate with the FAA and representatives of nearby communities; continue to support TANAA and TUG
Benefits	Provides links to the Port Authority's publicly-available information and services associated with the noise environment at TEB	Community outreach activities enable the Port Authority to support and maintain meaningful dialogue regarding aircraft noise at TEB
Rationale	Supports the function of the Port Authority and TEB Noise Offices.	

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Establish an Airport Noise Community Planners Forum

Description	Initiating a Community Planners Forum to discuss proposed planning, land uses issues, zoning concerns, and noise mitigation efforts
Benefits	A Voluntary Airport Noise Community Planners Forum that will enable the collaboration of various jurisdictions in the airport vicinity to share airport noise related information pertaining to comprehensive planning, land use issues, zoning issues, and noise mitigation efforts at TEB
Rationale	Collaboration and sharing of airport noise information, with various jurisdictions in the airport vicinity, pertaining to comprehensive planning, land use issues, zoning issues, and noise mitigation efforts for TEB

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Establish and Manage a Fly Quiet Program

Description	<ul style="list-style-type: none"> A Fly Quiet Program is a voluntary collaboration among airlines and air traffic controllers that encourages pilots and air traffic controllers to use noise abatement flight tracks, NADPs and preferential runways. Update the existing TEB Flight Crew handbook to provide a comprehensive Fly Quiet Program for TEB This program will incorporate the existing mandatory and voluntary noise abatement measures at TEB documented in the Handbook along with the additional proposed measures in the NCP
Benefits	Establishment and management of a voluntary Fly Quiet Program would enable the continuation of mandatory measures and the development and management of voluntary solutions for abating noise from aircraft operations at TEB.
Rationale	To ensure that airport noise can be collaboratively abated at TEB.

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Update the NEM and NCP

	Update the Noise Exposure Map	Update the Noise Compatibility Program
Description	Once an FAA-accepted NEM is more than five years old, the Port Authority will evaluate any changes in the noise environment at TEB and confirm in writing to the FAA whether the NEM continues to be a reasonable representation of current and/or forecast conditions at TEB or submit an updated NEM to the FAA for acceptance	The Port Authority will update the NCP only when additional measures and/or modified measures are required to reduce noncompatible land uses; the NCP does not require an update with each NEM update
Benefits	Meet the requirements of 14 CFR Part 150	
Rationale	Meet the requirements of 14 CFR Part 150, Section 150.21(d).	Meet the requirements of 14 CFR Part 150, Section 150.23(e)(9).

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Make Aircraft Noise Contours Available in a Geographic Information System (GIS)

Description	Provide public access to Geographic Information System (GIS) files of the future condition DNL 65, 70, and 75 contours through a link to be provided on the Noise Office website
Benefits	Making TEB noise contours available in a geographic information system will enable the public, land use planning agencies, and other stakeholders with easy access to future condition noise contours.
Rationale	Provide easy access to future condition TEB noise contours that could enhance awareness and decision-making for interested parties regarding aircraft noise.

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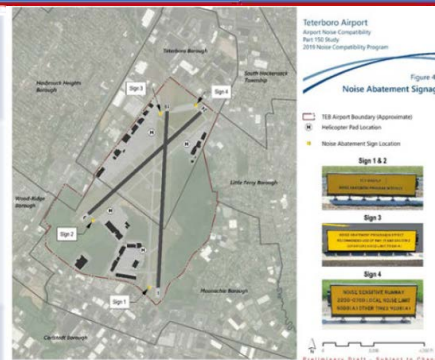
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Airfield Noise Abatement Program Signage

Description	The Port Authority has installed signs on the airfield and at the ends of each runway reminding pilots of the noise abatement program; an additional sign is proposed for a central run-up location
Benefits	Provides noise abatement information to the TEB pilots including: <ul style="list-style-type: none"> Details on maximum noise limits for departures Permission to operate jet aircraft forms Preferential noise abatement runway usage Maintenance run-up restrictions Flight procedures
Rationale	<ul style="list-style-type: none"> Supports the function of the Noise Office Effective communication tool to remind pilots about noise abatement



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Considered but Not Recommended Program Management Measures for Inclusion in this NCP

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Incentivize a Quieter Aircraft Fleet

- **Description**
 - Offer incentives to encourage aircraft operators to obtain quieter aircraft
- **Reason to not recommend**
 - Changes in Federal regulations over time have resulted in a quieter fleet at TEB
 - Due to the diverse nature of the TEB fleet additional measures would not be administratively feasible

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TAC Members

Name	Affiliation	Name	Affiliation	Name	Affiliation
Gabriel Andino	AvPORTS TEB Staff	Alex Gersten	National Business Aviation Association (NBAA)	Pablo Navarrete	Signature Flight Support West & East
Harley Arnsen	FAA	Dave Gencalves	Signature Flight Support TEB South	Gary Palm	FAA Airport Traffic Control Tower (ATCT)
Joel Barbosa	Signature Flight Support West & East	Paul Griffin	TANAAC	John Panarella	AvPORTS TEB Staff
Dave Belascheck	Teterboro Users Group (TUG)	Mark Guidel	FAA, TRACON	Kevin Pattermann	Jet Aviation
Peter Betselas	Bergen County	Gill Huisman	Aviation Development Council	Mike Parcella	FAA NY TRACON
Larry Brady	Federal Aviation Administration (FAA) Airport Traffic Control Tower (ATCT)	Ed Knoesel	FAA - NY ADO	Pasquale Ragusa	Signature Flight Support (Morristown)
Andrew Brooks	FAA	Peter Kornis	National Business Aviation Association (NBAA)	Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)
Jeff Brooks	FAA TRACON	Peter Ketrigh	Bergen County	David Sanchez	FAA Airports District Office (ADO)
Lindsay	FAA	Joe Legis	EWR Noise Community Roundtable	Ronald Seelgy	NI Sports and Exposition Authority
Geoff Cature	TUG	Tom Malene	FAA Flight Standards District Office (FSDO)	Maria Sheridan	PANYNJ/TEB
Jim Dantis	TUG	Jim Marks	Dassault Falcon Jet	Dave Swanson	FAA Flight Standards District Office (FSDO)
Fred Dressel	TANAAC	Scott Marsh	PANYNJ/TEB	Ralph Tragale	PANYNJ Noise Office
Joe Fazio	FBO, Atlantic Aviation	Zach Miller	AvPORTS TEB Staff	Joe Vukovich	NetJets
Michael Fiscus	AvPORTS TEB Staff	John Marotta	FAA Airport Traffic Control Tower	Adeel Yousuf	PANYNJ Noise Office
Ken Forester	Meridian Teterboro	Glenn Morse	AvPORTS TEB Staff		

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Schedule Review

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Review of Project Schedule

For Planning Purposes Only

Date	Milestone
August 2019	Submitted Preliminary Draft NCP Report to FAA for review
4 th Quarter 2019	Revision to be made based on FAA comments
1 st Quarter 2020*	Completion of noise abatement, land use and program management measure recommendations Draft NCP Report available for public review Public Workshop/Hearing during comment period, collect public comments
2 nd Quarter 2020*	Develop response to comments Develop Final NCP Report and submission of Final NCP Report to FAA Submission of Final NCP report to FAA
2 nd /3 rd Quarter 2020*	FAA 180-day review period
3 rd /4 th Quarter of 2020*	Release of FAA Record of Approval
4 th Quarter 2020*	Release of Final NCP Report TAC Meeting #15 TBD (if needed)

* Dates are tentative and subject to change

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TAC Projected Meeting Schedule

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 2016	TAC 7 - Complete	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 - Complete	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 - Complete	Continue discussion of noise abatement alternatives for consideration
9/15 - 10/16/2016	NEM comment period - Complete	

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TAC Projected Meeting Schedule - Continued

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Complete	Present initial noise abatement alternative analyses
January 27, 2017	TAC 10 - Complete	Present additional noise abatement and land use analyses
March 31, 2017	TAC 11 - Complete	Present third-round noise abatement analyses Present second-round compatible land use alternatives
June 2017	TAC 12 - Complete	Present third-round compatible land use alternatives
November 2017	TAC 13 - Complete	Present final noise abatement measures Discuss NCP documentation
October 2019	TAC 14 - Today	Present Recommended NCP Measures
1 st Quarter 2020	Workshop 3 Public Hearing on NCP	Present Final Draft NCP for Public Comment
TBD	TAC 15	After TEB NCP has been accepted into the FAA's Federal Register

* Dates are tentative and subject to change

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Wrap Up

Thanks for attending!

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Appendix D.3

Technical Advisory Committee Meeting Summaries

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**THE PORT AUTHORITY
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Technical Advisory Committee #6

14 CFR Part 150 Study – Teterboro Airport

May 24, 2016 – 1:00 PM to 4:00 PM (scheduled time)

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	✓
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
Dan Gardon	AvPORTS TEB Staff	✓
John Kastens	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	✓
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	✓
Mark Guiod	FAA	
John Moretto	FAA	
Suki Gill	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	

Name	TAC Member Organization/Affiliation	In Attendance
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	✓
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Peter Korns	NBAA	
Eileen O'Brien	Net Jets	
Karl von Valtier	Net Jets	✓
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	✓
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	✓

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI
Ted Baldwin	HMMH
Mary Ellen Eagan	HMMH
Ed Knoesel	PANYNJ
Timothy Middleton	PANYNJ
Pam Phillips	PANYNJ
Renee Spann	PANYNJ
Katie Winfree	PANYNJ
Adeel Yousuf	PANYNJ
David Full	RS & H

Public

Name	Organization/Affiliation
Eric Raboin	The Jones Payne Group

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the sixth meeting of the Teterboro Airport (TEB) Part 150 Noise Study Technical Advisory Committee (TAC).

Attendees introduced themselves and received copies of the presentation.

Ted Baldwin (HMMH Project Manager, Teterboro Airport) reviewed the current status of the Part 150 process and schedule. The primary areas of attention of current efforts involve:

- Developing noise contours for existing and 5-year forecast conditions,
- Collecting land use data and policies,
- Noise impact evaluation for DNL 65-75 dB, and
- Preparing maps in accordance with 14 CFR Part 150.

Noise Model Input Development, Review, and Approval Status:

At the March TAC meeting, draft noise model inputs were shared with the TAC for feedback and submitted to the FAA; no comments were received from TAC members. Ted stated that the FAA review and approval of non-standard flight profiles was received by the study team on May 23rd. With this approval, all model inputs are final, and land use analyses will move forward.

Lindsay Butler (FAA) asked if the approval letters will be posted on the project web site. Ted stated that all the approval letters will be presented in an appendix to the Noise Exposure Map (NEM) submission. The TAC members will be notified when that document is available.

Preliminary draft 2016 and 2021 DNL contours (Slide 5 of the presentation)¹ were shown and discussed. Ted explained that when overlaid on each other, it is visually apparent that there is no significant difference between the 2016 and 2021 contours. He stated that it would take a large increase in operations to produce a difference in sound levels, and that a more modern fleet mix is helping to keep the future noise contour stable. Once the

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

contours have been finalized, RS&H, part of HMMH study team, will be conducting a detailed land use analysis. At the July TAC meeting, parcel level land use analyses will be presented for the areas within the 2016 and 2021 65 DNL contours, along with information on discrete sensitive receptors.

Tim Middleton (PANYNJ Project Manager for TEB and EWR Part 150 Studies) asked if land use analyses would only be conducted for the slightly larger 2021 contour. Ted stated that, consistent with Part 150, the analyses will be conducted for both 2016 and 2021.

Ted noted the contours are relatively large for a general aviation airport. Tim Middleton (PANYNJ) observed the contours are similar to those seen before for TEB. He noted that the contours account how aircraft actually fly at TEB, including non-standard procedures, and that the PANYNJ is pleased with the results so far. Lindsay Butler (FAA) asked if these new contours would be compared to past contours. Ted and Tim observed that since no prior Part 150 Study has been done for TEB and it has been a long time since any Federal noise contour analysis has been conducted, there may not be a valid basis for comparison, but that the study team would look into the matter.

Ted reviewed areas where residential land uses fall within the 65 DNL contours, including both ends of Runway 6/24 and the south end of Runway 1/19 (Slide 6 of the presentation).

Ted pointed out the small protuberances in the contours at each of the "helipad" locations (there are no helipads at TEB, but as mentioned in previous TAC meetings, for purposes of noise modeling and consistent with operations at the airport: four locations have been identified as helipads); those effects do not extend off airport (Slide 7 of the presentation). Peter Kortright (Bergen County) questioned whether a vibration analysis would be conducted for helicopters. Ted responded that Part 150 does not include vibration analyses. He added that helicopters can cause secondary noise effects, when the low-frequency noise causes the house to vibrate slightly, resulting in plates, window, or pictures to rattle. The noise levels are not high and have little effect on DNL, but the rattling makes the helicopters noticeable.

Ted noted that the effect of run-ups on the contours (Slide 8 of the presentation) is reflected by on-airport property protuberances at the two primary run-up locations, the Alpha pad to the north (85% use for run-ups) and the Taxiway G extension to the east (13% use).

Ted presented the 2016 and 2021 DNL contours relative to the study area as a whole (Slide 9 of the presentation). He indicated that the study area was defined to include the TANAAC communities and a buffer area to ensure it would encompass the 55 and 60 DNL contours that will be presented for informational purposes only. Ted reminded the attendees that for Part 150 purposes, FAA only considers land uses within the 65 DNL contour and considers all land uses compatible outside of that contour.

Ken Forester (FBO, Meridian) asked whether the “pointy” part of the contour off the north end of Runway 1/19 was associated with takeoff noise. Ted indicated that the long, thin pointy shape of the contour in that area is associated with noise from approaches to Runway 19. Stephen Riethof (AOPA) asked why the south end of that runway does not have a similar “spike.” Ted responded that was because aircraft rarely land from the south on that runway, which would be Runway 1 landings. Runway 1 is primarily used for takeoffs to the north. Ted suggested that the study team would present figures showing primary runway use off each runway end at the next TAC meeting to help illustrate how runway use affects contour shape. The committee members thought that would be helpful.

TEB Noise Monitoring Locations

Ted reviewed TEB’s six remote noise monitoring station (RMS) installations that have been in place since the mid-1980s (Slide 10 of the presentation). Most are in public locations, high on telephone-like poles near roadways (although not busy roads) within the public right of way. One monitor, RMS #3 is on the roof of Hackensack Hospital. Ted reviewed Slides 10 through 16 of the presentation, which provide detailed information on each RMS.

Comparison of Modeled and Measured DNL

Ted noted that the study protocol calls for comparing modeled DNL for 2016 to 2014 measurements (Slide 17 of the presentation). Modeled results are greater than measured at five of the six RMS sites (RMS 3 was the exception). Modeled estimates are for ground level noise at RMS sites, and the greatest difference was at the RMS 2, which is exposed to the least aircraft noise. Ted noted that agreement within two decibels is considered quite close in terms of accuracy. Gabriel Andino (AvPORTS TEB staff) noted that RMS 3 is on top of a six-story building, which may partially explain why the measured levels are higher than modeled at that site. Ted said the study team will coordinate with Gabe to determine the

elevation of RMS 3 and analyze the potential effect on measured levels compared to ground level.

Complaint Graphics

Ted then reviewed overall TEB complaints statistics for 2014 and 2015 (Slide 18 of the presentation). Complaints are self-reported by residents and collected in the Port Authority’s ANOMS system by web form submissions and phone calls. Slides 19 and 20 show the geographic distribution of complaints received for jets, propeller aircraft, helicopters, and “unspecified” operations (for cases where a single specific aircraft type was identified). Jim Dramis (Teterboro Users Group) asked how many of the complaints are unique and not from the same person. Ted responded that complaint figures are in the form of circles centered on unique addresses from which complaints are received and that the relative sizes of the circles correspond to the numbers of complaints received from each address. Ted noted that a high percentage of the complaints are about jets and roughly follow the noise contours. Gabe noted that some of the unspecified complaints that are close to the airport may correspond to run-ups.

Introduction to Noise Compatibility Program (NCP) Development

Ted provided an introductory overview of NCP development, the next step in the Part 150 Study, as summarized on Slides 21 through 23. Ted noted that Part 150 requires that the final documentation must reflect that the airport proprietor (in this case, the PANYNJ) make all NCP recommendations, not the consultant, or any other third party. He also noted that for any strategy which is considered but not selected, the final NCP study documentation must provide reasons why. Peter Kortright (Bergen County) asked if the study team has looked at airport overlay zones² at other airports. Ted responded that yes, the study team has done overlay zones and cited a recent positive example at the Akron-Canton Airport in Ohio.

Ted reviewed major NCP strategy options in three categories: (1) noise abatement, (2) land use, and (3) programmatic (Slide 24 of the presentation). He noted that the TAC is going to need to get creative to think of ways to move or shrink the contours through noise abatement, given the long history of cooperative efforts at the airport. Ted stated that the

² Airport Overlay Zones are designated areas, agreed upon by land use jurisdictions, around an airport that place use restrictions and standards on land use and property development within a defined proximity of an Airport based on a chosen DNL contour.

TAC will get more “bang for their buck” by changing nighttime operations, since one nighttime event is equal to 10 daytime events. Joe Fazio (FBO, Atlantic Aviation) asked about the noise monitoring around the airport and how many of the complaints were night versus daytime. Ted Baldwin said that was a good question that the study team would report at the next meeting. Ted also noted that one of the most important components of an NCP is promotion, through TUG, NBAA, AOPA, in getting the word out that specific noise abatement measures are in place.

Ted noted that Part 150 identifies the minimum scope of NCP alternatives for consideration, as listed on Slide 25. Renee Spann (PANYNJ) questioned how far the analysis of one of those alternatives – a preferential runway system – could go. Ted replied that the study team would analyze this measure as far as possible in terms of noise benefits and implementation-related issues, such as airspace issues, wind, taxi distances, runway crossings, etc. The study team will look at as many factors as the TAC can help with. John Panarello (AvPORTS TEB Staff) asked if the study team and TAC would compile scenarios and then evaluate the pros and cons of each measure. Ted responded affirmatively.

Renee Spann (PANYNJ) noted that TEB has a voluntary preferential runway use program that the FAA cannot implement on a mandatory basis, which diminishes its effectiveness. She expressed concern that changes in airspace and air traffic control procedures might further diminish that effectiveness. She also noted that changes in air traffic control procedures can require enhanced environmental impact review and asked whether the study team will conduct such environmental review for new procedures. Andrew Brooks (FAA) responded that the FAA will consider the noise benefit of any proposal and then any further environmental review that is necessary. Lindsay Butler (FAA) added that the FAA will assess the benefit to the contour, pros and cons, and then look at the environmental reviews later, when TEB seeks to implement the new procedure.

Pam Philips (PANYNJ) questioned whether the Part 150 process could help TEB fast-track new approach/departure procedures under consideration that would reduce minimums or de-conflict TEB and EWR operations; that is, will the Part 150 process help streamline the FAA environmental review process. Andrew Brooks (FAA) responded that the FAA Airports District Office (ADO) and radar control facility (TRACON) will engage in review and discussion of implementation strategies with noise benefits inside the 65 DNL contour. He

added that new TEB procedures ready to be published would proceed more quickly on their original track than being folded into the Part 150 process.

Ted noted that preferential runway use procedures could be “informal” or “formal” under FAA regulations and observed that FAA had not approved a formal runway use program since the mid-1980s, and that such approval would be highly unlikely at TEB. Gabriel Andino noted that an informal runway use procedure could be done now but the burden would then be on the airport and operators to get the word out to pilots to make it effective. Renee Spann (PANYNJ) noted that TEB communicates well with the airport users, but that getting the word out to all pilots is difficult and that FAA air traffic control staff could not assist to the level she would like to see. She expressed her belief that a formal program is required to make a preferential runway program effective, but that since it may not be approved it could lead to negative community reaction. John Panarello (AvPORTS TEB Staff) asked if a recommendation for an informal runway use policy that came out of a Part 150 process would carry more weight. Ted responded affirmatively, since if the FAA approved the recommendation, it would be more likely to assist in implementation.

Tim Middleton (PANYNJ) asked the TAC to review the noise modeling input memorandum from last meeting and review the runway usage charts for discussion at the next meeting. He also requested that TAC members begin to brainstorm strategies or measures that could be used to shrink the contours. Ted added that TAC members should not be afraid to bring up any idea, even if it has been considered previously or seems like a remote possibility.

Gabriel Andino (AvPORTS TEB Staff) commented on night runway use and that the airport is less constrained at night. Ted suggested that the study team will consider runway use during the 11 pm – 6 am voluntary curfew period, when winds are calmer, there are less workload issues, and less traffic at EWR.

Ted asked where TAC members should send ideas about noise measures for the NCP. Tim Middleton responded that the TAC should email him and cc Kristen Ahlfeld (FHI) and Ted who will compile for future discussion.

Meeting Wrap-Up

Tim Middleton (PANYNJ) noted the next TAC meeting will be on Friday, July 29, 2016 from 9 a.m. to 12 p.m. Tentative dates for future meetings are as follows:

- TAC Meeting #8 –September 23, 2016 from 1 p.m. to 4 p.m.

- August or September - Public Workshop # 2

Renee Spann (PANYNJ) noted that the study team did not receive the level of participation from communities it desired for the first workshop. She questioned whether the study team would be doing anything to change the format to get more attendance. Tim Middleton (PANYNJ) stated that the study team was going to write some press releases, as well as prepare a local elected officials briefing packet, and possibly place flyers in libraries or schools closer to the airport.

Fred Dressel (TANAAC) noted that as Executive Director of Committee of Mayors, they are going to try to initiate land use review of 14 towns. He noted that the NJ Sports and Exposition Authority, Committee of Mayors, and County Planning Departments should be invited to participate at the public workshop. Renee Spann (PANYNJ) noted that people did not know the previous meeting was an open house format (which she noted is a good format), and that information regarding the workshop format should be provided in the press release. The study team needs to do a better job about informing people about the meeting format, and whether people can drop in at any time. Mary Ellen Eagan (HMMH) noted that at other meetings, a PowerPoint presentation on a loop would be good to have for those expecting a presentation.

Jim Dramis (TUG) noted that Members of TUG will be meeting with FAA in July to discuss the Runway 24 RUUDY FIVE departure. Tim Middleton (PANYNJ) and Gabriel Andino (AvPORTS TEB Staff) stated that they did not believe the issues under discussion would have any negative consequences for noise.

There was discussion of whether active noise cancellation systems could be used to abate aircraft noise. HMMH representatives responded that noise cancellation is only practical in confined environments such as cars, aircraft cabins, or small areas of a factory.

Ted Baldwin (HMMH) thanked Andrew Brooks (FAA) and all his associates for all their hard work in progress made with all the approvals to date.

It was noted that the July 29 TAC Meeting conflicts with Oshkosh fly-in meeting.

Tim Middleton (PANYNJ) will send those who cannot attend the July meeting the final presentation a few days beforehand.

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Technical Advisory Committee #7

14 CFR Part 150 Study – Teterboro Airport

July 29, 2016 – 9:00 AM to 12:00 PM (scheduled time)

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	✓
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	✓
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	
Dan Gardon	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	✓
Mark Guidod	FAA	
John Moretto	FAA	
Suki Gill	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	✓

Name	TAC Member Organization/Affiliation	In Attendance
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Peter Korns	NBAA	
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	✓
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	✓
Jim Dramis	Teterboro Users Group (TUG)	✓

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI
Ted Baldwin	HMMH
Mary Ellen Eagan	HMMH
Bob Mentzer	HMMH

Name	Study Team Organization/Affiliation
Ed Knoesel	PANYNJ
Timothy Middleton	PANYNJ
Pam Phillips	PANYNJ
Renee Spann	PANYNJ
Katie Winfree	PANYNJ
Adeel Yousuf	PANYNJ
David Full	RS&H

Public

No public attendees

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the seventh meeting of the Teterboro Airport (TEB) Part 150 Noise Study Technical Advisory Committee (TAC). Attendees introduced themselves.

Study Process Update

Ted Baldwin (HMMH) noted that the study is at a major turning point, transitioning to the Noise Compatibility Plan (NCP) phase. Moving forward, TAC meetings will focus on developing NCP strategies.

Draft 2016 and 2021 Noise Exposure Maps and Land Use Analysis

Ted Baldwin presented the Draft 2016 Noise Exposure Map (NEM) and highlighted non-compatible land uses (Slides 5 and 6 of the presentation)¹; he noted that the NEM figures and document will be available for public review and comment in September 2016.

Ted noted that the Port Authority sound insulated the Bergen County Technical High School as part of a previous mitigation program, so it is now a compatible land use. Andrew Brooks (FAA) noted that the "FAA will look to determine what documentation we have on file and share with the study team, if the Port Authority does not have the files." Ted

identified other non-compatible land uses within the DNL 65 dB contour and noted that the biggest cluster of residential use is an area of single- and multi-family dwellings to the southwest of the end of Runway 6.

Generalized land uses within the full area covered in the NEM figures were presented on Slide 7 of the presentation. Fred Dressel (TANAAC) commented that the mobile home park located at the end of Runway 19 is actually two parks, with the park on the west containing 236 mobile homes and the park on the east containing 205 mobile homes.

Ted noted that the 2021 contours are not much different than the 2016 contours (Slide 8 of the presentation); he noted that there is a slight growth in the 2021 contour so that it clips the North Jersey Vineyard Church to the north of Runway 19. Andrew Brooks (FAA) questioned whether the Study Team had collected the zoning for that parcel and whether the parcel is zoned for commercial uses. Dave Full (RS&H) stated that the parcel is zoned commercial, or storefront commercial; he added that the church is a free-standing structure (like a warehouse) and is not in a strip mall. Andrew noted that unless the church is a permanent structure then it probably would not be eligible for sound insulation. He stated that it comes down to facility ownership; if the space is rented from another owner and could be converted to another use, it is not eligible for mitigation. There will be more discussion on this building in future TAC meetings as the NCP process continues.

Lindsay Butler (FAA) indicated that a similar assessment may be needed for the Learning Tree Academy Daycare (southwest of the Runway 6 end) in Moonachie. The assessment would require asking for the facility's curriculum to identify that the academy is a learning institution versus a basic daycare. She noted that the actual amount of time spent each day on learning would determine the facility's eligibility. Dave Full pointed out that the facility was a free standing structure and not part of a residential home.

On Slide 10, Ted reviewed dwelling units and residential population within the DNL 65 dB contour for 2016 and 2021. For both years, dwelling unit counts and the number of people living within are based on Census 2010 block data. Dwelling units may have various population counts depending on if it is a multi family or single family home; the number of dwelling units is relevant because the FAA considers this in the mitigation process.

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

Slide 11 provided the land areas within the DNL contour intervals. This table also demonstrates that the DNL contours between 2016 and 2021 increase slightly.

Supplemental DNL Contours

Ted noted that supplemental 2016 and 2021 DNL contours have been prepared to show the DNL 60 dB and 55 dB contours and are for informational purposes only; they will be included in an appendix of the NEM document. Bob Mentzer (HMMH) described the reason for the "island" of DNL 55 dB noise to the southwest of the airport. That island is due to departures from Runway 24 that climb to 1,500 feet and then level off to maintain separation with Newark Arrivals. Once they pass this area they are cleared by the TRACON (New York Terminal Radar Approach Control) to resume their climb; the reapplication of power at this point causes an increase in noise levels in the area under the climb.

Response to Specific Requests from TAC #6

There were several questions asked at TAC Meeting #6 that the Study Team was asked to follow-up on or provide additional information:

- At the TAC's request, the relationship of runway use to contour shape was reviewed to help understand the effect of runway use on the shape of the contours. As shown on Slide 15 of the presentation, the slight increase in the contours by 2021 is associated with a 9% increase in operations at TEB. Ted also explained and compared the dominant runway use patterns for Runway 1/19 and Runway 6/24 and the relationship to the shape of the contour in 2016 and 2021 (Slides 16 through 19 of the presentation).
- At the TAC's request, separate complaint plots were presented for day (7 a.m. to 10 p.m.) and night (10 p.m. to 7 a.m.) by aircraft type (Slides 20 through 24 of the presentation). It was noted that most complaints fall inside the study area. Propeller complaints are much more scattered and had the least number of complaints. Helicopter complaints are focused on overhead crossing of properties such as mobile home parks and in the Little Ferry area, directly to the east of the airport away from the route. The unspecified complaints overlay the jet routes, therefore the Study Team assumed that these complaints could be related to jet movements. Gabriel

Andino (AvPORTS TEB Staff) commented that these complaints could be related to volume of traffic at a certain time of day.

- At the TAC's request, the DNL estimate at Hackensack Hospital was rerun to take into account the elevation of Remote Monitoring Site (RMS) 3 (Slides 25 through 27 of the presentation). The height adjustment led to an improvement between measured and modeled DNL. The Study Team was also able to obtain measured data for 2015 to supplement 2014 data, therefore better comparisons could be made to 2016 data; the measured and modeled agreement at RMS 3 is within 1 dB. It was noted that FAA does not allow the use of measured data to adjust noise contours.

Noise Compatibility Development Process

Ted noted that NEM phase of the study is almost complete and that the TAC and Study Team will be transitioning to the Noise Compatibility Program (NCP) Development Process. He reviewed the major steps in the NCP phase (Slide 28 of the presentation). Ted added that a goal of the TAC should be to work cooperatively to reduce or minimize the identified incompatible land uses within DNL 65 dB contour.

At TAC Meeting #6, the existing 11 p.m. to 6 a.m. voluntary curfew was discussed. Ted had asked the TAC members to think about how to encourage better compliance with the curfew and how TEB can better advertise the curfew to its operators and customers. Ted noted that fees or penalties would constitute a use restriction, which would trigger a Part 161 Study; very few airports have been successful on obtaining a use restriction under Part 161 and those that did were for Stage 2 aircraft only, which are no longer allowed to operate in the U.S. If TEB was successful in achieving full compliance with the existing voluntary curfew, residents in the study area would likely notice a difference; however, the contour might not be affected if the operations only shifted to the 10 – 11 p.m. and 6 – 7 a.m. shoulder hours, which still are considered nighttime operations in the calculation of DNL. In order to possibly change the contour, a longer curfew period would need to be implemented that would then lead to a reduction in operations during the 10 p.m. to 7 a.m. nighttime period.

Geoff Couture (TUG) commented on the importance of continued messaging about the curfew to pilots. He added that it is not the pilots who want to violate, most times it is the schedule set by clients. Gabriel Andino (AvPORTS/TEB Staff) added that a lot of times pilots are at the whim of the customers; if the airport is open they want to fly, regardless of curfews. Ted commented that at the airport in Naples, FL, there is a sign advertising a 10 p.m. to 7 a.m. noise curfew on blast deflectors so that it can be seen by pilots in the front of the plane and the customer in the back of the plane. Pam Philips (PANYNJ) noted that in addition to the daily outreach Gabriel Andino does on noise, the PANYNJ/TEB annually attends the National Business Aviation Association (NBAA) Schedulers and Dispatchers Conference to share information on TEB; it has been found to be very successful. She also noted that there is high pilot and other aviation staff turnover nationally so constant outreach is important.

Tim Middleton (PANYNJ) asked whether changing curfew hours based on the day of the week could have an effect on overall annual nighttime movements. Ted Baldwin (HMMH) stated that the Study Team would need to look at the data and see when these operations are occurring as they may be seasonal. Gabe Andino (AvPORTS/TEB Staff) added that there is some seasonality. Fred Dressel (TANAAC) commented that the Meadowlands sports complex experiences seasonal use, and there are numerous takeoffs after games/events. At the end of the discussion it was noted that the voluntary curfew is also referred to as a "voluntary restraint from operation" in correspondence since sometimes "curfew" can be inferred as a mandatory rule which it is not the case at TEB.

The discussion shifted to preferential runway use and nighttime movements. The Study Team is aware of the potential conflicts with EWR traffic at night time. Ted stated that he understands that operators have been requesting the Dalton departure off of Runway 19; based on the data, Runway 19 is not used often at night. Ted questioned whether a certain percentage of nighttime departures could be shifted to Runway 19 and what effect that would have on the contours. Gary Palm (FAA) noted the potential conflicts with EWR traffic with use of Runway 19 and also that the TRACON is staffed at lower levels at night.

Pam Philips (PANYNJ) noted that some of the biggest challenges at TEB are with EWR and LGA traffic. De-conflicting TEB from EWR's traffic is a long-term goal; however, it makes

things more complicated for the TRACON. Renee Spann (PANYNJ) questioned whether de-conflicting TEB from EWR and LGA would be a goal for Part 150. Lindsay Butler (FAA) stated that a noise benefit has to be shown to comply with the objective of the study, which is to show benefit with the DNL 65 dB contour. Pam Philips (PANYNJ) asked whether more departures on Runway 19 at night would show an improvement. Ted Baldwin (HMMH) responded that the Study Team can test those scenarios to see what type of benefit can be obtained and present it at the next TAC meeting in September. He added that if there is an increase in operations on Runway 1/19 at night for arrivals and departures, the contour could be "pulled in", essentially shrinking the contour to the Southwest of Runway 24; to a possible level that people in Wood Ridge are less affected.

On Slides 30 and 31 of the presentation, Ted reviewed the 2014 night-time runway use for jet arrivals and departures (hourly and total). On Slide 31, for the 2014 night-time jet arrivals, he noted that the volumes increase in the hour preceding and following the voluntary curfew period, with Runway 1 having the lowest use. He noted the possibility of shifting operations from Runway 6 to 1.

Gary Palm (FAA) asked if the Study Team can use data and make adjustments mathematically to show a shift in the contour without running a model. Ted responded that estimates could be made but the real answers will lie in the model run results. Lindsay Butler and Andrew Brooks (FAA) responded that this is the start of the brainstorming phase and the team will evaluate the positive benefits and the negative impacts of each measure brought forward by the TAC and Study Team. Andrew added that is also the reason why it is good that there is broad representation on the TAC so that differing interests are brought forward. Ted Baldwin noted that the Study Team can run some model scenarios with shifting departures from Runway 24 to Runway 19 and present the resulting contours at the next TAC meeting. He cautioned that the TAC needs to be careful as this scenario may shift noise from one community to another. Ted added that, if there is a net benefit, we would talk to air traffic to see if it is even realistic to fly the procedure.

Gary Palm (PANYNJ) noted that pilots do not want to fly a circle to land approach on the south end of TEB. With the existing obstructions, some pilots are uncomfortable with that procedure. Andrew Brooks (FAA) noted that if an RNAV procedure were to be brought

forward for the NCP it does not necessarily mean that on the day the NCP is certified that the procedure would be implemented. The NCP is first step to a procedure being approved; then would come obstruction and environmental assessment. Andrew added that sometimes recommended measures included in the NCP cannot be implemented, therefore in subsequent updates, those measures are removed.

Pam Philips (PANYNJ) asked if an Area Navigation (RNAV) procedure for Runway 1 is developed by FAA and also included in Part 150 Study as a recommended measure, would it be delayed by the Part 150 process. Andrew Brooks (FAA) responded that the procedure development process can go forward concurrently with the Part 150 study. Mary Ellen Eagan (HMMH) noted that it is very important for the Study Team to know about all of the independent efforts going on so that they can inform each other.

Ted stated that the Study Team can run the sensitivity analyses and requested TAC input on reasonable percentages to be shifted. Tim Middleton (PANYNJ) commented that 49% of departures at night are modeled off of Runway 24. Pam Phillips (PANYNJ) stated that it may make sense to go higher based on existing land use off Runway 24 and recommended 80% off Runway 19 and 20% off Runway 24, in a southerly flow. Bob Mentzer (HMMH) commented that it is going to come down to what is actually practicable in terms of air traffic reasons. Andrew Brooks (FAA) agreed and stated that a reality check is needed by the TRACON and that he will make sure that there is TRACON representation at the next meeting. Regarding the shoulder hours for the voluntary curfew, Lindsay Butler (FAA) questioned whether pilots are arriving at 10 p.m. because they know they can get in under the 11 p.m. threshold, or whether it is business/personal schedule and they are flying from the west coast after a 5 p.m. meeting? Gary Palm (FAA) stated that a percentage are trying to beat the deadline; he noted that if you compress the curfew earlier there could be a lot more air traffic issues so everything needs to be balanced.

Ted Baldwin (HMMH) said the study team could do some sensitivity analysis to tease out a pattern between the two hours and determine what the potential benefit may be. Fred Dressel (TANAAC) commented that if the activity is shifted, new annoyance will be created in a very vocal community located to the east of Runway 1. Noise is bothersome in some neighborhoods now and shifting noise is going to be very hard for the community to

accept. He added that there is an emotional and psychological affect from the noise.

Andrew Brooks (FAA) thanked Fred for his perspective and added that FAA is not in the business of shifting noise. Tim Middleton (PANYNJ) stated that another option could be to change existing operational procedures. He noted that people would not necessarily see a difference if an aircraft was on a similar path but able to climb to a higher altitude than existing procedures; procedural changes could potentially help the contour in Moonachie and Carlstadt.

Bill Huisman (Aviation Development Council) cautioned that the PANYNJ has to be careful when making operational adjustments and the messaging to the public. Pam Phillips (PANYNJ) agreed and stated that a big part of this will be education with respect to perceived vs actual impacts.

Ted Baldwin continued the discussion of the NCP development process by reviewing the categories of strategies that the TAC will be looking at and asked that the TAC members review the questions on Slide 33 and come to the next meeting to discuss strategies related to them as well as others.

Next steps

Kristen Ahlfeld (HMMH Study Team) stated that a public open house workshop will be held on Thursday, September 22, 2016 from 6 p.m. to 9 p.m. in the Multi-purpose Room at the Bergen County Complex in Hackensack, NJ. TAC members were given a workshop flyer.

The next TAC meeting (# 8) will be held on September 23, 2016 from 9 a.m. to 12 p.m.

TAC Meeting #9 will be held on November 17, 2016 from 1 p.m. to 4 p.m.

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	✓
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	
Dan Gardon	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	✓
Mark Guiod	FAA	
John Moretto	FAA	
Suki Gill	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	✓

Name	TAC Member Organization/Affiliation	In Attendance
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Peter Korns	NBAA	
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI
Jessica Ortiz	FHI
Ted Baldwin	HMMH

Name	Study Team Organization/Affiliation
Jessica Cohen	HMMH
Mary Ellen Eagan	HMMH
Rhea Gundry	HMMH
Bob Mentzer	HMMH
Gene Reindel	HMMH
Dominic Scarano	HMMH
Diana Wasiuk	HMMH
Timothy Middleton	PANYNJ
Pam Phillips	PANYNJ
Renee Spann	PANYNJ
Katie Winfree	PANYNJ
Adeel Yousuf	PANYNJ
David Full	RS & H
Gary Logston	RS & H

Public

Name	Organization/Affiliation
None	

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the eighth meeting of the Teterboro Airport (TEB) Part 150 Noise Study TAC and reviewing the agenda. TAC members were provided with a handout of the presentation. Attendees introduced themselves.

Ted Baldwin (HMMH) welcomed TAC members and provided an update on the TEB Part 150 Study Process (Slide 3 of the presentation)¹.

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

In reference to Slide 4 of the presentation, Kristen stated that the Draft NEM was available for public review and comment; the official NEM comment period is open and runs from September 15th through October 16th. She stated that the document is available online on the project website, at the Bergen County Complex, and in the TEB Airport Manager's office. Kristen encouraged TAC members to review the document and submit comments. She then reviewed the various methods the study team and PANYNJ used to advertise the availability of the NEM and the public workshop (Slides 5 through 8 of the presentation).

TEB Public Workshop Summary

A public workshop for the TEB Part 150 Study was held on Thursday, September 22nd in the Multi-purpose Room at the Bergen County Complex from 6 p.m. to 9 p.m. Kristen described the seven workshop stations that members of the public visited; she also explained that as members of the public entered the workshop, a TEB Part 150 Study Area map was available and they were asked to place a red dot on a town in which they lived.

Ted Baldwin (HMMH) led TAC members through the presentation boards that were on display at the workshop and highlighted key comments made by the public:

- There was interest in the sound abatement program for schools. Tim Middleton (PANYNJ) added that attendees had noted that there are schools outside the 65 DNL contour that should be evaluated for possible sound insulation. The PANYNJ will look at the list of schools already insulated to understand the history of interactions with each of the schools. Andrew Brooks (FAA) asked if one of the schools noted was the Sylvan School as the FAA has worked extensively with that school and they refused participation; the PANYNJ confirmed the Sylvan School was on the list of schools.
- Some public participants noted that air traffic seemed busier in September compared with summer activity.
- People seemed to know about and understand the 10 dB noise penalty for nighttime operations
- Bob Mentzer (HMMH) noted the public interest in the lower altitudes of flight profiles and mentioned that several members of the public had taken videos on their

- Dave Full (RS&H) noted that much of the discussion about land use and the land use map pertained to the data collection process.
- Bob Mentzer (HMMH) stated that people appreciated the extraordinary measures that the study team took to develop the flight tracks and profiles and to make sure that current TEB operations were replicated in the model.
 - Gary Palm (FAA) asked whether the study team used a breakdown of arrivals and descent by profile by day over the course of a year. Ted Baldwin responded affirmatively that the study team used that data for all of 2014. Gabriel Andino (AvPorts) noted that TEB has the arrival data tagged by aircraft.
- Bob also noted that the NEM maps with the land uses, presented both at the local and regional scales worked well; people could see if they were outside the 65 DNL contour where they fell within 60 and 55 DNL levels.
- People attending the workshop were most concerned with jets; no workshop attendees commented about helicopter noise.
- Petitions were received from Prospect Avenue Condominium Complex in Hackensack. While the comments from this group have not been compiled yet, it appears that they are in favor of the Runway 19 Quiet Visual approach currently under study by FAA. Since the petitions were received during the public workshop, they will be considered official project comments.

Additional comment forms were distributed and received at the public workshop; all comments submitted at the workshop as well as online will be considered for the Final NEM document. Ted Baldwin (HMMH) noted that all materials from the public workshop are available on the project web site.

Organization of the Draft NEM Report

Ted Baldwin (HMMH) briefly reviewed the contents of the Draft NEM report (Slide 10 of the presentation). He encouraged TAC members to download the document from the project web site and submit any comments or questions.

Review of NCP Discussion from Prior TAC Meetings

At the July TAC meeting, a discussion was started on potential noise abatement strategies that could be considered in the NCP (see Slides 12 and 13 of the presentation).

With regard to the existing TEB voluntary curfew, Ted Baldwin (HMMH) stated that at the Newark Liberty International (EWR) TAC meeting held earlier in the week, a suggestion was made to run daytime and nighttime contours by arrivals and departures; he added that this information will be beneficial for TEB as well, therefore the study team would complete the model runs and bring the analysis back to the next TAC meeting for discussion. Lindsay Butler (FAA) suggested that the study team add caveats to all of the analyses produced for the NCP that these model runs and any new maps are for discussion purposes only.

Tim Middleton (PANYNJ) stated that the majority of the incompatibilities are at the southern end of the airport, therefore the TAC should be looking at NCP measures that will have the greatest impact in that area.

During a discussion of TEB's existing preferential runway measures, Pam Philips (PANYNJ) noted that based on the numbers of requests received from pilots, there is a preference to use Runway 19 for departures at night, however FAA uses Runway 24 most of the time.

Ted requested that the TAC provide the study team with any other recommendations or strategies for noise abatement and stated that the next few TAC meetings will concentrate on the brainstorming and further development of NCP strategies.

Discussion of NY/NJ Metropolitan Airspace

The study team is coordinating with FAA on a special presentation that will provide an overview of the New York/New Jersey airspace and help TAC members get an overall understanding of airspace issues as the group moves forward into the NCP. More information will be distributed to TAC members.

Pam Phillips (PANYNJ) asked whether deconflicting TEB from EWR and LaGuardia (LGA) would fall under the Part 150 Study. Ted agreed that the metropolitan airspace information must be looked at as part of this study. He noted that a webinar may be possibly held with TRACON to discuss the existing air space for the four airports; i.e., TEB, EWR, Kennedy (JFK),

and LGA. Tim Middleton (PANYNJ) added that the TACs for all four Part 150 studies would be invited and then move on to more individual conversations in November/December. Arrivals into Runway 1 would be part of the deconflicting process.

Gary Palm (FAA) noted the Rutherford flight path is a combination of Runway 6 arrivals at TEB and also arrivals to EWR. Bob Mentzer (HMMH) commented that workshop attendees requested that arrivals on Runway 6 be fanned out; Mary Ellen Eagan (HMMH) stated she had heard similar comments.

Lindsay Butler (FAA) commented that the FAA has a list of approved/approved-in-part noise abatement measures throughout the country which she will forward to the project team for discussion at the next TAC meeting.

Next Steps

TAC Meeting #9 will be held November 17, 2016 from 1:00 pm to 4:00 pm. The TAC will continue its discussion on noise abatement alternatives. Ted Baldwin (HMMH) reminded TAC members to send any NCP strategies or recommendations to Tim Middleton or Kristen Ahlfeld.

TAC Meeting #10 will be held in January 2017 with a date and time to be confirmed.

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Technical Advisory Committee #9

14 CFR Part 150 Study – Teterboro Airport

November 17, 2016 – 1:00 PM to 4:00 PM (scheduled time)

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	✓
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	✓
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
Dan Gardon	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	✓
Mark Guid	FAA	
John Moretto	FAA	
Suki Gill	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	✓
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	

Name	TAC Member Organization/Affiliation	In Attendance
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	✓
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Alex Gersten	NBAA	✓
Peter Korns	NBAA	✓
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	✓
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
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Leslie Black	FHI
Ted Baldwin	HMMH
Mary Ellen Eagan	HMMH
Bob Mentzer	HMMH
Dominic Scarano	HMMH

Name	Study Team Organization/Affiliation
Diana Wasiuk	HMMH
Ed Knoesel	PANYNJ
Timothy Middleton	PANYNJ
Renee Spann	PANYNJ
Ralph Tamburro	PANYNJ
Adeel Yousuf	PANYNJ

Public

Name	Organization/Affiliation
None	

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the ninth meeting of the Teterboro Airport (TEB) Part 150 Noise Study TAC. TAC members were provided with a handout of the presentation. Attendees introduced themselves.

Review of Study Process

Ted Baldwin (HMMH) noted that the study is officially in the Noise Compatibility Program development phase. He noted that the comment period for the Draft Noise Exposure Map and documentation ended October 17, 2016 at 5:00 PM and that the Study Team is currently reviewing comments. Ted stated that a revised draft NEM is expected to be submitted to the PANYNJ shortly; he anticipates a final version being sent to FAA in January 2017.

NEM Status

Ted noted that 22 comments were received on the Draft NEM document; the Study Team is currently reviewing the comments and that the revised NEM will incorporate all of the comments received by the close of the comment period. Ted reviewed the topics of the

comments received (see Slides 4 and 5 of the presentation)¹, noting that most of the comments pertained to the NCP. He stated that a petition supporting the Runway 19 Quiet Visual Approach was also submitted as part of the comments. Since that procedure is separate from the TEB Part 150 Study the petition was forwarded to FAA for their consideration. Lindsay Butler (FAA) questioned whether the comments received on the Quiet Visual were in support of the procedure. Ted stated that yes, all of signers were in support of flying the procedure. Tim Middleton (PANYNJ) added that the petition included more than 200 signatures from residents of an apartment complex in Hackensack, north of the airport, all in favor of seeing FAA continue with this approach procedure.

NCP Noise Abatement Discussion

Ted reviewed the noise abatement strategies that were presented and discussed at the two previous TAC meetings (see Slide 6 of the presentation). In terms of compliance with TEB's existing voluntary restraint from operation (11 p.m. to 6 a.m.), he noted that the Study Team prepared additional analyses regarding the potential for a shift in nighttime operations to the "shoulder hours" of 10 p.m. and 7 a.m. The results of this analysis show that in order to receive any noise benefit, as defined for the purposes of Part 150, operations would need to shift from operating during the night (10 p.m. to 7 a.m.) to during the day (7 a.m. to 10 p.m.).

Other analyses requested at TAC meetings and at the public workshops are listed on Slide 7 of the presentation. Ted noted that the Study Team has prepared additional analyses and partial contours for all of the items. Ted stated that one of the requests was to consider turns to the south for departures on Runway 24. Based on discussions with TRACON, that procedure would not work because of the airspace conflicts. Fred Dressel (TANAAC) stated that planes flying to EWR travel down Route 17 and that current TEB departures are underneath that flight path; planes should be flying more easterly. Ralph Tamburro (PANYNJ) stated that if planes are turned too far east, they would be conflicting with LGA traffic. Ted suggested that the Study Team bring some examples and pictures of the flight tracks to the next TAC meeting to show where the air traffic is within the airspace. Fred

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

noted that his office is located in Lyndhurst and that planes are flying directly over that facility.

Ted turned the meeting over to Lindsay Butler of the FAA for a summary of every measure approved or disapproved by the FAA for Part 150s across the country since 2000. Lindsay added that her presentation can be used as a guideline to show thought process behind some of the measures; a more detailed description of what the measures included; as well as justification for why the measures were approved or disapproved by the FAA for the purposes of Part 150.

In terms of “partial” DNL contours, Bob Mentzer (HMMH) reviewed the categories of TEB operations that were evaluated (see Slide 8 of the presentation). He stated that the Study Team looked at each set of partial operations and modeled them to see what their contribution is to the NEM contour as a whole. Key points and discussion included the following:

- Jets only (Slide 9) – largest contributor to the DNL; defines almost the entire shape of the contour.
- Daytime only operations (Slide 10) – about 3 decibels (dB) smaller than the overall contour, but has the same general shape.
- Night operations only (Slide 11) – very similar to daytime but the contour narrows off Runway 24 (due to more arrivals to Runway 6 than departures from Runway 24 at night). Ted Baldwin (HMMH) added that the day/night operations contribute the same to the DNL and that TEB operations are very balanced.
- Departures only (Slide 12) – the width of the contour is defined by departures.
- Night departures only (Slide 14) – very similar between day and night. Ken Forester (Meridian) questioned why the contour is so different off Runway 6 compared to the daytime. Bob stated the difference can be attributed to higher runway use for departures off Runway 24 and arrivals to Runway 6 during the day.
- Arrivals Only (Slide 15) – does not contribute to width of contour, but the extension of the contour to the north and southwest; overall contribution is much smaller than departures.

Bob summarized the key points of the partial contribution analyses (Slide 18) and stated that in order to shrink the DNL 65 contour, the measures proposed in the NCP must affect jet operations and that changes in nighttime jet departures will provide the greatest noise benefit, while affecting the least number of operations.

To continue the noise abatement discussion, Ted Baldwin noted that the Study Team has prepared analyses for several measures or alternatives that were requested by TAC members or by the public at the workshops:

- Shift 10% of Runway 6 Night (10 pm – 7 am) Arrivals to Runway 1 (Slide 20) – would need good weather and there are obstructions (high radio towers). No discernable change in DNL.
- Shift 25% of Runway 6 nighttime (10 pm – 7 am) Arrivals to Runway 1 (Slide 21) – would pull the community located to the south of TEB outside the 70 DNL contour.
 - Tim Middleton (PANYNJ) questioned why the arrival contour off Runway 1 does not show a larger change under this scenario. Ted stated that there are not than many arrivals to Runway 1.
 - Ken Forester (Meridian) asked Gary Palm (FAA) whether the ATIS system ever allows an arrival to Runway 1. Gary stated that the FAA does advertise that procedure now (The ATIS advertises the ILS to Runway 6 or circle to land to Runway 1 which is optional to the pilot) but noted that circling to Runway 1 during night is completely different than during day and that circling to Runway 1 at night is only used during perfect conditions.
 - Alex Gersten (NBAA) stated that an RNAV procedure would be needed for this shift in order to have a direct approach to Runway 1 rather than circling. Ted noted that it would be possible to circle to Runway 1 but planes would need to stay within TEB airspace. Andrew Brooks (FAA) noted that a procedure direct to Runway 1 would conflict with EWR airspace. Gary Palm (FAA) concurred and stated that the separation would be very narrow.
 - Peter Korn (NBAA) questioned how the shift would work and whether every fourth aircraft would be shifted to Runway 1. Ted stated that over the course

of a 365-day year, 25% of the aircraft currently using Runway 6 would be shifted to Runway 1.

- Shift of 10% of Runway 24 nighttime (10 pm – 7 am) Departures to Runway 19 (Slide 22) – Ted noted that this is the Dalton 2 procedure that is sometimes requested by pilots; he noted that this is very promising as it shows the pilots understand the noise abatement procedure. There is almost no change to the contour with 10% shift.
- Shift 25% of Runway 24 nighttime (10 pm – 7 am) Departures to Runway 19 (Slide 23) – this results in bigger improvement, pulling the 70 DNL contour right to the property line; there is also a small reduction in noise to some of the residential properties along Route 17. Ted noted that most times when this procedure is requested, pilots are told there is an “indefinite delay”.
 - Gary Palm (FAA) noted that the delay could be two minutes up to an hour because this procedure is so intricately tied to EWR airspace. He stated that a gap would need to be built within EWR airspace in order for a plane to depart off Runway 19 at TEB. Sometimes traffic sequence is lighter into EWR and they can accommodate TEB. The sporadic use of Runway 19 is a factor because a consistent pattern cannot be established that EWR can program for.
 - John Panarello (AvPORTS, TEB Staff) questioned whether some sort of modeling could be done to give pilots a more exact delay/wait time for this procedure. He noted that even if the delay was 71 minutes, at least the pilot would know.
 - Renee Spann (PANYNJ) questioned whether this scenario was looking at the 10 pm to 7 am period and noted that EWR departures decrease after midnight. She questioned whether the Study Team could look departures on Runway 19 at later times. Ted responded that the Study Team can look at hour by hour statistics for both EWR and TEB to match them up to see where there are the fewest conflicts.

- Shift 10% of Runway 6 nighttime (10 pm – 7 am) Arrivals to Runway 1 and Shift of 10% of Runway 24 nighttime (10 pm – 7 am) Departures to Runway 19 (Slide 24) – there is not much benefit from combining these two scenarios.
- Shift 25% of Runway 6 nighttime (10 pm – 7 am) Arrivals to Runway 1 and Shift 25% of Runway 24 nighttime (10 pm – 7 am) Departures to Runway 19 (Slide 25) – under this scenario the population within 70 DNL contour is reduced to zero.
 - Gary Palm (FAA) cautioned that these shifts could not happen simultaneously since one affects south flow and the other affects north flow. Ted stated that the shifts would occur on an individual day basis over an entire year and that the effect would be cumulative.
 - Ken Forester (Meridian) questioned, if the delay for departure on Runway 19 was too long, whether pilots could get in line for departure on Runway 24 even if they have already taxied to Runway 19. Gary Palm (FAA) responded that the delay initially is almost always indefinite when pilots are asking for their initial departure heading, but then when they get to the runway, may have a better idea of time so they can make a decision.
- Shift 25% of Runway 19 Jet Arrivals to Quiet Visual (Slides 26) or shift 50% of Runway 19 Jet Arrivals to Quiet Visual (Slide 27) – Ted noted that there is a little shift in the contours; however it would be over compatible land. For the purposes of Part 150, this procedure would be disapproved by FAA because it would not be reducing incompatible land uses within the DNL 65 contour. Ted also noted that the FAA has made an independent decision not to pursue Quiet Visual approach.

Ted then presented a series of plots of TEB operations by day of week and hour of day (see Slides 28 through 32 of the presentation). He noted that the plots are pretty smooth over the course of the days and that all of the days are very similar when compared to each other. He noted that nighttime period shows a gradual decline and increase during the shoulder hours. This does not reflect an increase in use immediately before or after the Voluntary Restraint from operations period. He then questioned what more can the airport do to encourage compliance with its voluntary restraint from operations from 11 p.m. to 6 a.m. Joe Fazio (Atlantic Aviation) commented that there would be a big challenge trying to communicate a 10 pm to 7 am curfew. He stated that Atlantic Aviation is currently

encouraging people to fly before 11 pm. Ted noted that in order to make it a formal restriction, a Part 161 Study would be required, and historically these types of studies are very expensive and unsuccessful in getting approval from FAA.

Bill Huisman (Aviation Development Council) questioned the rationale for not moving forward with the Quiet Visual Approach. Ted stated that the FAA has decided not to pursue this procedure because of lack of participation. He noted that there were issues with design of approach, complexity of flying it and programming it into the FMS could not be done, which created a liability issue. Due to lack of participation, the agency will not pursue making it permanent procedure. Bill noted that it looked like it could result in a significant reduction. Ted responded that for the purposes of Part 150, there needs to be a benefit to the 65 DNL.

Tim Middleton (PANYNJ) reiterated that the Quiet Visual Approach would have no impact on the 65 DNL contour. He stated that there would be a bigger noise impact with more flights arriving on Runway 1 and that this procedure has more of an effect on the southern end of the contour. Ted added that the Study Team will compare the EWR plots to TEB plots to see when there is a lull in operations in order to find common time periods when conflicts would be low and when pilots could expect a light delay on the Dalton 2.

John Panarello (AvPORTS TEB Staff) requested that the Study Team and TAC look at making departures off Runway 19 an instrument procedure. He stated that all options need to be exhausted and that documentation needs to be provided on why it can/cannot be done. He noted technology may be needed and that some of the fleet may not be equipped to fly the procedure, but in terms of noise, the gains from this procedure could be huge.

The discussion circled back to the spreadsheet of NCP measures included in Record of Approvals since 2000 that were recently approved and/or disapproved by FAA. Lindsay Butler (FAA) continued to review 125 recent ROA's and grouped them into similar categories that will be evaluated at TEB as well as Part 161 measures. The spreadsheet provides some additional detail into the reasoning behind why the measures were approved, disapproved, as well as the thought process behind the measures. She noted that all approved measures need to show a benefit to the 65 DNL contour. Lindsay stressed the need to memorialize what has occurred at TEB to date as TEB has been an active group/airport with respect to

noise abatement; for example, an active users group (TUG), noise abatement group (TANNAC), and a voluntary nighttime restraint. Operational measures may be constrained by where TEB falls within the airspace. She noted that the spreadsheet will be distributed to TAC members but stated that it is a comprehensive list and not a recipe of NCP measures for TEB.

On Slide 34, Ted reviewed the minimum scope of NCP Alternatives noting that there are 7 major categories that need to be considered. He stated that in terms of noise abatement, the TAC should concentrate on flight tracks and runway use. Renee Spann (PANYNJ) noted that 5% to 6% of TEB's total operations occur during the curfew hours. Ted stated that the Study Team will prepare arrival vs. departure plots for the nighttime hours. Ted encouraged the TAC members to continue to think and provide recommendations for the NCP.

Renee Spann (PANYNJ) questioned what memorializing TEB's existing programs would entail. Lindsay Butler (FAA) stated that she was talking about formal documentation within the NCP so that TEB's existing programs would be documented for the purposes of Part 150. She recommended that the PANYNJ list the programs in the final NCP documentation and get credit for them and even possibly receive funding for those measures to update materials, etc. Alex Gersten (NBAA) noted that NBAA could use those materials for marketing pieces and advertise the TEB noise abatement program to other airports.

John Panarello (AvPORTS TEB Staff) thanked Fred Dressel and Ralph Tamburro for all of their hard work at TEB over the years.

Next Meeting and Wrap-Up

Tim Middleton (PANYNJ) thanked the FAA TRACON for preparation of the Airspace Webinar held on November 9th and noted that the link to view the webinar will be sent to the TAC for those who could not attend.

Bob Mentzer requested that TAC please send any other noise abatement ideas or measures to the Study Team.

Ted noted that TAC Meeting #10 will be held on January 27, 2017 from 9:00 am to 12:00 pm., and will include more discussions of noise contours, land use analyses, and actions related to the first round of land use mitigation alternatives.

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Technical Advisory Committee #10
14 CFR Part 150 Study – Teterboro Airport
January 27, 2016 – 9:00 AM to 12:00 PM (scheduled time)
Attendees:
TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	✓
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
Dan Gardon	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	
Mark Guiod	FAA	
John Moretto	FAA	
Zach DeLaune	FAA Airports District Office (ADO)	✓
Suki Gill	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	
Dave Swanson	FAA Flight Standards District Office	

Name	TAC Member Organization/Affiliation	In Attendance
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	✓
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Alex Gersten	NBAA	✓
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	✓
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI
Ted Baldwin	HMMH
Mary Ellen Eagan	HMMH
Bob Mentzer	HMMH
Eugene Reindel	HMMH

Name	Study Team Organization/Affiliation
Dominic Scarano	HMMH
Diana Wasiuk	HMMH
Scott Marsh	PANYNJ
Timothy Middleton	PANYNJ
Renee Spann	PANYNJ
Adeel Yousuf	PANYNJ

Public

Name	Organization/Affiliation
Jeff Morgan	Forest Hills Community Association - ATC
Eric Raboin	The Jones Payne Group

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the tenth meeting of the Teterboro Airport (TEB) Part 150 Noise Study TAC. TAC members were provided with a handout of the presentation. Attendees introduced themselves.

Review of Study Process/Noise Compatibility Program Development

Ted Baldwin (HMMH) noted that the study is officially in the phase of noise compatibility program development and about half way through the study process. The Study Team is addressing FAA comments on the NEM and continuing to develop noise abatement measures. Land use mitigation measures will be introduced to the TAC at this meeting.

On Slide 5¹ of the presentation, Ted reviewed major NCP strategy options. Tim Middleton (PANYNJ) reminded TAC members that, under Part 150 regulations, the Study Team will need to look at all of the measures and then describe why or why not they were pursued; every category will need to be responded to. Ted added that the majority of comments during the comment period were recommendations for NCP measures.

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

Major Proposals Raised to Date in the TEB Part 150 Process

On Slide 7 of the presentation, Ted reviewed the major NCP proposals raised to date by TAC members, the public, and FAA Air Traffic control staff.

Tim Middleton noted that a proposal for a new runway between Runways 19 and 24 was received at the workshop, and that the NCP must address why it is not environmentally and financially feasible. Ted noted that use restrictions are the last measures considered because airport sponsors first must prove they have exhausted all noise abatement, and mitigation options first.

FAA Summary of Recently Approved NCP Measures

Ted requested TAC feedback on the spreadsheet of recently approved NCP measures, which Lindsay Butler (FAA) presented at TAC #9, and that was circulated to TAC members via email (Slide 8). Ted asked that TAC members keep reviewing and thinking about the measures in the spreadsheet and send any ideas or comments to him or Tim Middleton.

Land Use/Noise Mitigation Measures

David Full (RS&H) introduced land use mitigation measures (Slides 9-17). He noted that municipalities have land use jurisdiction in New Jersey, and that the Study Team met with many of the jurisdictions in the TEB Part 150 Study Area to start discussions about land use measures that could be considered. TAC member discussion included the following:

- Real Estate Disclosures
 - Dave noted that the Study Team will coordinate with the New Jersey Association of Realtors on the possibility of an amendment to their standard disclosure form. Currently this form does not contain any information about airport noise or overflights.
 - Renee Spann (PANYNJ) asked if other states required disclosure by law. Dave responded affirmatively and added that this is not currently required in New Jersey.
- Zoning Overlays (Slide 13)
 - Dave noted that municipalities liked that overlays would not require a zoning change.

- Tim Middleton commented that since municipalities have jurisdiction over land use and zoning, the boundaries of the overlay zone do not need to be limited to the 65 DNL; they can cover a larger area if desired.
- Cooperative Land Use Agreements (Slide 15)
 - Renee commented that her office receives many requests related to obstructions.

Ted closed the discussion by noting the Study Team conducted more than 10 meetings with local jurisdictions to discuss land use measures, with very positive response. Dave Full added that more municipal meetings would be scheduled for February.

Major Categories of Noise Mitigation Measures

Gene Reindel (HMMH) presented an introduction to major categories of land use mitigation measures (Slides 18 through 23), so that TAC members can start thinking about what may be appropriate for their communities. TAC member discussion included the following:

- Sound Insulation - Gene noted that this is one of the most common strategies, and receives the most funding, but is a costly measure. It includes the installation of acoustical treatments to obtain at least a 5 dB improvement in the exterior –to-interior noise-level reduction for single and multi-family residences, educational facilities, places of worship and health care facilities. To be eligible for sound insulation, structures need to have been constructed before Oct 1998, located within the 65 DNL contour and the average noise level of habitable rooms in the home must be greater than or equal to 45 dB.
 - Alex Gersten (NBAA) questioned how interior noise levels are measured. Gene responded that a measurement is taken at the location within the 65 DNL contour to assess how the structure is performing currently. A sound source is used with a speaker placed outside on a bucket truck to emit a loud noise volume from above the home. The difference in sound from outside to inside is calculated with windows closed. The building interior needs to have a sound reading above 45 DNL in order to qualify for sound insulation.
- Positive Ventilation

- Andrew Brooks (FAA) noted that FAA will only pay for a system that is not currently there; FAA will not provide funds for maintenance or repair of existing systems.
- Gene stated that if the property is located within the 65 DNL, an evaluation would be needed to determine whether interior sound levels are greater than or equal to 45 DNL. If the levels are equal to or greater than 45 DNL then the property will qualify to receive positive ventilation and PANYNJ would need to apply for grant funding; and in the case of general aviation airports, the funding split is typically 90% federal and 10% from the local sponsor. Positive ventilation would be free of charge for the homeowner, provided everything else in the home is up to code.
- Tim Middleton noted that land use mitigation measures are limited to the 65 DNL, however noise abatement measures sometimes can have a broader effect outside of the 65, but still must show benefit within the 65 for approval.
- Fred Dressel (TANAAC) asked if a developer could ask for relief. Gene stated not if the property is outside 65 DNL. Andrew noted that anything constructed after October 1, 1998 would not be eligible for insulation or ventilation mitigation because the builder should have done due diligence to be compatible with 65 DNL building codes.
- Land acquisition (Slide 21) – Gene noted that land acquisition for noise purposes would not be eminent domain and would need to be done very carefully.
 - Ted Baldwin noted that land acquisition typically applies at 70 DNL or higher.
- Easement acquisition (Slide 22) – Gene noted aviation easements are usually included with sound insulation, but also can be a stand-alone measure, where a one-time payment is made to the homeowner. The easement is attached to the deed so future homebuyers know they are within an incompatible area.
 - Alex Gersten (NBAA) asked what percentage of the property value easements typically represent. Gene said local assessments of properties away from the airport are conducted to determine the value. Ted Baldwin added FAA permits nominal value easements, which typically are under \$2,000.

- Tim Middleton noted that since the PANYNJ is conducting four Part 150 Studies, there must be parity among them. PANYNJ does not want to be in a position where the easements are different between airports.
- Andrew Brooks commented that easements are most often used for obstruction removal and are usually less than 5% of the value of the home.
- Gene noted that easements are sometimes part of a package offered to homeowners.

Gene summarized typical implementation responsibility, cost, and timeframe for each mitigation measure (Slide 24). Gene noted that land use programs are time-consuming and costly; however, he also noted there are a small number of incompatible land uses at TEB. He pointed out that mobile home parks do not qualify for sound insulation.

Michael Fiscus (AvPORTS/TEB) asked if homeowners are eligible for remediation if lead paint and asbestos are found during sound insulation. Gene said the home assessment would include a hazardous materials inventory and the general rule is if contractors touch hazardous materials, they must remediate them.

Ken Forester (Meridian) asked who administers the programs. Gene said the PANYNJ would administer the mitigation program, most likely with a consultant. While some cities, such as Los Angeles, have given administration of the mitigation program to local jurisdictions, it is rare. He observed that implementation depends on how much money is available from FAA and airport sponsor on an annual basis. Gene added that sound insulation programs usually treat the highest noise level homes first; letters are sent to and meetings held with eligible homeowners; home assessments are conducted; the program goes through design; and a contractor is hired for the work. The process is out of the hands of homeowners.

John Panarello (AvPORTS TEB) asked questioned how homes are prioritized. Gene said that programs are administered differently around the country, but that usually it starts with the highest sound level homes closer to the airport. Andrew Brooks (FAA) added that once grants are awarded, properties in a 70 DNL or greater are ranked higher than those in the 65 DNL.

Fred Dressel (TANAAC) asked if residents can apply for additional funding if treatment fatigues over time and is no longer effective. Ted Baldwin said no, the homeowner is responsible for maintenance after the treatment.

Noise Abatement Analyses Presented at TAC 9

Ted Baldwin reviewed noise abatement analyses presented at TAC 9 (Slides 25 and 26).

- Shift night operation from southwest end of Runway 6/24 to south end of Runway 1/19.
 - Pulls residences out of the 70 DNL, but shifts noise to other areas, which is a concern.
- 50% Day Use of Quiet One by Runway 19 Jet Arrivals.
 - No benefit within 65 DNL; therefore this recommendation cannot move forward.

NCP Analyses beyond those Presented at TAC 9

Bob Mentzer (HMMH) summarized NCP analyses that were raised in public comments, and at TAC meetings and the public workshop (see Slides 27 through 36 of the presentation).

- Abate Noise from Engine Runups Through Barriers or Other Means (Slide 28) – Bob noted the analysis showed that even total abatement of runup noise only would produce a benefit on airport property and not reduce incompatible land outside the airport (within contour).
 - Alex Gersten (NBAA) asked which aircraft contributed most to runup noise. Bob responded mostly jet aircraft.
- Would Shifting 10% of Runway 1 Night Departures to Runway 6 Produce a Significant Benefit to Mobile Home Park (Slide 29) – Bob noted there would be a slight increase in the contour off the northeast end of Runway 6/24 into a residential area, with no noticeable reduction of the contour over the mobile home park, and no noticeable change in the contour over residential areas off the southwest end of Runway 6/24.
- Would Shifting 25% of Runway 1 Night Departures to Runway 6 Produce a Significant Benefit to Mobile Home Park? (Slide 30) – Bob noted a large increase in the contour off the northeast end of the runway into a residential area, with only a small benefit to the mobile home park.

- Would Shifting the Start-of-Takeoff-Roll Point at Night North to the Taxiway K for 10% of Runway 1 Jet Departures at Night Produce a Significant Benefit to the Mobile Home Park? (Slide 32) - Bob noted this measure would not produce a noticeable reduction of the contour over the mobile home park.
- Would Shifting the Start-of-Takeoff-Roll Point at Night North to the Taxiway K for 25% of Runway 1 Jet Departures at Night Produce a Significant Benefit to the Mobile Home Park? (Slide 33) - Bob pointed out a slight noise benefit to the mobile home park.
 - Tim Middleton asked why there is not a bigger difference between the 10% and 25% shifts. Bob said since we are only looking at night operations, its not enough operations to cause significant change.
 - Fred Dressel (TANAAC) stated there is an industrial park and wall at the rear of the mobile home park and asked if the wall affected noise in the mobile home park. Ted Baldwin stated that the model takes terrain into account but not structures.
- Would Shifting the Start-of-Takeoff-Roll Point to the Taxiway K intersection for all Runway 1 Jet Departures at Night Produce a Significant Benefit to the Mobile Home Park? (Slide 34) - Bob pointed out a substantial noise benefit to the mobile home park.
- Would Raising the Height of the Existing Berm at the South End of Runway 1/19 Produce a Significant Benefit? (Slide 35) - Bob noted that raising the higher section of the barrier in the west may produce a potential benefit to the mobile home park.
 - Ted Baldwin said the Team would present a more detailed analysis at the next TAC, including the potential that sound will bounce off the wall at the back of the park.

Noise Abatement Departure Procedures (NADPs)

Bob Mentzer presented Noise Abatement Departure Procedures (NADP) (Slides 37-44). He noted that the NBAA recently developed an NADP for operations at airports in high-density airspace areas, for which operations at TEB were a primary motivating factor. The high-density NADP involves a thrust cutback at 800 feet, returning to normal at 1,500 feet.

- Single Event Noise Contours (Slide 41) were shown for three aircraft models.

- Comparison of High-Density and Standard INM Procedures (Slide 42) – Bob noted that there would be 4.4 dB reduction for approximately two nautical miles; the analysis shows aircraft would be able to use the NADP and still comply with tower procedures.
- DNL Contours for Potential Implementation of High-Density NADP (Slide 43) – Bob noted that the high-density NADP would mitigate noisiest airport operations. The analysis shows some reduction off Runway 6/24 or north off Runway 19. He noted that the goal would be to try to promote the use of the high-density NADP whenever possible, as it would provide noise benefit off some of the runways to residences.
 - Ted asked Gabe Andino (AvPORTS/TEB) if he had a sense of the percentage of pilots that use this procedure. Gabe said it may be low due to low awareness.
 - Bob added that 100% compliance from the three modeled aircraft types is unlikely; however aircraft that were not modeled would use it, so the benefit would be similar.

Southerly Turn on Departure from Runway 24

Bob Mentzer discussed a southerly turn for Runway 24 departures (Slides 44 - 46), noting a five degree turn would shift the 65 DNL over more compatible land uses, but could conflict with EWR arrivals to Runway 22L. He said the EWR Part 150 is evaluating a potential offset approach to that runway, which may provide more room for the turn off Runway 24.

Alex Gersten (NBAA) commented that when he flew into New York, it was interesting to see the layers of air traffic and that the aircraft made a turn directly over TEB.

Bob also stated that, based on data obtained for EWR (Slide 47), the arrivals do not drop off at night or other times so as to reduce conflicts with TEB departures.

Ted Baldwin noted many alternatives have been analyzed to date, with very little effect on the contours; incompatibility issues would not be solved through noise abatement alone. He credited PANYNJ, TEB, and TANAAC for the great work they have done and continue to do with current noise issues at TEB.

John Panarello (AvPORTS TEB) commented that at the November TAC meeting, Lindsay Butler (FAA) stated that TEB should be taking credit for things it is already doing. He questioned whether current programs should be included in the NCP in order for them to

continue, or just because they are already being done. Tim Middleton stated that more coordination needs to be done with FAA on how the current programs should be documented. Ted noted that TEB's current warning/noise violation system is actually a use restriction, but has been grandfathered in; he was unsure of whether that needed to be included in the NCP and stated that the Study Team and PANYNJ will be having more discussions with FAA as the NCP progresses.

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Bill Huisman (ADC) questioned whether any research exists on whether barrier build-up would have benefits further out into the mobile park neighborhood. Scott Marsh (PANYNJ) added that the barrier is built as a "living wall" where growing vegetation is intended to assist with absorbing ground operations sound.

Next Meeting and Wrap-Up

Ted noted that TAC Meeting #11 will be held on Friday, March 31, 2017 from 9:00 am to 12:00 pm., and will include further presentation and discussion of noise abatement alternatives analyses, compatible land use and population analysis results for alternatives, further presentation and discussion of land use mitigation alternatives, and a briefing on results of meetings with land use control jurisdictions.

TAC Meeting #12 is tentatively scheduled to be held on May 18, 2017 from 9 a.m. to 12 p.m.

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	✓
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	✓
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
Dan Gardon	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Bruce Surak	Borough of Moonachie, NJ	✓
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	✓
Mark Guiod	FAA	
John Moretto	FAA	
Zach DeLaune	FAA Airports District Office (ADO)	
Suki Gill	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓

Name	TAC Member Organization/Affiliation	In Attendance
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	✓
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	✓
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Alex Gersten	NBAA	✓
Peter Korns	NBAA	✓
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	✓
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI

Name	Study Team Organization/Affiliation
Ted Baldwin	HMMH
Mary Ellen Eagan	HMMH
Bob Mentzer	HMMH
Eugene Reindel	HMMH
Brad Dunkin	HMMH
Dave Full	RS&H
Jane Herndon	PANYNJ
Timothy Middleton	PANYNJ
Renee Spann	PANYNJ
Adeel Yousuf	PANYNJ

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the eleventh meeting of the Teterboro Airport (TEB) Part 150 Noise Study TAC. TAC members were provided with a handout of the presentation. Attendees introduced themselves.

Review of Study Process/Noise Compatibility Program Development

Ted Baldwin (HMMH) provided an update of the Part 150 Study schedule, and noted that a draft of the final submission of the NEM is under preparation which addresses public, FAA, and PANYNJ comments.

Ted noted that an additional potential noise sensitive site has been identified, the Jersey College School of Nursing, that falls within the 65-70 DNL contour for both 2016 and 2021 (Slide 6)¹. Dave Full (RS&H) stated that the school moved into this location in March 2013 and it appears that only interior modifications were made to the building. Andrew Brooks (FAA) stated that it would be a concern to FAA if the building was an office before it became a school as it may not be a permanent establishment; he said this would be similar to storefront churches and would get into rental and/or ownership issues in terms of

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

eligibility. Lindsay Butler (FAA) added that FAA is interested in protecting its investment and needs to evaluate eligibility on a case-by-case basis in these cases.

NCP Proposals Raised To Date

Ted reviewed the Noise Compatibility Program development status (Slide 4 of the presentation) and the categories of noise abatement strategies required to be considered in a Part 150 study (Slide 5).

The major NCP proposals raised to date in the TEB Part 150 process were presented (Slide 7). Ted discussed the status of each proposal and reminded TAC members that these proposals came out of TAC meeting discussions, public comments, and discussions with TRACON and others. He also stated that mandatory restrictions or noise fees cannot be considered until all non-restrictive measures have been considered and rejected.

Additional Noise Abatement Alternatives

Bob Mentzer (HMMH) described several additional noise abatement alternatives and presented preliminary analyses conducted for each (Slides 8 through 18).

- New Alternative: Expand Application of National Business Aviation Association (NBAA) High-Density Noise Abatement Departure Procedure (NADP) to Jet Departures Not Held at or Below 3,000 Feet (Slide 9) – The Study Team originally modeled this alternative for 3 aircraft but expanded the analysis to include the 10 most active INM jet types operating at TEB, which represent 88% of all TEB departures. HMMH developed departure profiles that were then applied to all flights not held at or below 3,000 feet (unrestricted climb) off each runway end; this resulted in 52% of departures using the NADP procedure. Bob Mentzer (HMMH) stated that there would be some reduction off each runway end, with the largest off Runway 24. He reminded TAC members that the analysis was run for 100% of the eligible operations, but in reality the percentage would be much lower, therefore the reduction would be lower. He noted that in the area of north of Runway 19, there would be a reduction in the contour near the church.
 - Ted Baldwin (HMMH) added if pilots used this procedure it would be enough of a reduction that people would probably notice. He noted that this

measure would require FAA approval of user-defined profiles for modeling and that this measure poses some concern as eligibility for mitigation might be affected because on day-to-day basis, the airport could not tell if pilots were using it. Tim Middleton (PANYNJ) questioned whether there would be a way to monitor the use of this procedure. Andrew Brooks (FAA) stated that the NCP could include assumption on usage and the contour would be adjusted to reflect that use, then eligibility would be determined off the contour. He stated that monitoring would probably not occur until it was time to update the NEM and the airport could see the flight tracks related to this procedure and the contour can be adjusted.

- Gabe Andino (AvPORTS/TEB Staff) questioned whether the same percentage of unrestricted climb departures was used off each runway end. Bob stated that the use was runway specific, based on the percentage of flights not held down for departures on each runway.
- Ken Forester (Meridian) questioned what percentage of unrestricted climbs was used off Runway 24. Bob Mentzer (HMMH) stated that he needed to verify the numbers, but it was approximately 30%. Ted Baldwin (HMMH) stated that the Study Team can provide a table that includes all of the analysis assumptions.
- Andrew Brooks (FAA) questioned that since the PANYNJ is disclosing the 55 DNL contour, whether the Study Team looked at the 55 DNL for this analysis. Ted Baldwin (HMMH) stated that the 55 DNL has not been plotted for this analysis yet, but a combined analysis 55 DNL will be provided in the final NCP.
- Tim Middleton (PANYNJ) commented that for all of these preliminary analyses, the Study Team is only looking at the 65 DNL and that the PANYNJ has not instructed the Study Team to look out further at the 60 or 55 DNL for any analysis. He stated that because NCP decision making will be based on 65 DNL, the Study Team is only showing that right now.
- Ted Baldwin (HMMH) noted that changing the modeling from 16% to 52% of departures (Slide 10) produced an increased noise benefit. He also noted that

there was not a larger change in the contour between the two analyses because one of the aircraft types used in the previous analysis included a Lear 35, which was an older, noisier jet.

- New Alternative: All Night Jet Departures on Runway 24 Assigned 235° Heading (Slides 11 and 12) – Bob Mentzer (HMMH) stated night departures off Runway 24 would depart on the 235° heading initially, and then turn back at a later point to merge with existing routes. Preliminary results showed no reduction in residential land within the 70 DNL contour and moderate reduction in residential land within the 65 DNL contour. He also noted that the contours pulled to the east of Route 17. This would be a more likely case than 24 hours because it could be implemented at night because of less air traffic and less conflict with EWR operations. Bob reminded TAC members that the analysis and benefit shown on the slide is based on 100% of night operations; in reality, and in consideration with conflicts at EWR, the percentage and benefit would likely be less.
 - Ted Baldwin (HMMH) stated that the Study Team received an email from Ralph Tamburro (PANYNJ) that forwarded an FAA proposal for a nighttime heading of a 230°. Andrew Brooks (FAA) stated that the 230° turn was only to be considered in connection with a proposed arrival offset procedure at EWR. He added that if an offset procedure at EWR were to advance that would open the opportunity for 230° degree turn.
 - Fred Dressel (TANAAC) questioned how far out the flight of any aircraft would be affected. He stated that he receives strong and persistent complaints from people in Carlstadt, Lyndhurst, North Arlington, and all the way down to Nutley. He stated this procedure would benefit them if air traffic was pulled more into the Meadowlands. Bob Mentzer (HMMH) stated that the aircraft would depart, make the turn, then in a few miles connect back into the RUUDY 5 procedure. He added that the Study Team still needs to evaluate the route design with FAA.
 - Tim Middleton (PANYNJ) stated that the EWR Part 150 Study is potentially looking at an offset procedure for arrivals; EWR arrivals directly over TEB would be shifted slightly to the east of TEB, providing a possibility of opening

up airspace for 235° or 230° heading. Andrew Brooks (FAA) added that the EWR procedure can only be considered in the context of LGA operations, further complicating matters. Tim concurred with Andrew and added that many of the EWR Part 150 proposals would require a shift in LGA operations.

- Fred Dressel (TANAAC) commented that this procedure would be welcome in many of the communities south of the airport.
- Ted Baldwin (HMMH) explained that more work still needs to be done on this proposal and that the Study Team needs to understand how far out it would go and how it would relate to the RUUDY 5, and whether the assumption about the RUUDY 5 procedure is appropriate.
- Gabe Andino (AvPORTS/TEB Staff) – questioned whether the Study Team modeled the turn off the runway end or off a certain altitude. Ted Baldwin (HMMH) stated that the turn is based on where turns were being initiated off runways right now. Gabe stated that the turns generally occur 400 feet off the runway end. Ted stated that the turn is not going to be a sharp or acute turn and that it would have more radius to it. He added that this procedure can be monitored from day one to see how many aircraft are using it.
- Combination Case: All Night Jet Departures on Runway 24 Assigned 235° Heading and 88% of All Jet Departures Not held at 3,000 Feet Use NBAA High-Density NADP (Slide 13) – Preliminary analysis results show that the contour retracts and pulls more to the other side of Route 17 and reductions continue off the northern runway ends. Bob Mentzer (HMMH) noted that the analysis was conducted using the expanded list of NADP operations and not just the three aircraft types.
- Combination Case: All 24-Hour Jet Departures on Runway 24 Assigned 235° Heading and 88% of All Jet Departures Not held at 3,000 Feet Use NBAA High-Density NADP (Slide 14) – Preliminary results of this alternative are similar to the results of the nighttime alternative, except for an even more significant reduction in residential land within the 65 DNL contour than night-only case.
- Combination Case All Night Jet Departures on Runway 24 Assigned 235° Heading and All CNA750, GIV & Lear 35 Departures Not held at 3,000 Feet Use NBAA High-Density NADP (Slide 15) – Ted Baldwin (HMMH) stated that this was a way of testing

what would happen if a smaller percentage of aircraft used the procedure. He noted that the preliminary results of this analysis were similar to the results of the other combination cases.

- Combination Case All 24 Hour Jet Departures on Runway 24 Assigned 235° Heading and All CNA750, GIV & Lear 35 Departures Not held at 3,000 Feet Use NBAA High-Density NADP (Slide 16) – Analysis show similar result to the other combination cases.

Ted Baldwin (HMMH) stated that the Study Team evaluated the 4 noise sensitive receptors wholly or largely within the 65 DNL contour against all of the proposed noise abatement alternatives for the year 2021 (Slides 17 and 18). Ted stated that the check marks in the tables denote that the receptor would still be located within the 65 DNL contour in 2021. He noted that the North Jersey Vineland Church would be removed from the contour under the NBAA NADP and combination case alternatives. The same exercise will be presented for residential population counts at the next TAC meeting.

Land Use/Noise Mitigation Measures

Dave Full (RS&H) reviewed land use/noise mitigation measures and seven typical strategies (Slide 20). Since the last TAC meeting, the Study Team has met with several jurisdictions in the TEB Study Area to discuss the Part 150 Study and some of the land use and noise mitigation measures that could be implemented as part of the NCP. He stated that one thing that was made clear to the jurisdictions that the land use measures would be under their control and that they would be making the decisions, not the FAA and the PANYNJ.

- Real estate disclosures (Slide 21) – the Study Team met with representatives of the New Jersey Association of Realtors who indicated that language in the standard Real Estate Disclosure form was approved by the New Jersey State Legislature; therefore a change to the form or language may require approval by the Legislature. Dave noted that for that reason, this measure may be a little more difficult to implement.
 - Renee Spann (PANYNJ) asked if the New Jersey Association of Realtors was amenable to the discussion or to the change. David Full (RS&H) responded that they were neutral on the subject.

- Land use rezoning (Slide 22) – Dave noted that the Study Team did talk to the jurisdictions about this, however, given the land uses around the airport and how densely developed it is, there are not a lot of opportunities for rezoning for compatible land uses.
- Zoning overlays (Slide 23) – Dave noted that almost every jurisdiction was interested and questioned how they would go about setting up an overlay zone. Dave stated that based on the positive response to this measure, most jurisdictions feel as though this is something they could implement. Some of the jurisdictions were also wondering if other jurisdictions were going to be participating and implementing overlay zones.
 - Ted Baldwin (HMMH) noted that the Study Team can provide examples to the cities and towns that are interested of overlay zones, as well as identifying areas for the zones.
 - Fred Dressel (TANAAC) questioned whether the Study Team met with the counties or just cities and towns. Dave Full (RS&H) replied that the counties have been involved in the land use discussions.
- Building codes (Slide 24) – Dave stated that this measure would require the local jurisdictions to change their building codes to something more stringent than the State Unified Code. He noted that this measure did not generate a lot of interest with the local jurisdictions.
- Cooperative land use agreements, Community Planners Forum, and Distribution of Noise Mitigation Information (Slides 25 through 27) – under cooperative land use agreements, the jurisdiction would provide PANYNJ with plans for any new development or rezoning occurring in their jurisdiction so that the PANYNJ could be aware and possibly provide input. Dave stated that these agreements would work in tandem with Community Planner Forums, where the communities would be able to meet and discuss with each other and the PANYNJ how overlay zoning and other noise mitigation measures may be getting implemented or any issues with implementation. Similarly, the PANYNJ could regularly distribute information with respect to mitigation measures that are occurring and how they are being implemented. Dave stated that it would provide the communities with an avenue for

learning about noise mitigation around the airport but also what is happening at the airport (e.g., a new hangar or any new development).

The list of jurisdictions that the Study Team has met with was presented on Slide 28. Dave Full (RS&H) noted that South Hackensack needs to be added to the list and that the Study Team is setting up a meeting with Carlstadt, which would be last meeting that would need to be conducted for TEB. He stated that overall, the meetings went very well and consisted of good discussions on potential noise mitigation measures. Overlay zones received the most positive responses and interest, while all of the jurisdictions also seemed very amenable to community planner forums/cooperative agreement to increase communication with the PANYNJ. Lindsay Butler (FAA) commented that in other states communities need to prepare comprehensive and/or master plan updates; therefore FAA is encouraging communities to include Part 150 in their 10 year master planning cycle.

Ted Baldwin (HMMH) turned back to Slide 11 and noted when the HMMH team met with the Borough of Teterboro in their building at the north end of the TEB airport, staff commented on the fumes and noise from airplanes queuing for take-off; after further investigation, Ted determined that the noise and fumes were coming from the maintenance run-up and questioned whether it would be possible to build a run-up enclosure elsewhere at TEB. Ted stated that municipal representatives questioned whether the building would be eligible for sound insulation; Ted replied negatively and said that municipal buildings are only eligible for mitigation if they are located within the 70 DNL contour.

Tim Middleton (PANYNJ) noted that there have been past discussions about moving run ups; however there are not a lot of opportunities to build new pavement because TEB is constrained by wetlands and other environmental conditions. There are not a lot of areas where a run-up enclosure makes sense due to the way that aircraft taxi around the airport. He stated that the PANYNJ and the Study Team would need to take a closer look at the airport layout, but that moving run-ups from the alpha pad is not realistic right now. Andrew Brooks (FAA) questioned whether the alpha pad would allow for the construction of a run-up enclosure. Renee Spann (PANYNJ) stated that there is probably not enough space. Ted Baldwin (HMMH) added that the enclosures typically require a big footprint. He also noted that, based on a past hypothetical analysis presented at the TAC, there was no benefit

in terms of DNL, therefore it would not meet the requirements of Part 150. Based on his experience at other airports, Ted noted that moving the enclosure to a more centrally-located area within the airfield would require aircraft to cross an active runway, which introduces safety issues. The Borough of Teterboro asked the Study Team for information on sound insulation. Ted noted they would have to do on their own as they would not be eligible through Part 150 since the building falls outside of the DNL threshold for eligibility.

Ted Baldwin (HMMH) stated that the Study Team has prepared very preliminary analysis of the benefit of the existing noise barrier that is on the approach end of Runway 1. The Study Team is also looking at the benefit of doubling height of the barrier as well as the effects of noise reflecting off the industrial structure located at the rear of the mobile home park. Ted also noted that there is one house in the contour in Little Ferry; there are massive industrial buildings located behind the house, so the Study Team will be modelling the benefits/effects of those existing buildings on the house. Results of the noise barrier analysis will be presented at the next TAC meeting. Ted noted that the Study Team is also looking at Part 77 surfaces, and whether raising the height of the barrier would be considered an obstruction to aircraft.

John Panarello (AvPORTS/TEB) suggested that the Study Team provide a narrative document of the procedure that would include the 235° heading on Runway 24 (see Slide 8 of the presentation) so that people understand what the procedure is maybe a pinpoint location of where it is. Ted Baldwin (HMMH) stated that information can be provided at the next TAC meeting. John Panarello (AvPORTS/TEB) also asked about the NBAA NADP procedure and Bob Mentzer (HMMH) started that the procedure was reviewed at the last TAC meeting but can be provided again for reference. Tim Middleton (PANYNJ) confirmed any final documentation related to the NCP will include a narrative. Alex Gersten (NBAA) commented that a brochure describing the procedure is available for download on the NBAA web site at NBAA.org/noise. Ted asked if the procedure includes contours and comparisons that the Study Team prepared as part of a previous effort. Alex responded negatively and said just the brochure on procedure is available at this time.

TAC Member Discussion

Ted Baldwin (HMMH) encouraged TAC members to keep reviewing materials and send any new ideas to him or Tim.

Tim Middleton (PANYNJ) introduced Jane Herndon (PANYNJ), the new manager of Aviation and Environmental Programs at the PANYNJ.

Andrew Brooks (FAA) stated that the National Transportation Map was released by the Bureau of Transportation Statistics (BTS). He said the map presents noise exposure from highway and aviation noise at the national level. Andrew pointed out that the evaluation does not use DNL, rather it uses Leq, and does not account for the night-time dB penalty. This is a conceptual effort to show trends in population growth and noise exposure over time and that it should be used more as a tracking tool. There is no correlation between DNL and Leq.

Next Meeting and Wrap-Up

Ted Baldwin (HMMH) noted that due to some project uncertainties as well as the conflicts with LGA and EWR, the TAC meeting schedule has been modified to an every three month schedule going forward. Therefore TAC Meeting #12 is tentatively scheduled for late June, probably sometime during the last week of the month. Tim Middleton (PANYNJ) added that the schedule change was made to accommodate the 4 on-going Part 150 Studies, to make sure that the Study Teams have ample time to make deadlines, and that the FAA review schedule can be accommodated.

- TAC Meeting #12 is scheduled to be held on Thursday, June 29, 2017 from 2:00 pm to 5:00 pm.

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	✓
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
Dan Gardon	AvPORTS TEB Staff	✓
John Kastens	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Paula Cozzarelli	Borough of Little Ferry, NJ	✓
Bruce Surak	Borough of Moonachie, NJ	
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	
Mark Guiod	FAA	
John Moretto	FAA	
Zack DeLaune	FAA Airports District Office (ADO)	✓

Name	TAC Member Organization/Affiliation	In Attendance
Suki Gill	FAA Airports District Office (ADO)	
David Sanchez	FAA Airports District Office (ADO)	
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Alex Gertsen	NBAA	✓
Peter Korns	NBAA	
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI
Ted Baldwin	HMMH
Jessica Cohen	HMMH
Mary Ellen Eagan	HMMH
Robert Mentzer	HMMH
Xiaobo Liu	Port Authority
Scott Marsh	Port Authority
Timothy Middleton	Port Authority
Renee Spann	Port Authority
Katie Winfree	Port Authority
Adeel Yousuf	Port Authority
David Full	RS & H

Public:

Name	Organization/Affiliation
Kathleen Canestrino	Deputy Mayor, City of Hackensack, NJ

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the twelfth meeting of the Teterboro Airport (TEB) Part 150 Noise Study TAC. The HMMH study team provided TAC members with a handout of the presentation. Attendees introduced themselves.

Review of TEB Study Process/Noise Compatibility Program Development Process

Bob Mentzer (HMMH) provided an update of the Part 150 Study schedule. He noted that the Federal Aviation Administration (FAA) accepted the Final TEB Noise Exposure Map (NEM) on June 15, 2017 and FAA published the acceptance notice in the Federal Register on June 22, 2017. The final document is available on the Port Authority's website at http://panynjpart150.com/TEB_FNEM.asp and notices are in the process of being published in

local newspapers over the next several weeks, sometime in July, according to Tim Middleton (Port Authority). He noted that the Port Authority plans to run three (3) cycles of the announcements, per the FAA requirements, to ensure public awareness of the acceptance of the NEM; specifically, to notify the public where to find the final document in print and online.

On Slides 5 and 6 of the presentation¹, Bob reviewed the Noise Compatibility Program (NCP) development process and noted that the TAC and Study Team are continuing to discuss noise abatement strategies and land use strategies; he also stated that noise barriers will be discussed at today's meeting. The Port Authority and HMMH Study Team plan to introduce programmatic strategies and discuss possible use restrictions at TAC meeting #13 in the fall.

Discussion of Final Land Use Review

Bob Mentzer (HMMH) noted that the Study Team undertook a final land use review in March 2017 to verify land uses for the Final NEM (see Slides 7 through 11 of the presentation). This review identified changes to some parcels, which led to minor changes in population and housing counts. Both the number of dwelling units and population counts increased slightly for 2016 and 2021; Slide 10 of the presentation notes these increases. Bob stated that the land use changes did not lead to changes to the noise contour lines and noted that all changes are now part of the Final NEM Report available on the Port Authority website.

Kathleen Canestrino (City of Hackensack) questioned how the Study Team did the projections for 2021. Ted Baldwin (HMMH) stated that the Study Team prepared a forecast-based contours which involved a very extensive forecasting process looking into aircraft fleet mix, airport operations, and socioeconomic conditions. The airport operations forecast went through FAA review and was approved before the NEM modeling began. Tim Middleton (Port Authority) added that the reason that the population counts are different between

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

2016 and 2021 is that the contours are slightly larger in 2021. The increase in population between the 2016 and 2021 NEMs does not indicate population growth.

The final land use review also resulted in changes to the noise-sensitive sites located within the contours. As previously discussed at TAC meeting #11, the review determined that the Jersey College of Nursing is within the 65 DNL contour as displayed on maps and in tables. Additionally, the North Vineyard Church identified within the 2016 and 2021 contours has changed its name to Catalyst Agape Church; this change was also made within the Final NEM Report.

Major NCP Proposals Raised to Date in the TEB Part 150

Bob reviewed the list of the major NCP proposals discussed to date, presented on Slide 12 of the presentation, and stated that there would be a detailed discussion of the relocation of the maintenance runups and the noise barrier analysis this meeting. Tim Middleton (Port Authority) again reminded TAC members to send any additional ideas for NCP noise abatement strategies to himself or Bob as soon as possible.

Jessica Cohen (HMMH) discussed additional noise abatement alternatives for TEB noise including:

- Existing and Revised Runway 24 Departure Tracks (Slides 15 and 16) – based on discussions with the FAA and TRACON, two revised headings, a 235° heading and a 230° heading, have been modeled assuming 90% usage for nighttime jet departures. For the 235° heading, there would be no reduction in residential land uses within the 70 DNL contour and only a slight reduction in residential land in the 65 DNL contour. Jessica noted that for the 230° heading, there would be a moderate reduction in residential land use within the 65 DNL contour. TAC member discussion included the following:
 - Tim Middleton (Port Authority) commented that the 230° heading moves the contour completely south of Route 17. He added that based on the 2021 conditions, the 65 DNL would go beyond Route 17 to the south, however with the 230° heading, the 65 DNL contour would remain to north of Route 17.

- Ted Baldwin (HMMH) stated that for the people living in Wood-Ridge and Carlstadt, the noise does not end at the 65 contour. FAA requires the 65 DNL as the basis for justifying the measures. However, he pointed out that there would be other benefits to this alternative in that the planes would be noticeably farther south. Jessica Cohen (HMMH) added that the flight track, as shown on Slide 16 of the presentation, would be more over industrial/manufacturing area rather than residential.
- Bob Mentzer (HMMH) stated that the flight procedure (with regard to altitude) would remain the same as it is currently being flown today.
- Gabe Andino (AvPORTS/TEB) questioned whether this heading would only be feasible at night. Tim Middleton (Port Authority) stated that based on the discussions with TRACON, this heading would be a nighttime option; part of this procedure's availability is dependent on the possibility of a procedure change at EWR. Tim noted, that in terms of feasibility, there is some confidence that TRACON would be able to fit both procedures in; however daytime operations are too busy to make this heading change during the day. Ted Baldwin (HMMH) added that the Study Team had hoped that the 235° heading could be used during the day and the 230° used at night, but it would not be feasible due to a conflict with operations at EWR.
- Location of All Maintenance Runups in the Center of the Airfield along Taxiway Q (Slide 17) – this alternative would consolidate all maintenance runups into a centralized location. The 60° and 240° headings were used to keep aircraft in line with the runway ends. Jessica noted that the reduction of the 70 DNL contour south of Route 46 would occur on airport property; there would be no reduction in residential land use within the 65 DNL contour north of Route 46; there would be a slight noise benefit to the mobile home park.
 - Tim Middleton (Port Authority) noted that the centralized location of the runup came out of conversations with Teterboro Airport Manager (Renee Spann) and the Port Authority planning staff. He stated that there have been ideas for a long time about a potentially feasible runup location off of

Taxiway Quebec as less remediation would be needed for wetlands and drainage than in other locations at the airport.

- Gabe Andino (AvPORTS/TEB) requested confirmation on whether the runup would be on the actual taxiway. Tim Middleton (Port Authority) stated that there would be a ramp area off the existing taxiway to the east of Taxiway Quebec.
- Tim Middleton (Port Authority) commented that the slight noise benefit in the mobile home park would be the result of pulling all of the modeled runups into one location.
- Alex Gertsen (NBAA) questioned whether there is a safety concern for aircraft taxiing on Taxiway Gulf, especially for lighter aircraft. Bob Mentzer said potentially there could be some safety issues but the study team has yet to look at that. Tim Middleton (Port Authority) added that the aircraft at the runup would be parallel to aircraft taxiing and that if this proceeds as a measure, an evaluation will occur regarding the distances between the runup and the taxiway, which would address safety concerns during the design period. Bob Mentzer (HMMH) added that it is a large pad and the model ran assuming runups occurred in the middle; he could not recall the distance between the runup and the taxiway but a gap distance was included in the model.
- Renee Spann (Port Authority) questioned whether this alternative would still be eligible under Part 150. Tim Middleton (Port Authority) and Bob Mentzer (HMMH) concurred and stated that because of the small benefit to the mobile home park, it should be eligible as a proposed measure in the NCP.
- Andrew Brooks (FAA) questioned, given the small nature of the potential benefit to the mobile home park, how the Study Team is proposing to demonstrate the benefit. He questioned whether the Study Team would perform a grid point analysis for certain facilities. Tim Middleton (Port Authority) stated that the Study Team and Port Authority are starting that conversation now. Ted Baldwin (HMMH) stated that the grid point analysis was a good suggestion. He added that HMMH has done a grid point analysis

for supplemental analysis in a case like this one; specifically, for a runup enclosure at Tampa International Airport. Bob Mentzer (HMMH) noted that the grid point analysis can be done for the 2 schools off Route 46 and the mobile home park. Andrew (FAA) concurred that grid point analyses are a good way to demonstrate a reduction in noise exposure.

Ground Noise Overview/Noise Barrier Analysis Results

Ted Baldwin (HMMH) stated that the Study Team performed an in-depth preliminary screening analysis (see Slide 18 of the presentation) and determined that there would not be a significant benefit to installing noise barriers in the two locations evaluated (see Slide 19 of the presentation). Ted also noted that there is a high cost associated with the design and construction of noise barriers and, as modeled, the benefits do not justify the costs. He stated that the performance of this analysis was at the recommendation of TAC members.

The existing noise barrier is located at the south end of the airport across from the mobile home park. The Study Team also evaluated the effects of airport noise on one residence in Little Ferry that is located within the 65 DNL contour. Ted stated that it is important to note that mobile homes are not structurally suited for noise mitigation options available for noise compatibility. Specifically, sound insulation cannot make them compatible due to their lightweight construction; as such, the FAA will not fund or approve sound insulation for mobile homes. Ted noted that realistically the only option for mobile homes is typically acquisition and relocation.

Slide 19 of the presentation shows the analysis locations. Ted noted that the distinct shape of the contour at the runway ends (where it bulges out) is characteristic of locations where start of takeoff roll noise is dominant. The noise usually comes off the airplane at a 45-degree angle and the mobile home park is located within that area.

The Runway 01 Noise Barrier (Slide 20) consisted of an analysis of the existing noise barrier at the south end of the airport; the mobile home park is located across Moonachie Avenue. Ted noted that in order for a barrier to be effective it has to block the line of sight from the noise source to the receiver; the existing barrier does not do this and is therefore ineffective at blocking noise to the mobile home park.

Ted noted that the height of the existing barrier changes midway down the barrier; the Study Team believes height changes are due to obstruction clearance surfaces for Part 77 – Imaginary Surfaces; however, records are unavailable for the height variation. Tim Middleton (Port Authority) noted that the alteration of the barrier height over the years is due to several different projects. He stated that in terms of Part 77, the barrier remains compliant.

Ted stated that for the mobile home park analysis, the Study Team digitized the location of every mobile home as well as the large, industrial structure at the rear of the mobile home park to determine the effects of noise reflecting off that structure. On Slide 22 of the presentation, Ted demonstrated the engine height above runway end elevation compared with the existing barrier height. He noted that the barrier height varies from 5 feet to 11 feet but that the barrier actually starts below the runway elevation. None of the barriers break the line of sight. Overall, if this alternative were to move forward, the FAA would require a much more detailed analysis.

The results of the analysis indicate that the existing noise barrier reduces noise levels by less than one (1) decibel (dB) in the mobile home park. The only area where noise reduction is greater than one (1) dB in on the sidewalk along Moonachie Avenue in front of the mobile home park (see Slide 24 of the presentation). Several modeling scenarios were also tested:

- Modeling Scenario: Double the height of the existing barrier (Slides 25 and 26) - at the lower end near the mobile home park there would be no benefit, while on the higher end (22 feet), the benefit would be a 4 to 5 dB noise reduction at 23 of the 155 mobile homes. Ted stated that given the obstruction, environmental, and engineering issues this would not be a feasible scenario.
- Modeling Scenario: Part 77 Shaped Barrier (Slides 27 and 28) – would include a barrier shaped to match the Part 77 surface. The results of the analysis showed that the area of benefit was in an area that was already compatible, not containing any mobile homes.
- Modeling Scenario: Part 77 Hybrid Barrier (Slides 29 and 30) – would include a barrier shaped to match Part 77 surfaces and the existing barrier. The results of the analysis showed that the area of benefit was in an area that was already compatible, not containing any mobile homes.

Ted concluded the discussion of the Runway 01 Noise Barrier analysis by stating that a noise barrier is not recommended as a Part 150 alternative and presented general conclusions of the noise barrier analysis (as listed on Slide 31). He noted that barrier costs would be very high and that Part 77 surfaces significantly limit opportunities for building a higher barrier.

The Study Team also conducted an analysis of ground noise to one house within the 65 DNL in Little Ferry (see Slides 32 through 37 of the presentation); the analysis considered the effect of building shielding and reflection on Runway 24 start of takeoff roll noise. Based on the modeling, Ted stated that the commercial buildings provide a significant amount of shielding from Runway 24 noise. However, at the location of the house, sound is bleeding around the edge of the building. Ted did note that the results of the analysis are not refined enough; he stated that the Study Team's recommendation would be to proceed with the standard FAA protocol for sound insulation if the Port Authority were to move forward with a sound insulation program as a land use mitigation measure. Tim Middleton (Port Authority) added that Mayor Fred Dressel first discussed the buildings and questioned whether sound was reflecting off them causing an impact. Further, He added, that the major reason for the pursuit of noise barrier analysis at TEB was that these two locations are the closest residential areas to the 65 DNL and the airport boundary.

Incompatible Land Use and Population Analysis Results for Alternatives

On Slides 38 through 45 of the presentation, Bob Mentzer (HMMH) reviewed all of the NCP measures proposed for evaluation to date from the perspective of net reductions and/or net increases in dwelling units and population counts, as well as sensitive receptors within the DNL. He noted that the Study Team compared population counts and dwelling units to the 2021 NEM as baseline. Further, he noted that any noise abatement procedures will undergo study for safety and efficiency and approval by the FAA before the implementation of any proposed procedure.

- Noise Abatement Flight Tracks; Departures and Arrival Procedures (Slide 39) – all flight tracks show a net reduction in dwelling units and population, with the highest reductions coming from the 90% nighttime Runway Jet Departures to a 230° heading, which would result in a net reduction of 15 dwelling units and 37 people.

Neither of the arrival procedures evaluated would result in a reduction of dwelling units or population.

- Runway Use Changes (Slide 40) – all runway use changes would result in a net reduction of dwelling units and population from the 2021 baseline except for the shift of 25% of Runway 24 Nighttime Departures to Runway 19, which would result in a net increase of 3 dwelling units and 6 people. The runway use change that would result in the highest net reductions would be the Shift of 25% of Runway 6 Nighttime Arrivals to Runway 1 (net reduction of 8 dwelling units and 20 people. TAC) member discussion included the following:
 - Alex Gertsen (NBAA) questioned, since most of the reductions in population and dwelling units are relatively small (single digits), how does the data compare to other airports studies and whether the numbers are typically higher. Ted Baldwin (HMMH) stated that for General Aviation airports this is typically the scale. He noted that for Air Carrier airports like EWR the numbers are often much larger. Renee Spann (Port Authority) questioned whether FAA looks at the actual numbers or a percentage of total impact. Andrew Brooks (FAA) stated that in order for the FAA to consider a measure it would have to show benefit in 65 DNL contour (indicated by green in the tables on Slides 39 and 40). Ted Baldwin noted that oftentimes airports recommend measures even though they do not show benefit within the 65 DNL. However, per FAA's Part 150 regulations, the measure is then "Not approved for the purposes of Part 150," but sometimes tower managers recognize the benefit outside the 65 DNL and implement the recommend measures outside of the Part 150.
 - Kathleen Canestrino (City of Hackensack) questioned why there is no data for the Quiet Visual arrival procedure. Bob Mentzer (HMMH) stated that there are dashed lines in the table because there is no change in dwelling units and population counts from baseline values. Tim Middleton (Port Authority) added that there are no residential dwelling units in the 2016 baseline contour or the 2021 contour for the Runway 19 approach. He also stated that the Study Team presented the Quiet Visual procedure at TAC meeting #9 and noted that the Quiet Visual does shift the 65 DNL contour to the west slightly,

within the compatible land uses. Tim stated that the quiet visual modeled tracks are based on the flights that were flown in 2016. Kathleen questioned that even though when the procedure was flown there was a reduction in noise over the most densely populated street in Bergen County, since the track is flying over Route 17 where no one lives. Tim clarified that in terms of the 65 DNL, which is what the Part 150 is looking at, there was no change. Renee Spann (Port Authority) added that the street Kathleen was referring to is not located within the 65 DNL contour. Kathleen clarified and stated that the noise monitors recorded levels of 61 dB on that street and questioned why since it is not at 65 dB, it is not taken into account. Tim explained that the 65 DNL is a different metric than the 61 dB that what is in the noise monitoring/noise abatement report statistics. Kathleen asked whether any data was collected for the Quiet Visual that shows any change in the 61 dB number. Bob stated that for the Part 150, no other data was collected on the Quiet Visual approach; he stated that it was evaluated in terms of the 65 DNL and that the Quiet Visual was a separate FAA effort. Andrew Brooks (FAA) stated that operation of that study and process was discontinued due to the complexity of the route. He added that because Jeppesen pulled the support for the procedure, if pilots wanted to use it they would have had to manually enter all five fixes to fly it, which led some to consider the safety of the procedure. Kathleen questioned why the procedure was pulled and stated that there has to be an explanation of why it was not flown. Andrew stated that with the amount of time that the FAA has put into the Quiet Visual they would have been happy to see something more positive come out of the process. Tim Middleton (Port Authority) stated that, from the Port Authority perspective relative to the Part 150 Study, we are limited in what can evaluate within the 65 DNL contour. He stated that the Study has looked at what the Quiet Visual can do in terms of the 65 DNL, and in terms of the Part 150 process, the Quiet Visual does not show a benefit. Tim added that it is not to say that the Quiet Visual does not have a benefit in other communities, but in

terms of proposing it as part of the Part 150 it is not something that can be pursued as the procedure does not show a benefit in the 65 DNL.

- Kathleen then questioned whether the number went from 61 to 65 it would be studied. Renee Spann (Port Authority) stated that Kathleen was referring to the numbers in the noise monitoring report, which is not the same DNL number that we are using for this study. Tim Middleton (Port Authority) explained that the DNL is a modeled number based off a forecasted operations for 2016 and 2021. Kathleen commented that the DNL is not actual noise level. Andrew Brooks (FAA) stated that DNL is the most accurate reflection of the actual noise level for the entire airport; it is based off of a full year of operations data, modified to account for changes in fleet mix, operational increases, and new procedures.
- Kathleen questioned whether the model takes into consideration the height of the buildings and the height of sea level. She stated that Hackensack has 20 plus story buildings. Tim and Andrew responded negatively and stated that the model does not factor in building height. Kathleen stated that not factoring in building height is a huge issue in Hackensack and that certain areas are 100 feet above sea level and the buildings are over 20 stories high. Gabe Andino (AvPORTS/TEB) stated that the model does take topography into consideration, but not building height. Kathleen indicated that the noise levels in the upper stories of the buildings has to be higher than on the street and that needs to be factored into the analysis. Gabe stated that the 61 dB from the Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC) noise monitoring reports looks at data in 3 month increments, whereas the DNL in the NEM report is an average of noise data over an entire year. The DNL levels at Site 3 (in Hackensack) were modeled to be 61 DNL, and they were measured to be 61 DNL for the calendar year of 2014. Tim Middleton (Port Authority) reiterated that the Quiet Visual has been evaluated, however by regulation, measures outside the 65 DNL cannot be pursued as part of Part 150. He added that in terms of operating the airport, the Port Authority supports flight procedures that make the airport a good neighbor, but it is

not something that can be looked at right now in Part 150; Tim stated that the evaluation of the Quiet Visual approach was documented in the TAC meeting #9 summary.

- Andrew Brooks (FAA) added that building heights are factored into safety procedures and buildings are identified according to obstruction procedures so they can be seen by night flights. He stated that he understands Kathleen's concerns with regard to noise and the height of buildings, but reiterated that building heights are not factored into the models used for the analysis. Tim Middleton (Port Authority) noted that the Study Team has conducted meetings with the local jurisdictions about potential land use measures outside of the 65 DNL, which is up to their discretion to prevent further incompatibilities.
- Airport Layout (Slide 41) – all layout changes would result in a net reduction of dwelling units and population counts. Bob noted that shifting 100 percent of Runway 1 night departures to start at Taxiway K intersection would produce the largest reduction. Originally, the Study Team considered this during the day, however potential conflicts with the Jet Aviation ramp resulted in this scenario being most feasible at night. One hundred percent use at night is not realistic either and the Study Team is developing a reasonable usage rate. Tim Middleton (Port Authority) noted that the Study Team is having a meeting with the Teterboro Users Group (TUG) in July to discuss these options. Bob also noted that the centralized location of the maintenance run-ups would produce a net reduction of 5 dwelling units and 13 people.
 - Andrew Brooks (FAA) questioned how many of the reductions were benefitting the same houses. Bob responded that in terms of the reductions from the layout changes, the majority were the same houses. Andrew commented that the numbers are misleading that he does not want there to be a perception that if all of these measures were done, that all of the homes and population would fall out of the contour completely. Bob clarified that the tables show each individual procedure by itself. Tim Middleton (Port Authority) clarified that the 10% of Runway 1 Departures starting at Taxiway K

intersection and the centralization of maintenance run-ups both yield reductions of 5 dwelling units and 13 people, and that in reality those are probably the same houses and the same people that get pulled out of the contour in both scenarios. Ted Baldwin (HMMH) added that if we combined the two measures, the benefit to the mobile home park could potentially be compounded. He stated that the next meeting will focus on more combinations and that TUG input at this stage is important so that the most reasonable combinations of measures can be modeled.

- o Alex Gertsen (NBAA) suggested a scenario for TUG to consider logistically for avoiding concern regarding congestion of aircraft coming out of Jet Aviation if the intersection at Taxiway K noise abatement procedure were to be implemented. In essence, aircraft could taxi onto the runway at the full-length point, the way it is currently done using Taxiway L. They would then proceed on Runway 1 to the Taxiway K intersection on taxi power and then apply take-off power at Taxiway K. Bob Mentzer (HMMH) noted that it is a good suggestion, but that the Study Team would need to talk to the Tower and TUG further about the feasibility of doing something like this.
- NBAA High-Density NADP (Slides 41 and 42) – these are voluntary procedures currently in use at TEB; pilots are suggested to fly them if at all possible. They were analyzed separately and in combination with the noise abatement turns. In most cases, there would be a larger benefit when the NADP's are used off all runway ends, which would produce a benefit in Moonachie and the mobile home park to the south. Bob noted that these scenarios are counting all the aircraft not held down for air traffic reasons; the Study Team is looking to refine the percentage of traffic that could use those procedures so the numbers in the tables will likely change if this option is pursued.
- Noise-Sensitive Receptors within the 65 DNL (Slides 43 through 45) – Bob noted that there are four noise-sensitive sites within the 2021 contour. All four sites would remain within the 65 DNL contour under all of the flight track, arrival procedure, runway use, and airport layout scenarios; Bergen County Technical School and the

Jersey College School of Nursing would remain within the 65 DNL contour under the NBAA High-Density NADP and combination scenarios. As shown on Slide 45, the Learning Tree Academy Daycare and the Catalyst Agape Church would be removed from the contours under several of the NADP and combination scenarios. TAC discussion included the following:

- o Tim Middleton (Port Authority) questioned whether the sensitive receptors are non-compatible land uses that are not residential. Bob responded affirmatively and clarified that these include the schools and churches.

Land Use Measures/Noise Mitigation Measures

Bob Mentzer (HMMH) began the discussion of the land use mitigation measures by stating that they are intended to prevent introduction of new, incompatible land uses (see Slide 46 of the presentation).

Dave Full (RS&H) discussed the seven (7) strategies that are typical preventative land use measures and the feedback received from the municipalities around TEB:

- Real Estate Disclosures (Slides 48 and 49) – Dave noted that the standard disclosure form used by the New Jersey Association of Realtors does not include airport noise. The Study Team has had discussions with the New Jersey Association of Realtors and the New Jersey Legislature passed the current language on the form; therefore, any changes to the form would also need approval by the legislature. Dave stated that most municipalities were skeptical about getting this change made through the legislature and skeptical about whether they would like to enact their own disclosure form. He stated that the Study Team has evaluated this measure and does not believe that it would be a realistic recommendation at this time. TAC member discussion included the following:
 - o Tim Middleton (Port Authority) commented that at other airports around the country that do have these disclosures, it seems that those local municipalities were more amenable to the changes and took it on themselves. It seems that getting this form changed would be difficult to do in the State of New Jersey.

- Renee Spann (Port Authority) questioned whether it was known if there is a difference in real estate disclosures between New York and New Jersey. Tim responded affirmatively, stating there is a difference. Andrew Brooks (FAA) added that New York has a policy that a seller can give the buyer \$500 at closing, thus waiving the need to disclose. He stated that noise disclosure would affect that process in New York.
 - Renee Spann (Port Authority) questioned that currently the State of New York does not require disclosure of noise. Tim Middleton (Port Authority) responded affirmatively, and added that the current disclosure in NY does not contain noise, but for other disclosure categories the seller can opt out from disclosing if buyer accepts \$500.
- Land Use Rezoning (Slides 50 and 51) – Dave stated that this would be enacted by the local jurisdiction and also reminded TAC members that all land use planning in New Jersey is done at the local level. He added that neither the FAA nor the Port Authority have local land use controls and that all planning in New Jersey is done by the local jurisdictions and the NJSEA. Dave stated that the intent of this strategy is to prevent incompatible land uses from being developed and promote compatible land uses near TEB. However, these strategies only work if there is vacant land available. Dave noted that there is very little vacant and undeveloped land around TEB and that the land use within the study area is very well established. He added that most of the vacant and undeveloped land is under the jurisdiction of the NJSEA; therefore, there is little opportunity for rezoning and it was not discussed positively during the meetings with the local jurisdictions.
- Overlay Zoning (Slides 52 and 53) – Dave stated that overlay zones work in tandem with the underlying land use zone; the zoning of a particular parcel would remain, but the overlay would add an extra level of regulation. The intent of this measure is to prevent incompatible land uses from being developed within or near the noise exposure contours provided in the NEM; the overlay zone provides extra details and restrictions on what is allowable within the overlay zone itself. Dave noted that the communities and the NJSEA were very interested in learning more, especially with regard to how large the overlay zone could be, especially since the

overlay zone does not have to be tied to the 65 DNL contour, thereby providing additional benefit to a community. Dave provided an example of the Akron-Canton Airport overlay zone; he noted that this overlay zone covered multiple cities and counties. He noted that the Study Team will be developing a map showing what an overlay zone could look like around TEB and sharing that with the TAC and Land Use Planning agencies.

- Building Codes (Slide 55) – Municipalities were not generally supportive in changes to State of New Jersey Building Codes, however they would be interested in including building code requirements as part of an overlay zone.
- Cooperative Land Use Agreements (Slides 56 and 57) – would be a partnership between the local jurisdictions and the Port Authority and would focus on sharing information about land use, redevelopment and infrastructure near TEB. The agreement would be voluntary. However, it would ensure that the Port Authority could provide their insight into development projects in a local jurisdiction near TEB. Dave stated that generally the jurisdictions were supportive of cooperative land use agreements, but want to make sure they would be implemented in concert with Community Planner Forums and Distribution of Noise Mitigation Information. Dave also provided sample text from a Cooperative Land Use Agreement from John Wayne Airport in Orange County, California.
- Community Planner Forums (Slides 58 and 59) – These forums would be sponsored by the Port Authority and would include planners from all of the local jurisdictions. The meetings would focus on sharing land use, zoning, and development information amongst the communities and would provide opportunities for the communities to learn from each other with how compatible land uses can be planned for around TEB. Meetings could be held monthly, quarterly, or yearly. Dave noted that the jurisdictions were supportive of this strategy but would like to see these forums implemented in concert with Cooperative Land Use Agreements and the distribution of Noise Mitigation Information. Dave provided an example of the Oakland International Airport (OAK) Noise Forum, which includes planners and elected officials from a variety of jurisdictions around the airport. He also noted

the forum meets regularly that they have a very active website where they post information regularly.

- Distribution of Noise Mitigation Information (Slides 60 and 61) – Dave noted that this strategy would also be enacted by Port Authority; Port Authority would be responsible for sharing or distributing information regarding noise mitigation (e.g., program implementation, information, and periodic updates) to jurisdictions in the vicinity of TEB. Information would be provided on a periodic basis, but Dave noted that the Community Planner Forum would be a good way for the Port Authority to provide and share that information with the local jurisdictions. He stated that if the Port Authority were to enact all three measures (i.e., Cooperative Land Use Agreements, Community Planner Forums, and Distribution of Noise Mitigation Information) it would be a nice way of sharing information from the jurisdictions to the Port Authority and from the Port Authority back to the local jurisdictions. Dave provided an example of the San Diego International Airport Noise Advisory Committee (ANAC). He stated that every permit application for construction is presented to ANAC so they can share information about noise and mitigation. TAC member discussion included the following:
 - Renee Spann (Port Authority) questioned whether this would be different from what TEB currently does with TANAAC. Tim Middleton (Port Authority) stated that these measures do not yet have full plans behind them as they are under consideration for now but they can provide an update to TANAAC about land use. He noted that some of the noise mitigation information would still be discussed only at TANAAC, but the Community Planner Forum could be something that meets twice a year with land use planners, separate from TANAAC. Tim added that this is something that needs a further discussion so the appropriate approach with TANAAC is implemented to integrate these measures. Tim commented that there would be discussions as to whether the scope of TANAAC would change or if these things would be separate from TANAAC.
 - Scott Marsh (Port Authority) stated that he believes the measure would be the airport's mechanism for distributing information back to the

communities about noise impacts. He stated that TANAAC has been doing this since 1987 and that he does not believe any other airport in the country has been doing it as long.

- Tim Middleton (Port Authority) stated that TANAAC is already doing much of what was described for this measure. Renee Spann (Port Authority) stated that there are two items to discuss. These are the community planner's forums and the distribution of noise mitigation information, which TANAAC is already doing. She questioned that in the context of the distribution of noise mitigation information, whether there are things that are dissimilar from TANAAC that the airport should adopt. Dave responded affirmatively. Ted Baldwin (HMMH) added TANAAC and TUG would be the groups to handle noise abatement, but when you are talking about sound insulation or other land use measures, TANAAC has never dealt with those issues. Renee clarified and stated that the school soundproofing program was run through TANAAC. Tim stated that if Port Authority decides to do a sound insulation program, the updates, application process, and other details would likely be distributed through TANAAC.
 - Dave noted that is not a short process, which is why it is so important to keep people informed.
 - Renee commented that these efforts seem very targeted and questioned whether noise statistics would be presented at these meetings. Dave responded negatively.
 - Andrew Brooks (FAA) stated that the Part 150 process also serves to memorialize programs and policies that are already working like TUG and TANAAC.
- Additional Topics Identified by Jurisdictions (Slide 62) – Dave highlighted some additional land use-related topics that were discussed at the meetings with the jurisdictions. He noted that the Study Team had a positive meeting with the NJSEA and that they are interested in being a partner and promoting compatible land uses near TEB. Local jurisdictions were also very interested in potential soundproofing and wanted more information when it may be available on timing

and funding. The Borough of Teterboro was also interested in windows with sound insulation technology for their buildings near the airport.

Dave stated that the Study Team conducted initial meetings with local municipalities to introduce the Part 150 study process and coordinated on collecting land use data. Follow-up meetings were then conducted to discuss noise contours prepared for the NEMs and review potential noise abatement and land use measures for the jurisdiction. Slides 64 and 65 of the presentation display list of jurisdictions and corresponding meeting dates. Dave noted that the Study Team met with the Borough of Carlstadt earlier in the day.

Next Steps/TAC Member Discussion

Bob Mentzer (HMMH) stated that the Study Team has gone through mostly all of the noise abatement measures possible, aside from some combination measures. The results of these analyses will be presented at TAC meeting #13 in the Fall.

Renee Spann (Port Authority) asked about real estate disclosures and whether the changes to the form could be something that the Port Authority initiates or whether it is something that the jurisdictions need to initiate. She further clarified and asked whether the airport can approach the State Legislature about making the changes to the form. Dave Full stated that it could come from the airport. Tim Middleton (Port Authority) stated that other airport sponsors prepare a handout that includes the NEM and shows where residences fall within the contour; those maps are provided to the jurisdictions and then it is up to the jurisdictions to communicate with the homeowner. In other cases, airports have been given permission to approach homeowners directly. He added that the Port Authority can approach the State Legislature to change the real estate disclosure form and then have further discussions about how that would actually get implemented. Andrew Brooks (FAA) stated that the Port Authority could certainly work with the State to advocate the change or the airport could do community outreach. However, he cautioned that the outreach would need to be done according to the standard disclosure process.

Renee Spann (Port Authority) commented that she is the airport manager and that she is receiving complaints from people moving into the area without the prior knowledge of the noise from the airport. She believes it would be to the airport's benefit if the people who

are moving into these homes know about the noise situation. Dave Full (RS&H) stated that based on the conversations he has had with the New Jersey Association of Realtors, they are not interested in changing the existing disclosure form to include airport noise. Kathleen Canestrino (Hackensack) commented that homeowners who have owned their homes for 40+ years; they had no indications that there would ever be this type of noise and now their properties are devalued because of it. Andrew Brooks (FAA) noted that one other factor is the consideration of airport sponsors across the state; because it would be applied uniformly, Port Authority may get push back from other areas.

Regarding modeling, Kathleen Canestrino (Hackensack) questioned whether the Study Team could look into building heights when there is a grouping of 20 buildings being flown over, and the buildings are 22 to 24 stories high. She added that she believes that there has to be a huge difference in noise levels on the higher floors of some buildings than in a single family home. Kathleen noted that the aircraft fly very close to these buildings and requested that the Study Team consider building heights in the analysis. Renee Spann (Port Authority) responded that the study is very highly regulated by the FAA so we cannot "pick and choose" from a menu of options. Andrew Brooks (FAA) stated that he understands Kathleen's concerns, but that the model does not operate in that fashion. Ted Baldwin (HMMH) stated that no one is disagreeing about the noise levels on higher floors on the buildings. However, the 65 DNL contour does not leave the commercial areas that are well south of those residential areas. He noted that per Part 150, the FAA would not approve noise abatement alternatives that only benefit the high rises, as they are not within the 65 DNL contour. Kathleen stated that there may be a benefit but that we will not know unless the 28-story building is modeled. Andrew Brooks (FAA) stated that entire building would need to be in the 65 DNL; based on the elevation, for example, the first, second and third floors would not meet the criteria. Kathleen stated that her issue goes beyond noise and that it is really a safety issue, which is not the focus of the study. Tim Middleton (Port Authority) noted that the Study Team cannot pursue the Quiet Visual further within Part 150, as we have to work within the framework of the federal regulations, and the modeling done shows no benefit within the 65 DNL contour. The Port Authority will continue to be a good neighbor and try to work with the communities to see how the Quiet Visual can be pursued through other avenues.

Kathleen asked if the City of Hackensack does its own noise monitoring whether the Study Team could look at the data. Andrew Brooks (FAA) commented that noise-monitoring data is really for informational purposes within the Part 150 Study. Tim Middleton (Port Authority) noted that the Port Authority is not permitted, by regulation, to refine or change the inputs to the model based on noise measurements; it has to go by the process undertaken by the Study Team.

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Bob Mentzer (HMMH) requested that TAC members review what has been presented so far and to send any last ideas or thoughts to Tim and he can distribute them to the Study Team. Bob mentioned that the deadline for submittal of ideas for consideration is August 1st.

Andrew Brooks (FAA) noted that all of the NCP measures that are going to be analyzed over the next several months will be documented in the Final NCP report.

Upcoming Meetings

- The next TEB TAC meeting #13 is tentatively scheduled for the first or second week of November 2017, with a day and time to be determined. More information will come from the Study Team over the coming weeks.
- TAC #14 and #15 are tentatively scheduled for January and May, respectively.

**THE PORT AUTHORITY
OF NEW YORK & NEW JERSEY**

Technical Advisory Committee #13
14 CFR Part 150 Study – Teterboro Airport
November 9, 2017 – 1:00 PM to 4:00 PM (scheduled time)

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Dan Calipa	AIG Aviation	
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	✓
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
John Kastens	AvPORTS TEB Staff	✓
Zack Miller	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	✓
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	
Bruce Surak	Borough of Moonachie, NJ	
Peter Rothwell	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	
Lindsay Butler	FAA	✓
Mark Guidod	FAA	
John Moretto	FAA	
Zach DeLaune	FAA Airports District Office (ADO)	
Suki Gill	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Mario Diaz	FBO, Landmark Aviation	
Dave Goncalves	FBO, Landmark Aviation	
Ken Forester	FBO, Meridian	

Name	TAC Member Organization/Affiliation	In Attendance
Al Rabasca	FBO, Signature Flight Support	
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Alex Gersten	NBAA	
Peter Kornis	NBAA	
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	✓
Ron Seelogy	New Jersey Sports and Exposition Authority	
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
Leslie Black	FHI
Ryan Walsh	FHI
Jessica Cohen	HMMH
Bob Mentzer	HMMH
Eugene Reindel	HMMH
Tom Bock	Port Authority of New York & New Jersey (Port Authority)
Timothy Middleton	Port Authority
Renee Spann	Port Authority

Public:

Name	Organization/Affiliation
Claudia Herrera	City of Hackensack

Welcome and Introductions

Leslie Black (FHI) began the meeting by welcoming attendees to the thirteenth Technical Advisory Committee (TAC) meeting of the Teterboro Airport (TEB) 14 CFR Part 150 Study. The study team provided TAC members with a handout of the presentation. Attendees introduced themselves.

Review of TEB Study Process/Noise Compatibility Program Development Process

Jessica Cohen (HMMH) reviewed the meeting agenda (Slide 2 of the presentation)¹ and the overall study process as well as the steps in developing the Noise Compatibility Program. On Slides 4 and 5 of the presentation, she noted: the prior investigation of the noise abatement strategies; the introduction of land use strategies; and, the future discussion of programmatic strategies at later TAC meetings.

NCP Documentation Discussion

Jessica Cohen (HMMH) then reviewed the contents of the Noise Compatibility Program (NCP) document (Slides 6 and 7 of the presentation) and noted that the document will include components similar to the Noise Exposure Map (NEM) report. Additionally, the NCP report will also include a summary of the public workshop/hearing, something that was not required for the NEM report. Bob Mentzer (HMMH) noted that the stakeholder engagement chapter (Chapter 6) will include summaries of all of the NCP related TAC meetings and presentations, newsletters, and news stories about the project; all of these materials will be included in an Appendix. Renee Spann (Port Authority) asked for clarification on the newsletters and news items that would be included. Tim Middleton (Port Authority) explained that the Project Team produces quarterly newsletters and that each of those would be included in the report. He added that there would be another newsletter produced shortly before the release of the NCP, which will also be included. Tim stated that the news items are press releases produced by the Port Authority as well as legal notices placed in newspapers for the public meetings and hearing. Bob Mentzer (HMMH) noted that the public workshop/hearing will be similar to the meeting format used for previous public meetings and will include informational display boards that the public can review.

Bob Mentzer (HMMH) continued the discussion of the NCP report and explained that Chapters 2, 3, and 4 will be the primary substance of the report. These chapters will detail existing measures, recommended measures, measures considered but not recommended, and a summary of recommended measures. Chapter 5 will summarize responsible parties, cost, and implementation. Renee Spann (Port Authority) inquired about the timeframe for the NCP Report. Bob Mentzer (HMMH) responded that the NCP document would likely be ready for review by the end of the summer 2018. Tim Middleton (Port Authority) explained that there would be two or three TAC meetings before the public release of the document and the public workshop/hearing to review the content of the NCP report. The public workshop and hearing will take place late summer/early fall 2018. He noted that the next TAC meeting, which would occur in March or April 2018, would include a discussion about which strategies to carry forward for recommendation.

NCP Noise Abatement Discussion

Bob Mentzer (HMMH) reviewed major NCP proposals proposed and evaluated to date (Slide 8 of the presentation) including noise abatement flight paths, arrival procedures, and departure procedures; preferential runway use; airport layouts; noise barriers; corrective and preventative land use measures; and mandatory restrictions, noise fees, and limits on operations.

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

The meeting including the discussion of the following noise abatement measures:

- Potential NCP Measure Evaluated: **CRAFT (Concerned Residents along Flight path of Teterboro) approach** (see Slide 10 of the presentation) – this is a new approach to Runway 6 proposed by CRAFT. This approach includes an offset approach that aligns with the existing ILS approach near Paterson Plank Road. The modeling evaluation, which included all arrivals on Runway 6, showed that this approach would not result in a change to the DNL 65 contour. TAC member discussion included the following:
 - Tim Middleton (Port Authority) noted that the TAC members and/or airport stakeholders could pursue some of the identified recommendations outside the framework of the Part 150 program. Lindsay Butler (FAA) noted that it is acceptable for the NCP to include strategies that do not affect DNL 65. The FAA will note that they are “not approved for the purposes of Part 150,” but that does not prevent the airport or users from pursuing those strategies through other methods. Gene Reindel (HMMH) added that many NCP reports include proposals that do not receive approval from the FAA through the ROA (Record of Approval) for Part 150 but can undergo implementation through alternate means.
 - Tom Bock (Port Authority) questioned how aircraft would fly the CRAFT approach if implemented and whether it is an RNAV or visual approach. Bob Mentzer indicated that it is proposed as a visual approach.
- Potential NCP Measure Evaluated: **Shift Start of Take-Off Roll Point on Runway 1 at Night to the Taxiway K Intersection** (Slide 11 of the presentation) – this alternative would shorten takeoff distance by 550 feet but overall takeoff distance is still longer than Runway 6. Bob noted that this would be a voluntary procedure and that requesting it only at night would reduce potential queuing issues. Tim Middleton (Port Authority) noted the adjustment of the proposal from the previous TAC meeting based on input from Alex Gersten (NBAA) at that meeting. Alex G. suggested that the proposal include aircraft entering at the end of the runway and taxiing to the Taxiway K intersection before beginning their takeoff. Bob Mentzer (HMMH) noted that the evaluation of the revised alternative considered 80% of all nighttime departures (Slides 12 and 13 of the presentation) and stated that there would be a noticeable reduction in the 65 DNL contour over the mobile home park. After discussions with the Port Authority, 20% remaining on the full length of the runway was a reasonable assumption and this includes all long haul corporate jets. Jessica Cohen (HMMH) explained that the contraction of the contour would take 56 people out of the DNL 65 contour, which is approximately 40% of the mobile park population exposed to DNL 65 and above. Bob Mentzer (HMMH) noted that there are not many other options available to consider for that community due to their proximity to the runway. TAC member discussion included the following:
 - Lindsay Butler (FAA) asked whether the tower supports the proposal. Tim Middleton (Port Authority) replied that Gary Palm (FAA ATCT) said he could potentially support the

procedure but did not have the opportunity to discuss in detail how the proposal would be run from the tower.

- o John Panarello (AvPORTS TEB Staff) asked about the process of implementation of this measure and how it would be communicated/publicized to users. Bob Mentzer (HMMH) replied that the process involves publishing and distribution of this departure through the tower and that it would be similar to a displaced departure threshold. This would be a voluntary noise abatement procedure, but users could request to use the full length of the runway.
- Potential NCP Measure Evaluated: **Revised Runway 24 Departure Tracks Assigned 230° Heading** (Slides 14 through 17 of the presentation) at night. Bob stated that aircraft would be on the 230° heading until over Paterson Plank Road and then would turn and be located over the high school and commercial area to reduce flights over the residential area south of Moonachie Avenue; since this procedure would be used only during nighttime, the school would not be affected, and the surrounding residential communities would benefit. Bob confirmed that based on conversations with TRACON and FAA, the implementation of the 230° heading would be for nighttime departures only. However, the runway departure use is dependent on changes to the offset approach proposed at EWR. The Project Team evaluated three usage ranges for nighttime departures (50%, 65%, and 80%) on Runway 24; Bob stated that the 80% use assumption is a reasonable assumption and provides the optimal benefit of the three model runs. Jessica Cohen (HMMH) noted that the results for the 80% model shows a reduction of 15 people, from 39 to 24 people in the DNL 70, which is a notable affect in the DNL contour. TAC member discussion included the following:
 - o Tim Middleton (Port Authority) noted that there is a desire to have a Runway 19 departure option, but after much discussion with TRACON and the FAA, Runway 24 seems to be the best option, but Runway 19 will still be considered.
 - o Tim Middleton (Port Authority) explained that at the last Teterboro Users Group (TUG) meeting, it was determined that the 230° procedure would be flyable as a standard procedure if the proposed EWR procedure is in place.
 - o Lindsay Butler (FAA) noted that the new flight track (as shown on slide 14) could potentially introduce aircraft to populations that are not currently receiving overflights west of Route 17. Bob Mentzer (HMMH) stated that any aircraft not using the RUUDY RNAV procedure is currently using the 280° turn. Tim Middleton (Port Authority) explained that the blue track shown on Slide 14 is only representative of the RUUDY RNAV that most aircraft fly. Lindsay Butler (FAA) recommended showing it in a more representative format with existing track data to determine if new impacts would be introduced.
 - o Bob Mentzer (HMMH) noted that air traffic control stated because the procedure is visual it would follow the existing non-RNAV procedure and include the 280° turn, but that the Project Team could talk to them about making it more consistent with the RUUDY procedure.

- o Gene Reindel (HMMH) noted that the Project Team needs to do more analysis to understand the current activity and explained that the hold-down at 1500 feet on these flights will continue to occur.
 - o Tom Bock (Port Authority) questioned why air traffic would not go back to what they normally do. Tim Middleton (Port Authority) explained that pilots cannot do the 230° turn with RNAV and that they have to turn farther out. To get the benefit similar to the 230° turn, it must be a non-precision departure (SID but not RNAV procedure). Tom responded that pilots would have to look at the display. They start the left turn and then come back to the right, to make two turns. He continued that the procedure would result in a wide splay of traffic.
 - o Tim Middleton (Port Authority) noted that an action for the Project Team would be to follow up with TRACON. Bob (HMMH) suggested that the Project Team would talk to TRACON about modifying the procedure to be closer to the RUUDY SIX procedure, with a final heading of about 260° for the majority of traffic.
 - o Gene Reindel (HMMH) explained that the FAA may have a preferred way to execute the procedure and that it may require more analysis to reduce future affects. He added that the FAA initially recommended the turn to 280° degrees.
- Potential NCP Measure Evaluated: **Location of all Maintenance Runups in the Center of the Airfield along Taxiway Q** (Slides 18 and 19) – Bob stated that this alternative would result in a reduction of the 70 DNL contour south of Route 46 on the north side of the airfield. The most beneficial change to the 65 DNL contour would occur in the mobile home park and would result in a 0.2 dB reduction/change. No additional TAC member discussion took place.

Potential Recommended Combination Cases for the NCP (Slides 20 through 24)

Bob discussed the combination of three noise abatement measures for the NCP. The Project Team evaluated the combinations with three versions of Runway 24 usage – 50%, 65% and 80% - all on the 230° heading at night. Bob stated that the combined scenario of 100% centralized runups with 80%-night departures from Taxiway K, 80% of all night departures on Runway 24 assigned 230° heading (on Slide 23) offers the largest reduction in non-compatible land uses. Tim Middleton (PA) further explained that under the best-case scenario, the 65 DNL contour would move east of Route 17 and primarily over non-compatible land use (Slide 24). This scenario would also result in a larger reduction in residential land use within the 65 DNL contour, notably a larger section of the mobile home park. Bob noted that considering how close the mobile home park is to the airport, noise mitigation options are very limited. The building structure of mobile homes does not allow for the same mitigation measures as for permanent residences.

- o Renee Spann (Port Authority) asked what would be considered a significant reduction. Bob Mentzer (HMMH) replied that there is no set number, but that aiming for at least a 10 to 25% population reduction in the 65 DNL contour would be desirable. Gene Reindel (HMMH) replied that “significant” is not a word that is typically associated with the Part 150 process. Notable improvements would typically require additional

environmental analysis. The purpose of the Part 150 process is to reduce non-compatible land uses using noise abatement, and noise mitigation strategies. Renee noted that eventually, when it comes to costs, people will ask whether there is a significant improvement. Gene replied that the NCP report will include projected costs and the airport sponsor typically conducts a cost benefit analysis prior to implementation of any recommendation.

- Tim Middleton (Port Authority) explained that the Project Team will identify measures that have benefit; determinations based on cost would happen much later.
- Lindsay Butler (FAA) explained that even if there are measures approved and deemed implementable, there is not a guarantee of implementation of those due to potential limitations in federal funding.

Land Use Analysis of Proposed NCP Measures

HMMH performed calculations for population and dwelling unit counts for all of the proposed NCP measures evaluated to date. (Slide 25 of the presentation). All measures are in comparison to the 2021 NEM as baseline. Bob Mentzer (HMMH) summarized the dwelling unit and population counts for proposed NCP measures (Slides 26 and 27 of the presentation) and noted that each measure would result in a net reduction of the number of dwelling units and the number of people within the contour except for the CRAFT approach. Gene Reindel (HMMH) commented that those results are positive for the mobile home park; this is because there are few other mitigation measures that are implementable for mobile home structures.

John Panarello (AvPORTS TEB Staff) asked if the Port Authority pursued a central ground runup location, whether that would trigger the National Environmental Policy Act (NEPA) since it is not involving flight tracks. Bob Mentzer (HMMH) responded that it would be a change to the Airport Layout Plan (ALP), so it would trigger NEPA. Tim Middleton (Port Authority) added that the Project Team has talked to Port Authority planning staff and they thought the ground runup relocation was feasible.

In terms of noise sensitive sites, Slides 28 and 29 of the presentation, Bob Mentzer (HMMH) stated that none of the noise sensitive sites would fall outside the contour with the implementation of the noise abatement measures evaluated to date.

Use Restriction Measures

Jessica Cohen (HMMH) noted that the intention of use restriction measures is to prevent the introduction of new incompatible land uses. Federal legislation, The Airport Noise and Capacity Act (ANCA) of 1990, has grandfathered TEB's current use restrictions in place as they were in effect prior to the passing of the Act. Gene Reindel (HMMH) added that going forward, a Part 161 study would be required if further changes or new restrictions were included. As long as the airport does not implement new measures that further restrict access, use restrictions are subject to the grandfathering that occurred with the passing of ANCA. Tim Middleton (Port Authority) noted that the NCP documentation

would provide information on these grandfathered use restrictions. The presentation shows TEB's existing use restrictions on Slide 31 of the presentation.

Lindsay Butler (FAA) questioned if there was a consolidated run-up area at TEB, whether the maintenance runup timing would change. Tim Middleton (Port Authority) responded that there are no maintenance runups at night that is why the modeling did not show more benefit; he stated timing would be kept the same.

John Panarello (AvPORTS TEB Staff) noted that time restrictions might not be married to the use restrictions being grandfathered. Gabriel Andino (AvPORTS TEB Staff) noted that time restrictions could be separated out without interfering with the use restrictions that are grandfathered. He also noted that users can fly in without filling out a "Permission to Operate Jet Aircraft" form but that is what users are signing off on, that they are aware of the rules and possibility of permission being revoked to operate at TEB if violations of terms occur. Gene Reindel (HMMH) noted that TEB must make sure those runup operations, which are a use of the airport, will not be more restrictive or that could cancel the grandfathered use restrictions. John Panarello (AvPORTS TEB Staff) noted that TEB will look into those restrictions.

Jessica Cohen (HMMH) noted that the existing voluntary restrictions would remain in place as shown on the Slide 23. Tim Middleton (Port Authority) noted that the voluntary preferential runway use of Runway 19 for departures at night is limited because of EWR traffic. Renee Spann (Port Authority) stated that TEB would have a problem with promoting the use of Runway 19 because the tower is not cooperative with that procedure. Tim Middleton (Port Authority) responded that the Project Team wants to make sure to include items such as a preferred runway measure if we know that it can't be flown; there will have to be more discussions with FAA to determine how best to include the preferential runway program in the NCP. The John Panarello (AvPORTS TEB Staff) commented that sometimes it seems as if Runway 19 is treated like it does not exist even though TEB keeps trying to promote it as a noise abatement alternative. Lindsay Butler (FAA) noted that the Project Team will have to explain/validate that it meets the intent of what the airport wants and what operators can do. If there is still a benefit, even if it is difficult to implement, it should be included in the document. Bob Mentzer (HMMH) responded affirmatively, the study will include it, but noted that it will be difficult to use Runway 19 more and increase the benefit. Renee Spann (Port Authority) commented that there may possibly be a greater level of cooperation if it is included in the Part 150 document.

John Panarello (AvPORTS TEB Staff) stated that if increased use of Runway 19 is too burdensome for the tower, or is not flyable anymore, it is not going to be used in the future. In regards to other aspects of the existing preferential runway recommendations, John noted that the ILS 6 circle to Runway 1 procedure is used on windy days. Tim Middleton (Port Authority) noted that the Project Team should look at it again to see if it is viable to include in the NCP. Lindsay Butler (FAA) noted even if it is only used 20% of the time, any opportunity to reduce noise should be pursued. Gene Reindel (HMMH)

commented that it seems that as far as air traffic control is concerned, there is not really a preferential runway program at TEB. Lindsay Butler (FAA) noted that the FAA has precedents for issuing clearer communication between towers and TRACON. John Panarello (AvPORTS TEB Staff) stated that if TRACON, the tower, and the traffic can handle it, it would be better to have a preferential runway program.

Upcoming TAC Meetings/Meeting Wrap-Up

Bob Mentzer (HMMH) asked that TAC members forward any other feedback on measures discussed today and let the Project Team know of suggestions for any additional possible noise abatement measures.

With regard to upcoming TAC meetings, potential programmatic measures will be presented at the next TAC meeting in Spring 2018; the next TAC meeting in Summer 2018 TAC meeting will cover land use measures and mitigation measures as well as recommended measures and how they will be documented in the NCP. Bob Mentzer (HMMH) stated that a public hearing will likely be held in Summer/Fall 2018, followed by a TAC meeting to review the draft documents and public hearing comments. Tim Middleton (Port Authority) confirmed that the Project Team will not have the public hearing until the recommended NCP measures have been discussed at first shown to the TAC meeting. He added that the Project Team will not have the decision on land use measures until the Spring 2018.

Bill Huisman (Aviation Development Council (ADC)) commented that there is usually some push back on communication with the media before the public hearing and questioned whether social media be used. Tim Middleton (Port Authority) responded that the Port Authority does not have a current plan to use social media and that public affairs will reach out to local media with legal notices and press releases. He noted that whether the media runs the press release/story or not is up to the Port Authority. Katie Winfree (Port Authority) added that the Project Team will reach out to the Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC), roundtables for other airports, and stakeholder email lists associated with the Project Newsletter sign-up on the website, as they are effective outreach tools.

Cheryl Rezendes (New Jersey Sports and Exposition Authority) asked who the audience is for the public hearing. Tim Middleton (Port Authority) responded that the study area is an approximate 10-mile radius around TEB and includes all of Bergen county and part of the Meadowlands area. Cheryl added that the Project Team should reach out to the New Jersey Department of Environmental Protection (NJDEP) to talk to the Rebuild by Design outreach team as they have extensive mailing lists. She added that the Meadowlands Chamber of Commerce also has business contact lists. Bob Mentzer (HMMH) noted that the Project Team has an extensive mailing list and the hearing notice will go out to all of them. Lindsay Butler (FAA) added that people who commented on the NEM should be included as well. Gene Reindel (HMMH) confirmed that those people will be included in notices for the public hearings and will receive newsletters; anyone who has provided their contact information to the study team has been added to an email distribution list. Tim Middleton noted that TANAAC also does its own outreach for the Part 150

Study. John Panarello (AvPORTS TEB Staff) commented it may make sense for the Project Team to spend a little extra effort to get TEB users (pilots and flight departments) to attend, TAC meetings and the public hearing. He stated that it would be beneficial for those who fly to be part of the process. Bob Mentzer (HMMH) responded that the Project Team has made presentations at TUG meetings and that he will make a note to do that again to make sure TEB users are part of the process.

Next Meeting and Wrap-Up

TAC Meeting #14 is tentatively scheduled to be held in March/April 2018 and will include a discussion of monitoring and implementation of programmatic measures.

Attendees:

TAC Members (and Alternates)

Name	TAC Member Organization/Affiliation	In Attendance
Glenn Morse	Airlines, United	
Bill Huisman	Aviation Development Council (ADC)	✓
Stephen Riethof	Aircraft Owners and Pilots Association (AOPA)	
Gabriel Andino	AvPORTS TEB Staff	✓
Michael Fiscus	AvPORTS TEB Staff	✓
John Kastens	AvPORTS TEB Staff	
Zack Miller	AvPORTS TEB Staff	✓
John Panarello	AvPORTS TEB Staff	
Peter Botsolas	Bergen County	
Peter Kortright	Bergen County	✓
Bruce Surak	Borough of Moonachie, NJ	
James Marks	Dassault Falcon Jet	
Harley Aronson	Federal Aviation Administration (FAA)	
Andrew Brooks	FAA	✓
Lindsay Butler	FAA	
Mark Guiod	FAA	
John Moretto	FAA	
Zach DeLaune	FAA Airports District Office (ADO)	
Suki Gill	FAA Airports District Office (ADO)	
Ed Knoesel	FAA Airports District Office (ADO)	✓
David Sanchez	FAA Airports District Office (ADO)	✓
Gary Palm	FAA Airport Traffic Control Tower (ATCT)	
Dave Swanson	FAA Flight Standards District Office	
Mike Porcello	FAA TRACON	
Joe Fazio	FBO, Atlantic Aviation	✓
Kevin Pattermann	FBO, Jet Aviation	
Ken Forester	FBO, Meridian	
Joel Barbosa	FBO, Signature Flight Support	✓
Dave Goncalves	FBO, Signature Flight Support	

Name	TAC Member Organization/Affiliation	In Attendance
Pasquale Raguseo	FBO, Signature Flight Support, Morristown	
Alex Gersten	NBAA	✓ (on phone)
Peter Korn	NBAA	
Eileen O'Brien	Net Jets	
Joe Vukovich	Net Jets	
Joe Lepis	Newark Airport (EWR) Noise Community Roundtable	
Cheryl Rezendes	New Jersey Sports and Exposition Authority	
Ron Seelogy	New Jersey Sports and Exposition Authority	✓
Fred Dressel	Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC)	
Dave Belastock	Teterboro Users Group (TUG)	
Geoff Couture	Teterboro Users Group (TUG)	
Jim Dramis	Teterboro Users Group (TUG)	

Study Team

Name	Study Team Organization/Affiliation
Kristen Ahlfeld	FHI
Leslie Black	FHI
Melissa Pineda	FHI
Robert Mentzer	HMMH
Jessica Spencer	HMMH
Jane Herndon	Port Authority
Juan Rojas	Port Authority
Maria Sheridan	Port Authority
Adeel Yousuf	Port Authority

Welcome and Introductions

Kristen Ahlfeld (FHI) began the meeting by welcoming attendees to the fourteenth Technical Advisory Committee (TAC) meeting of the Teterboro Airport (TEB) 14 CFR Part 150 Study. The study team provided TAC members with a handout of the presentation. Attendees introduced themselves. Kristen then reviewed the agenda for the meeting.

Review of TEB Part 150 Study Process/Noise Exposure Map Completion

Bob Mentzer (HMMH) reviewed the Part 150 Study process (Slide 3 of the presentation)¹ as well as the steps in developing and completing the Noise Exposure Map (NEM) (Slides 4 and 5).

¹ TAC Presentation materials can be found on the project website (http://www.panynjpart150.com/TEB_TAC.asp); slides will be referenced in this meeting summary.

Noise Compatibility Program Development Process

Bob Mentzer (HMMH) reviewed the Noise Compatibility Program (NCP) (Slides 6 – 8 of the presentation), the process which includes identification of noncompatible land uses and consideration of noise abatement, land use, and program management measures. The objectives of a NCP are to reduce noise exposure over noncompatible land uses, limit growth of noncompatible land uses, mitigate noise exposure where it cannot be reduced to compatible land uses, and prevent introduction of new noncompatible land uses.

For the TEB NCP, the baseline DNL noise contour (representing 2021) includes 196 dwelling units and 4 noise-sensitive sites, which were identified as potentially noncompatible land uses. Bob reiterated that the goal of the NCP is to reduce or eliminate noncompatible land uses and to prevent future noncompatible land uses within the 65 DNL contour. This can be done by developing strategies to reduce noise thereby reducing the size of the overall DNL contour, shifting the area within the DNL contour over compatible land uses or by mitigating the land uses to make them compatible with aircraft noise.

TEB NCP Measures Analyzed

Bob Mentzer (HMMH) reviewed the TEB NCP measures that were analyzed:

- Noise abatement measures - 20 were considered and 17 are being recommended for inclusion in the NCP.
- Land use (noise mitigation) measures – 10 were considered and 5 recommended for inclusion in the NCP.
- Program management measures – 13 were considered and 12 recommended for inclusion in the NCP.

Noise Abatement Measures

Jessica Spencer (HMMH) reviewed noise abatement measures (Slides 10 – 38 of the presentation) recommended for inclusion in the NCP. She noted that some are new measures while others are already in existence at TEB and therefore the existing measures would be memorialized in the NCP. New noise abatement measures recommended for inclusion in the NCP include:

- Implement a Runway 24 departure turn to 230° at night – this is a new measure that would reduce the 65 DNL contour south of the airport and could remove approximately 27 people and 11 dwelling units from the 65 DNL contour. This strategy would be limited by EWR arrival patterns.
- Encourage intersection departures from Taxiway K on Runway 1 at night – this measure was recommended by the TAC. This measure could remove approximately 56 people in 23 dwelling units from the 65 DNL contour.
- Implement a centralized aircraft run-up pad – this measure would be restricted to daytime hours only. With 100 percent usage, this measure could remove approximately 13 people in 5 dwelling units from the 65 DNL contour, mainly from the mobile home park south of the airport.
- Implement an offset approach procedure to Runway 19 – this measure provides no benefit inside the 65 DNL contour and therefore will not be approved by the FAA for the purposes of the Part 150. However, since this measure could provide reduced overflights of Hackensack

University Medical Center and shift aircraft over compatible land uses north of TEB, the Port Authority would still like to recommend this measure for inclusion in the NCP.

- Implement an offset approach procedure to Runway 6 - this measure provides no benefit inside the 65 DNL contour and therefore will not be approved by the FAA for the purposes of the Part 150. However, since this measure could reduce the number of overflights of Lyndhurst and Rutherford, the Port Authority would still like to recommend this measure for inclusion in the NCP.
- Implement a published approach procedure to Runway 1 – by shifting arrival operations over compatible land uses, this measure could remove approximately 20 people in 8 dwelling units from the 65 DNL.
- Implement a published departure procedure from Runway 19 – this measure could remove approximately 5 people in 2 dwelling units from the 65 DNL contour by shifting operations over compatible land use southwest of Runway 6. A published procedure will encourage pilots to use the procedure more often.
- The Port Authority will coordinate with FAA on development and implementation of NextGen procedures. Andrew Brooks (FAA) commented and recommended that it may be more appropriate to categorize this measure as a Program Management Measure. Although the FAA supports this recommendation, he indicated that the FAA will not approve this recommendation as a Noise Abatement Measure as it does not show a measurable noise benefit. HMMH agreed with this assessment and stated that they will move this measure to Program Management.

Jessica Spencer (HMMH) reviewed the existing noise abatement measures that are being recommended for memorialization and continuation in the NCP (Slides 20-23 of the presentation). These measures are found in the TEB Flight Crew Handbook. They include:

- Existing mandatory permission to operate jet aircraft
- Existing mandatory noise limits
- Existing mandatory aircraft maintenance run-up restrictions
- Existing voluntary restraint from operations between 11:00 pm and 6:00 am
- Existing voluntary preferential runway use at night
- Existing voluntary encouragement of the use of NBAA noise abatement departure procedures (NADP)
- Existing voluntary restraint from the use of reverse thrust
- Existing voluntary IFR and VFR approach and landing procedures to Runway 1 at night
- Existing voluntary helicopter routes

Jessica noted that there were other Noise Abatement measures that were considered but not recommended for inclusion in this NCP (Slides 24 – 27 of the presentation) due to their infeasibility. These measures were suggested via TAC member input or public comment and include:

- Construct a new north-south runway
- Noise barriers
- Increase night departures from Runway 6 – this would extend the contour into a new residential area, so it was removed from consideration

Land Use Measures

Bob Mentzer (HMMH) reviewed the land use measures recommended for inclusion in the NCP (Slides 28–38 of the presentation):

- **Acquire Noncompatible Residential Parcels:** this corrective measure involves acquiring noncompatible residential parcels then changing the designated land use so that it is compatible with aircraft noise. Bob noted that the Port Authority has not identified any parcels for acquisition at this time.
- **Sound Insulate Eligible Residential Units:** This corrective measure involves insulating noncompatible residential units to reduce average interior noise to DNL 45 and provide at least a 5dB improvement to the structures' noise level reduction. Approximately 121 dwelling units are potentially eligible for sound insulation treatments. Bob also reviewed the process for the residential sound insulation program (RSIP).
- **Sound Insulate Eligible Non-Residential Noise-Sensitive Structures:** This corrective measure involves insulating noncompatible non-residential noise sensitive structures to reduce average interior noise levels to DNL 45 and provide at least a 5dB improvement within noise sensitive rooms to the structures' noise level reduction. Examples include schools, places of worship, healthcare facilities, day care facilities, and libraries. Bob noted that the Bergen County Technical High School is not eligible for sound insulation, as the Port Authority has previously treated this facility.
- **Provide Positive Ventilation to Eligible Residential and Non-Residential Noise-Sensitive Structures:** This corrective measure involves providing ventilation systems to allow for air circulation inside structures that have been sealed for noise mitigation purposes. These could include structures that do not qualify for sound insulation but obtain necessary noise level reduction when their existing doors and windows are fully closed.
- **Port Authority Assistance with Establishing an Airport Noise Overlay Zone:** This preventive measure is intended to prevent noncompatible land uses from being developed near TEB. Port Authority would recommend that local land use planning jurisdictions develop and implement an airport noise overlay zone. Bill Huisman (Aviation Development Council (ADC)) asked whether the local land use agencies are aware of a noise overlay zone. Bob Mentzer (HMMH) responded affirmatively and added that all the jurisdictions were supportive of an overlay zone.

Bob also reviewed the land use measures considered but not recommended for inclusion in the TEB NCP (Slides 39-44 of the presentation):

- Acquire Avigation Easements
- Implement Cooperative Land Use Agreements
- Raise Minimum Building Standards
- Implement Rezoning of Land uses
- Include Airport Aircraft Noise in Real Estate Disclosures

Program Management Measures:

Jessica Spencer (HMMH) reviewed the program management measures recommended for inclusion in the NCP (Slides 46–54 of the presentation):

- Maintain Noise Office
- Maintain NOMS, Public Flight Tracking Portal, & Noise complaint Management System

- Maintain Existing Noise Office Website and Continue Community Outreach Activities
- Establish an Airport Noise Community Planners Forum - Bill Huisman (ADC) asked if this group would be over and above TANAAC. Bob Mentzer (HMMH) responded affirmatively and stated that the local land use agencies were supportive of this measure. He added that this group would allow each of the agencies to convene on a regular basis to discuss planning issues on properties located near TEB.
- Establish and manage a Fly Quiet Program
- Update the NEM and NCP
- Make Aircraft Noise contours Available in a Geographic Information System (GIS) - Peter Kortright (Bergen County) asked if the contours would be web-based and how the Port Authority plans to provide access to GIS to the public. Adeel Yousuf (Port Authority) stated that the Port Authority has Google Earth and shapefiles available now. Peter requested that the Port Authority provide the shapefiles to planning/land use agencies to incorporate into their web-based GIS systems so that the public may have access to it. He added that it would be very useful to provide it in a web-based format (Google Earth).
- Airfield Noise Abatement Program Signage

Jessica also reviewed the program management measure considered but not recommended for the TEB NCP:

- Incentivize a quieter aircraft fleet

TAC Member Discussion/Comments

Peter Kortright (Bergen County) asked about the criteria for overlay zones for each jurisdiction and noted that the communities will need guidance or a template to work from. Bob Mentzer (HMMH) stated that the essence of the measure would be for the Port Authority to provide guidance, not establish the overlay zones for the communities. Peter added that the criteria for the zones should be standardized across communities and that the Port Authority should not be afraid to suggest guidance to avoid fragmented regulation and so that there is consensus across the jurisdictions. Jane Herndon (Port Authority) noted that the Port Authority does not want to be in the position of steering communities in one direction. She noted that if the communities express an interest, the Port Authority can look at other airports with overlay zones and provide general language for consideration.

Zach Miller (AvPORTS TEB Staff) asked what local land use agencies are involved in real estate transactions and why would they not want airport noise disclosed in real estate disclosures. Bob Mentzer (HMMH) responded that the study team met with 6-7 jurisdictions in the TEB study area and they were not supportive of this measure as this matter would need to be handled at the State level and then enacted statewide. Jane Herndon (Port Authority) stated that several communities voiced a concern about diminution of property values. Zach added that he fields noise complaints from people that did not know that TEB was located so close to their homes. Jessica Spencer (HMMH) reiterated that this measure would involve state-level intervention, the passage of legislation, and would need to be enacted statewide.

Ron Seelogy (New Jersey Sports and Exposition Authority) requested clarification that there are currently no overlay zones within the district. Bob Mentzer (HMMH) stated that Ron's assumption was correct. Ron added that getting the contours would be very helpful to NJSEA.

Review of Project Schedule and Next Steps

Bob Mentzer (HMMH) reviewed the project schedule (Slide 60 of the presentation). The public workshop/hearing for the NCP will be held in the first quarter of 2020 and that, if necessary, another TAC meeting could be held to present the final approved NCP document; more information will be provided on the public workshop/hearing and potential TAC meeting in the future.

Bob also thanked the TAC for being part of the Part 150 Study and the continued support and input of the membership. Adeel Yousuf (Port Authority) added his appreciation to the TAC for their continued involvement in this important initiative.

Meeting adjourned.

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Appendix E

Public Outreach

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Appendix E.1

Public Meetings/Workshop Materials

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THE COVID-19 PANDEMIC COMMUTING

Survey: More expect to return to offices

Majority of workers say they feel safe using buses, trains to get to work.

Larry Higgs For The Star-Ledger

NJ Transit's latest passenger survey results said more people expect to return to the workplace and a majority of those surveyed said they consider buses and trains a safe way to make the commute.

In fact, those who responded said they'd feel safer from the coronavirus on a transit vehicle than aboard an airplane.

The agency's fourth survey, conducted in June, received 46,000 responses, a little less than the 50,000 people who responded to a December 2020 survey. Results were released Tuesday. However this survey was conducted before the delta variant of the coronavirus began spreading.

Of those who responded, 49% of those who commute to jobs in New York expected to return to their workplace in September.

Of those surveyed, 67% of New York rail commuters and 51% of bus commuters expect to return to a hybrid schedule split between the office and home. Those who expect to return to the workplace five days a week were 46% of New York bus commuters and 29% of rail riders, the survey said. A minority of 5% and lower expect to continue working remotely.

That could change since some employers have pushed back office reopening dates to October and in some cases to 2022, according to a CNBC poll of employers done in early August.

For commuters traveling to and from jobs in New Jersey, expectations were higher that commuters would be back in the workplace sooner with 46% of North Jersey in-state bus commuters and 62% of South Jersey bus riders saying they expected to return in June.

Of those commuters, the majority, 72% in North Jersey and 86% in South Jersey said their employers' plans called for them to be in the workplace five days a week when the COVID crisis was "over."

New Jersey lifted a state of emergency on June 4. Gov. Phil Murphy announced on Aug. 28 that state workers were expected to return to their offices on Oct. 18, which came after the governor mandated all state workers would be required to be vaccinated against COVID-19.

But how do commuters feel about riding public transit? The survey asked them to rank it and 10 activities, ranging from eating outdoors, eating in a restaurant, working in an office, mall shopping, going to school and traveling on a plane, among others.

Commuters who use six different NJ Transit travel modes ranked public transit safer from COVID-19 than traveling on a plane, but less safe than working in an office.

South Jersey bus riders gave transit use the highest ranking at 77%, followed by Access Link passengers at 73% and North Jersey bus riders at 71%. The lowest ranking were 68% of light rail riders who considered transit to be safe, followed by 68% of rail and New York bus commuters.

But when it came to how clean NJ Transit buses, trains and light rail equipment was, riders on all three gave the agency higher marks than in December. On a scale of 1 to 10, rail riders gave trains the highest grade of a 7.3, followed by bus and light rail that tied at 6.8.

While riders gave their fellow passengers an average grade of 90% compliance with mask wearing regulations in June, some of those grades fell from last December's 96 to 98%. Light rail passengers continued to be ranked the lowest with 89% obeying mask regulations.

Officials said questions about mask compliance would be tightened up in the next survey to account for relaxing



In an NJ Transit passenger survey, more people said they expect to return to the workplace this month, and most said they consider buses and trains safe. Star-Ledger file

outdoor mask rules.

Officials attributed it to some confusion over federal regulations that lifted mask wearing requirements in outdoor transit facilities. NJ Transit was the first regional agency to let riders take off masks in outdoor facilities in mid-June, following federal guidance that relaxed the rules.

Passengers still have to wear masks inside aircraft, trains, buses and light rail vehicles until Jan. 18 under an extension of federal regulations announced last month.

This survey was more forward looking than one in December, which also looked at who was taking trains and buses to and from work. The next COVID travel survey could be conducted in October or November, officials said.

ATTENTION ELIZABETH RESIDENTS
NO GARBAGE WILL BE PICKED UP
LABOR DAY
MONDAY, SEPTEMBER 6, 2021
GARBAGE CURBSIDE PICKUP WILL BE
COLLECTED IN ALL WARDS ON
TUESDAY, SEPTEMBER 7, 2021

9/1/21 \$45.08

JOHN F. PAPETTI, JR.
DIRECTOR OF PUBLIC WORKS

University Hospital
Newark, NJ

University Hospital will no longer advertise RFP's on an individual basis. All RFP's and information related to RFP's in process for University Hospital Supply Chain Management are now available and posted on the University Supply Chain Management website <http://www.uscm.com/purchasing>. The following RFP's are the new postings on the University Hospital Supply Chain Management website: ADDENDUM # 1 to RFP # UH-P2-047 EMS AIR MANAGEMENT SERVICES.

Respondents are required to comply with the requirements of N.J.S.A. 10-3-1 et seq. P.L. - 1975, c.127. (NJAC 17:27)

Robert Sharbaugh
Acting Executive Director
Supply Chain Management
9/1/2021 \$70.84

The Port Authority of New York & New Jersey
NOTICE OF AVAILABILITY -
DRAFT NOISE COMPATIBILITY PROGRAM AND
NOTICE OF VIRTUAL PUBLIC INFORMATION WORKSHOP
AND PUBLIC HEARING
Title 14 of the Code of Federal Regulations Part 150
(14 CFR Part 150)
Airport Noise Compatibility Planning Study for
Newark Liberty International Airport

As part of an on-going Airport Noise Compatibility Planning Study (Part 150 Study), the Port Authority of New York & New Jersey (Port Authority) has completed the Draft Noise Compatibility Program (NCP) pursuant to the requirements of 14 CFR Part 150 for Newark Liberty International Airport (ENR). Notice hereby is given that the Draft ENR NCP document is available online at: http://panynjpart150.com/ENR_DNCP.asp. All comments must be postmarked by October 15, 2021.

Written comments on the Draft ENR NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007. Attn: Ayo Chelapian. In addition, comments may be emailed to ALPAPART150@panynj.gov. All comments must be postmarked by October 15, 2021.

VIRTUAL PUBLIC INFORMATION WORKSHOP AND PUBLIC HEARING ON THE DRAFT NCP

Information and an opportunity to comment on the Draft ENR NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

Virtual Public Information Workshop:
DATE: Thursday, October 7, 2021
TIME: 6:00 P.M. - 6:30 P.M.

Virtual Public Hearing:
DATE: Thursday, October 7, 2021
TIME: 7:00 P.M. - 9:00 P.M.

Registration for the ENR Workshop and Hearing:
dratvenrworkshopandhearing.com

FORMAT: The Virtual Public Information Workshop and the Virtual Public Hearing will be conducted online via the Zoom platform and will be recorded for record keeping purposes.

ADVANCE REGISTRATION REQUIRED: Advance registration is required to obtain workshop and hearing login information and for all who wish to make oral comments during the virtual public hearing. If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The Public Hearing will close only after all registered speakers have had the opportunity to speak.

CONTENT: The virtual Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on noise abatement, land use, and program management measures recommended in the Draft ENR NCP. Workshop attendees will be able to ask questions and engage with the Project Team. During the Public Hearing, the public will have an opportunity to provide oral comments on the Draft ENR NCP document. All comments will be recorded by a stenographer and included in the Final NCP document. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes, depending on the number of speakers registered at the start of the hearing.

The Public Information Workshop presentation will be available on October 5, 2021 on the project website http://panynjpart150.com/ENR_DNCP.asp.

All comments (written and oral) along with responses developed by the Port Authority will be included in the Final ENR NCP and will be considered by the Federal Aviation Administration (FAA) in their decision-making process on the Port Authority recommended measures contained in the Final ENR NCP.

Upon written request to the PANYNJ at the address provided above, a hardcopy, CD-ROM, or flash drive of the Draft ENR NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Spanish, Portuguese, and American Sign Language interpretation services are available for the Public Information Workshop and Hearing upon advance request. To make arrangements for such services, contact the Port Authority Noise Office at ALPAPART150@panynj.gov or at (212) 435-3777 no later than September 30, 2021.

For more information about the ENR Part 150 study, please visit the project website at: http://www.panynjpart150.com/ENR_homepage.asp

The Port Authority of New York & New Jersey
NOTICE OF AVAILABILITY -
DRAFT NOISE COMPATIBILITY PROGRAM AND
NOTICE OF VIRTUAL PUBLIC INFORMATION WORKSHOP
AND PUBLIC HEARING
Title 14 of the Code of Federal Regulations Part 150
(14 CFR Part 150)
Airport Noise Compatibility Planning Study
for Teterboro Airport

As part of an on-going Airport Noise Compatibility Planning Study (Part 150 Study), the Port Authority of New York & New Jersey (Port Authority) has completed the Draft Noise Compatibility Program (NCP) pursuant to the requirements of 14 CFR Part 150 for Teterboro Airport (TEB). Notice hereby is given that the Draft TEB NCP document is available online at: http://panynjpart150.com/TEB_DNCP.asp. All comments must be postmarked by October 15, 2021.

Written comments on the Draft TEB NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007. Attn: Ayo Chelapian. In addition, comments may be emailed to ALPAPART150@panynj.gov. All comments must be postmarked by October 15, 2021.

VIRTUAL PUBLIC INFORMATION WORKSHOP AND PUBLIC HEARING ON THE DRAFT NCP

Information and an opportunity to comment on the Draft TEB NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

Virtual Public Information Workshop:
DATE: Thursday, September 30, 2021
TIME: 6:00 P.M. - 6:30 P.M.

Virtual Public Hearing:
DATE: Thursday, September 30, 2021
TIME: 7:00 P.M. - 9:00 P.M.

Registration for the TEB Workshop and Hearing:
drattebrworkshopandhearing.com

FORMAT: The virtual Public Information Workshop and the Virtual Public Hearing will be conducted online via the Zoom platform and will be recorded for record keeping purposes.

ADVANCE REGISTRATION REQUIRED: Advance registration is required to obtain workshop and hearing login information and for all who wish to make oral comments during the virtual public hearing. If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The Public Hearing will close only after all registered speakers have had the opportunity to speak.

CONTENT: The virtual Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on noise abatement, land use, and program management measures recommended in the Draft TEB NCP. Workshop attendees will be able to ask questions and engage with the Project Team. During the virtual Public Hearing, the public will have an opportunity to provide oral comments on the Draft NCP document. All comments will be recorded by a stenographer and included in the Final NCP document. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes depending on the number of speakers registered at the start of the hearing.

All comments (written and oral) along with responses developed by the PANYNJ will be included in the Final TEB NCP and will be considered by the Federal Aviation Administration (FAA) in their decision-making process on the Port Authority recommended measures contained in the Final TEB NCP.

The Public Information Workshop presentation will be available on September 28, 2021 on the project website http://panynjpart150.com/TEB_DNCP.asp.

Upon written request to the PANYNJ at the address provided above, a hard copy, CD-ROM, or flash drive of the Draft TEB NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Spanish, Korean and American Sign Language interpretation services are available for the workshop and hearing upon advance request. To make arrangements for such services, contact the PANYNJ Noise Office at ALPAPART150@panynj.gov or at (212) 435-3777 no later than September 23, 2021.

For more information about the TEB Part 150 study please visit the project website at: http://www.panynjpart150.com/TEB_homepage.asp

POLITICS

Christie to speak on the future of the GOP

Matt Arco For The Star-Ledger

Nearly a decade after a woman tearfully begged then-Gov. Chris Christie to run for president after a speech he gave at the Ronald Reagan Presidential Library, Christie is set to return to the same stage to address fellow Republicans.

Christie is slated to speak at the Institute's Time for Choosing Speaker Series about "critical questions facing the future of the Republican Party," according to a news release from the Ronald Reagan Presidential Foundation.

The event will be on Sept. 9 in Simi Valley, California. Christie was less than two years into his first term when he gave his first speech at the library. At the time, speculation was rampant he would launch a presidential campaign.

During the question and answer portion of the speech in 2011, Christie was asked about whether he would run, with one questioner pleading with him to say "yes."

"It's extraordinarily flattering but by the same token, that heartfelt message you gave me is not a reason for me to do it," Christie responded at the time. "That reason has to reside inside me."

He ultimately decided against running in that campaign and ran an unsuccessful White House bid in 2016. He's often mentioned as a possible 2024 contender.

The former governor has another book coming out in November titled "Republican Rescue: Saving the Party from Truth Deniers, Conspiracy Theorists, and the Dangerous Policies of Joe Biden." It's part of a two-book deal with Threshold Editions.

DRIVERS WANT TO EARN UP TO \$1,500 MONTHLY NO COLLECTIONS

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BOROUGH OF CARTERET
PUBLIC NOTICE
ORDINANCE #21-14
LEASE ORDINANCE STATEMENT AND SUMMARY

The lease ordinance, the summary terms of which are included herein, has been adopted by the governing body of the Borough of Carteret, in the County of Middlesex, State of New Jersey on August 26, 2021 and the 20 day period of limitation within which a suit, action or proceeding questioning the validity of such lease ordinance can be commenced, as provided in the Local Bond Law, has begun to run from the date of the first publication of this statement. Copies of the lease ordinance are available at no cost at the Municipal Clerk's Office, 61 Cooke Avenue, Carteret, NJ for members of the general public who request the same. The summary of the terms of such lease ordinance follows:

Title: AN ORDINANCE OF THE BOROUGH OF CARTERET, IN THE COUNTY OF MIDDLESEX, STATE OF NEW JERSEY, APPROVING AND AUTHORIZING THE ENTERING INTO, EXECUTION AND DELIVERY OF A LEASE AND AGREEMENT WITH THE MIDDLESEX COUNTY IMPROVEMENT AUTHORITY RELATING TO THE ISSUANCE OF COUNTY-GUARANTEED CAPITAL EQUIPMENT AND IMPROVEMENT REVENUE BONDS, SERIES 2021 OF THE MIDDLESEX COUNTY IMPROVEMENT AUTHORITY

Purpose(s): Lease police vehicles (described in Exhibit A below) from and approve the entering into of a lease agreement with the Middlesex County Improvement Authority

Appropriation: \$250,000

Bonds/Notes Authorized: N/A (Bonds will be issued by the Middlesex County Improvement Authority to finance the acquisition of the police vehicles.)

Grant Appropriated: None

Section 20 Costs: N/A

Useful Life: N/A (Lease term is 5 years)

Carmelo Pogorzelski, Municipal Clerk
Exhibit A
Middlesex County Improvement Authority
2021 Capital Equipment and Improvement Financing Program
Project List
Carteret Borough

Project	Est. Cost	Useful Life
FIVE-YEAR PROJECTS		
Lease		
None	\$0.00	5 Years
Subtotal	\$0.00	
Lease		
Police Vehicles	\$250,000.00	5 Years
Subtotal	\$250,000.00	
Five Year Project Subtotal:	\$250,000.00	
Loan Total:	\$0.00	
Lease Total:	\$250,000.00	
Total Borrowing:	\$250,000.00	

09/01/2021 \$225.40



**Teaneck
Tid-Bits de
Elie Y. Katz**



Elie Y. Katz, Alcalde de Teaneck
Katz07666@gmail.com

Unidos para Teaneck

Presenta:

**MES DE LA
HERENCIA
HISPANA
PINTADA
DE MURAL**

Para ser voluntario por favor comuníquese con

ldepaz@teanecknj.gov

**iSÍ SE
PUEDE!**

**Domingo, Septiembre 19
a las 2:30 PM**

Richard Rodda Center - Parking Lot
250 Colonial Court
Teaneck, NJ 07666



**La Autoridad Portuaria de Nueva York y Nueva Jersey
(The Port Authority of New York & New Jersey)
AVISO DE DISPONIBILIDAD - PLAN PRELIMINAR DEL PROGRAMA
DE COMPATIBILIDAD DE RUIDO y
AVISO DE TALLER INFORMATIVO PÚBLICO y
AUDIENCIA PÚBLICA VIRTUAL
Título 14 del Código de Reglamentos Federales Parte 150
(14 CFR Parte 150)**

**Estudio de planificación de compatibilidad de ruido de aeropuertos
para el Aeropuerto Teterboro**

En conformidad con los requisitos de 14 CFR Parte 150 para el Aeropuerto Teterboro (TEB) y como parte de un Estudio continuo de planificación de compatibilidad de ruido de aeropuertos (Estudio Parte 150), la Autoridad Portuaria de Nueva York y Nueva Jersey (PANYNJ, por sus siglas en inglés) ha completado el Plan preliminar del Programa de compatibilidad de ruido (NCP, por sus siglas en inglés). Por medio del presente se informa que el documento del Plan preliminar de TEB NCP está disponible en línea en: http://panynjpart150.com/TEB_DNCP.asp del 1 de septiembre de 2021 al 15 de octubre de 2021.

Los comentarios escritos sobre el Plan preliminar de TEB NCP deben enviarse a: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. Adicionalmente los comentarios se pueden enviar por correo electrónico a NJPART150@panynj.gov. **Todos los comentarios deben tener el sello postal a más tardar el 15 de octubre de 2021.**

**TALLER Y AUDIENCIA PÚBLICA VIRTUALES DE INFORMACIÓN
PÚBLICA Y SOBRE EL PLAN PRELIMINAR DE NCP**

Se proveerá información y se dará al público la oportunidad de hacer comentarios sobre el Plan preliminar de TEB NCP a través de un Taller informativo público virtual y una Audiencia pública virtual.

Taller informativo público virtual:

FECHA: Jueves, 30 de septiembre de 2021

HORARIO: 5:00 a 6:30 p.m.

Audiencia pública virtual:

FECHA: Jueves, 30 de septiembre de 2021

HORARIO: 7:00 a 9:00 p.m.

Registro para el Taller y la Audiencia de TEB: drafttebnpc.eventbrite.com.

ARREGLO: El Taller virtual de información pública y la Audiencia pública virtual se llevarán a cabo a través de la plataforma Zoom y se grabarán para propósitos de registro.

REGISTRO ANTICIPADO REQUERIDO: Es obligatorio registrarse anticipadamente para obtener la información de cómo conectarse al taller y a la audiencia y para todas las personas que deseen hacer comentarios verbales durante la audiencia pública virtual. Si no tiene acceso a Internet y desea participar, por favor llame a la Oficina de Ruido de la Autoridad Portuaria al (212) 435-3777 para registrarse y recibir información de acceso al taller y a la audiencia. La Audiencia pública cerrará únicamente después de que todas las personas registradas para hablar hayan tenido la oportunidad de hacerlo.

CONTENIDO: El Taller informativo público iniciará con una presentación que incluirá información referente al proceso 14 CFR Parte 150 y detalles sobre el abatimiento del ruido, uso de terrenos y medidas recomendadas de la administración del programa en el Plan preliminar de TEB NCP. Los asistentes al taller podrán hacer preguntas y participar con el Equipo del Proyecto. Durante la Audiencia pública, el público tendrá la oportunidad de dar sus comentarios verbales sobre el Plan preliminar de NCP. Un estenógrafo grabará todos los comentarios y los incluirá en los documentos Finales de NCP. Cada orador tendrá el mismo límite de tiempo para hablar, lo cual será de 1 a 3 minutos, dependiendo del número de oradores registrados al inicio de la audiencia.

Todos los comentarios (verbales y escritos) junto con las respuestas desarrolladas por el PANYNJ se incluirán en el TEB NCP Final y serán considerados por la Administración Federal de Aviación (FAA) en su proceso de toma de decisiones con respecto a las medidas recomendadas de la Autoridad Portuaria contenidas en el TEB NCP Final.

La presentación del Taller informativo público estará disponible el 28 de septiembre de 2021 en el sitio web del proyecto http://panynjpart150.com/TEB_DNCP.asp.

Con solicitud previa por escrito al PANYNJ a la dirección indicada anteriormente, se proporcionará una copia impresa, CD-ROM o flash drive del documento del Plan preliminar de TEB NCP y de la presentación del taller a quienes indiquen específicamente que no tienen una computadora o acceso a Internet.

Hay disponibles servicios de interpretación al español, coreano y lenguaje americano de señas para el taller y la audiencia con solicitud anticipada. Para hacer arreglos de dichos servicios, comuníquese a la Oficina de Ruido de PANYNJ a NJPART150@panynj.gov o al (212) 435-3777 a más tardar el 23 de septiembre de 2021.

Para obtener más información acerca del estudio TEB Parte 150, sírvase visitar el sitio web del proyecto: http://www.panynjpart150.com/TEB_homepage.asp

Adapt

Continued from Page 8

tific issues nor scientific experts; rather, they configure them as a subsidiary body of knowledge and expertise to be mobilized as an ancillary, impersonal institution useful for legitimizing the expansion of political jurisdiction over the governance of the emergency."

Political assertions are far from the same thing as saying that these measures always work. Certainly, school closures and lockdowns are to be avoided at all costs, because the physical, psychological and economic devastation have been shown throughout the pandemic to way outweigh the limited benefit in terms of viral control.

When it comes to masks, and even more so to vaccines, the benefits are real and the risks or downsides are small. In these cases, government mandates may seem purely political, but so are autonomous refusals falsely described as personal choice.

After all, taking the vaccine not only means you are less likely to get very ill or go to the hospital, it also definitely decreases your risk of spreading the virus to others, which makes it a public health concern.

Businesses and schools have every right to request a vaccination or proof of immunity, or to institute regular rapid testing.

Better to identify and screen contacts as opposed to having to close businesses or quarantine entire classrooms. Of course, we must keep in mind that now with delta, vaccination is by no means

an assurance that a person is free from carrying COVID.

It is clear from many studies that the way to keep schools open is with widespread vaccination, testing, masking, distancing (3 feet) and proper ventilation. Closing schools because of your child's right to refuse to wear a mask makes as little sense as forcing masks on little kids who can't tolerate them.

Resisting a government mandate is just as politically dogmatic as blindly following it.

The public health reality here is simple, even if the politics are complex.

I was reminded of it this week when I heard from a dear friend of mine in south Texas. He's a great internist who provides service at nursing homes and hospitals and in the office. He is overweight and over 60, and he had the Moderna shot more than six months ago.

Two weeks ago, he contracted COVID. He told me he has been encountering many unvaccinated people without masks from both sides of the border and they are spreading it.

My friend got very sick, despite the vaccine, suffering a high fever, extreme fatigue and a decreased oxygen saturation. He said that if it weren't for the vaccine, he would have ended up on a ventilator. He managed to stay out of the hospital, barely, and wished he had had a booster.

You can do everything right and still get sick, which is all the more reason not to do everything wrong. Not because the government tells you, but because it is the right thing to do.

The playing field is changing, the goal posts are moving, and we must move along with them.



Taking the vaccine not only means you are less likely to get very ill or go to the hospital, it also definitely decreases your risk of spreading the virus to others, which makes it a public health concern. DAMON HIGGINS/THE PALM BEACH POST

The Port Authority of New York & New Jersey NOTICE OF AVAILABILITY – DRAFT NOISE COMPATIBILITY PROGRAM and NOTICE OF VIRTUAL PUBLIC INFORMATION WORKSHOP and PUBLIC HEARING Title 14 of the Code of Federal Regulations Part 150 (14 CFR Part 150) Airport Noise Compatibility Planning Study for Teterboro Airport

As part of an on-going Airport Noise Compatibility Planning Study (Part 150 Study), the Port Authority of New York & New Jersey (Port Authority) has completed the Draft Noise Compatibility Program (NCP) pursuant to the requirements of 14 CFR Part 150 for Teterboro Airport (TEB). Notice hereby is given that the Draft TEB NCP document is available online at: http://panynjpart150.com/TEB_DNCP.asp from September 1, 2021 to October 15, 2021.

Written comments on the Draft TEB NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. In addition, comments may be emailed to NJPART150@panynj.gov. All comments must be postmarked by October 15, 2021.

VIRTUAL PUBLIC INFORMATION WORKSHOP AND PUBLIC HEARING ON THE DRAFT NCP

Information and an opportunity to comment on the Draft TEB NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

Virtual Public Information Workshop:

DATE: Thursday, September 30, 2021

TIME: 5:00 P.M. – 6:30 P.M.

Virtual Public Hearing:

DATE: Thursday, September 30, 2021

TIME: 7:00 P.M. – 9:00 P.M.

Registration for the TEB Workshop and Hearing: drafttebnpc.eventbrite.com.

FORMAT: The Virtual Public Information Workshop and the Virtual Public Hearing will be conducted online via the Zoom platform and will be recorded for record keeping purposes.

ADVANCE REGISTRATION REQUIRED: Advance registration is required to obtain workshop and hearing log-in information and for all who wish to make oral comments during the virtual public hearing. If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The Public Hearing will close only after all registered speakers have had the opportunity to speak.

CONTENT: The virtual Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on noise abatement, land use, and program management measures recommended in the Draft TEB NCP. Workshop attendees will be able to ask questions and engage with the Project Team. During the virtual Public Hearing, the public will have an opportunity to provide oral comments on the Draft NCP document. All comments will be recorded by a stenographer and included in the Final NCP documents. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes depending on the number of speakers registered at the start of the hearing.

All comments (written and oral) along with responses developed by the PANYNJ will be included in the Final TEB NCP and will be considered by the Federal Aviation Administration (FAA) in their decision-making process on the Port Authority-recommended measures contained in the Final TEB NCP.

The Public Information Workshop presentation will be available on September 28, 2021 on the project website http://panynjpart150.com/TEB_DNCP.asp.

Upon written request to the PANYNJ at the address provided above, a hard copy, CD-ROM, or flash drive of the Draft TEB NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Spanish, Korean and American Sign Language interpretation services are available for the workshop and hearing upon advance request. To make arrangements for such services, contact the PANYNJ Noise Office at NJPART150@panynj.gov or at (212) 435-3777 no later than September 23, 2021.

For more information about the TEB Part 150 study please visit the project website at: http://www.panynjpart150.com/TEB_homepage.asp

NJ GOCOR TEB Virtual Public Workshop and Hearing Notices

Good morning:

This email is to notify you that the Port Authority of New York and New Jersey (Port Authority) has completed the Draft Noise Compatibility Program (NCP), pursuant to the requirements of 14 CFR Part 150, for Teterboro Airport (TEB). The Port Authority will be holding one Virtual Public Information Workshop and one Virtual Public Hearing on **Thursday, September 30, 2021**, to present the Draft TEB NCP and receive comments and feedback from the public and stakeholders.

Draft TEB NCP Document and Comment Period

The Draft TEB NCP is available online at: http://panynjpart150.com/TEB_DNCP.asp from September 1, 2021, through the close of the comment period on October 15, 2021.

Written comments on the Draft TEB NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. In addition, comments may be emailed to NJPART150@panynj.gov. **All comments must be postmarked by October 15, 2021.**

Virtual Public Information Workshop and Virtual Public Hearing on the Draft NCP

Information and an opportunity to comment on the Draft TEB NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

Virtual Public Information Workshop:

DATE: Thursday, September 30, 2021

TIME: 5:00 P.M. – 6:30 P.M.

Virtual Public Hearing:

DATE: Thursday, September 30, 2021

TIME: 7:00 P.M. – 9:00 P.M.

Registration for the TEB Workshop and Hearing: drafttebncp.eventbrite.com.

Format

The Virtual Public Information Workshop and the Virtual Public Hearing will be conducted online via the Zoom platform and will be recorded for record keeping purposes.

Advance Registration Required

Advance registration is required to obtain workshop and hearing log-in information and for all who wish to make oral comments during the Virtual Public Hearing. If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The Virtual Public Hearing will close only after all registered speakers have had the opportunity to speak.

Content

The Virtual Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on noise abatement, land use, and program management measures recommended in the Draft TEB NCP. Workshop attendees



will be able to ask questions and engage with the Project Team. During the Virtual Public Hearing, the public will have an opportunity to provide oral comments on the Draft NCP document. All comments will be recorded by a stenographer and included in the Final NCP documents. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes, depending on the number of speakers registered at the start of the hearing.

All comments (written and oral), along with responses developed by the Port Authority, will be included in the Final TEB NCP and will be considered by the Federal Aviation Administration (FAA) in their decision-making process on the Port Authority-recommended measures contained in the Final TEB NCP.

The Public Information Workshop presentation will be available on September 28, 2021, on the project website http://panynjpart150.com/TEB_DNCP.asp.

Upon written request to the Port Authority at the address provided above, a hardcopy, CD-ROM, or flash drive of the Draft TEB NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Language Assistance

Spanish, Korean, and American Sign Language interpretation services are available for the Virtual Public Information Workshop and Public Hearing upon advance request. To make arrangements for such services, contact the Port Authority Noise Office at NJPART150@panynj.gov or at (212) 435-3777 no later than September 23, 2021.

For more information about the Virtual Public Information Workshop and Public Hearing and/or the TEB Part 150 study, please contact Ayo Olanipekun at (212) 435-3880 or aolanipekun@panynj.gov, or visit the project website at: http://www.panynjpart150.com/TEB_homepage.asp

TEB TAC Member Email Notification

Dear Teterboro Airport Part 150 TAC Member:

We are pleased to announce that the Draft Noise Compatibility Program (NCP) for Teterboro Airport (TEB) will be available online at: http://panynjpart150.com/TEB_DNCP.asp from **September 1, 2021 through October 15, 2021** for public review and comment.

Written comments on the Draft TEB NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. In addition, comments may be emailed to NJPART150@panynj.gov. **All comments must be postmarked by October 15, 2021.**

Virtual Public Information Workshop and Virtual Public Hearing on the Draft NCP

Information and an opportunity to comment on the Draft TEB NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

Virtual Public Information Workshop:

DATE: Thursday, September 30, 2021

TIME: 5:00 P.M. – 6:30 P.M.

Virtual Public Hearing:

DATE: Thursday, September 30, 2021

TIME: 7:00 P.M. – 9:00 P.M.

Registration for the TEB Workshop and Hearing: drafttebncp.eventbrite.com.

Format

The Virtual Public Information Workshop and the Virtual Public Hearing will be conducted online via the Zoom platform and will be recorded for record keeping purposes.

Advance Registration is Required

Advance registration is required to obtain workshop and hearing log-in information and for all who wish to make oral comments during the virtual public hearing. If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The public hearing will close only after all registered speakers have had the opportunity to speak.

Content

The Virtual Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on noise abatement, land use, and program management measures recommended in the Draft TEB NCP. Workshop attendees will be able to ask questions and engage with the Project Team. During the Virtual Public Hearing, the public will have an opportunity to provide oral comments on the Draft NCP document. All comments will be recorded by a stenographer and included in the Final NCP documents. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes, depending on the number of speakers registered at the start of the hearing.

The Public Information Workshop presentation will be available on September 28, 2021, on the project website http://panynjpart150.com/TEB_DNCP.asp.

Upon written request to the Port Authority at the address provided above, a hard copy, CD-ROM, or flash drive of the Draft TEB NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Language Assistance

Spanish, Korean, and American Sign Language interpretation services are available for the workshop and hearing upon advance request. To make arrangements for such services, contact the PANYNJ Noise Office at NJPART150@panynj.gov or at (212) 435-3777 no later than September 23, 2021.

As TAC members, we hope that you can attend and participate in the Virtual Public Workshop and Hearing. We have attached a workshop flyer in English, Spanish and Korean. We hope you will distribute the flyer to other parties and organizations that may have an interest in the Draft TEB NCP.

We thank you for your continued support on this project. If you have any questions or need additional information, please contact Ayo Olanipekun at aolanipekun@panynj.gov or 212.435.3754. For more information about the TEB Part 150 study please visit the project website at: http://www.panynjpart150.com/TEB_homepage.asp

Thank you!



YOU ARE INVITED TO ATTEND

Teterboro Airport

Virtual Public Information Workshop and Public Hearing

14 CFR Part 150 Airport Noise and Land Use Compatibility Planning Study





As part of the on-going Airport Noise Compatibility Planning Study (Part 150 Study), the Port Authority of New York and New Jersey (Port Authority) has completed the Draft Noise Compatibility Program (NCP) for Teterboro Airport (TEB) pursuant to the requirements of 14 CFR Part 150. Notice hereby is given that the Draft TEB NCP is available online at: http://panynjpart150.com/TEB_DNCP.asp from September 1, 2021 through October 15, 2021.

Written comments on the Draft TEB NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. In addition, comments may be emailed to NJPART150@panynj.gov. All comments must be postmarked by October 15, 2021.

VIRTUAL PUBLIC INFORMATION WORKSHOP AND PUBLIC HEARING ON THE DRAFT NCP

Information and an opportunity to comment on the Draft TEB NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

VIRTUAL WORKSHOP AND HEARING FORMAT

	Thursday, September 30, 2021	The Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on the noise abatement, land use, and program management measures recommended in the Draft NCP. Workshop attendees will be able to ask questions and engage with the Project Team.
	Virtual Public Information Workshop 5:00 P.M. – 6:30 P.M. (30-minute intermission) Virtual Public Hearing: 7:00 P.M. – 9:00 P.M.	During the Public Hearing, the public will have an opportunity to provide oral comments on the Draft NCP. All comments will be recorded by a stenographer. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes depending on the number of speakers registered at the start of the hearing. The Public Hearing will close only after all registered speakers have had the opportunity to speak.
	Online via the Zoom Platform Advance Registration is Required drafttebnpc.eventbrite.com	All comments (written and oral) along with responses developed by the Port Authority will be included in the Final NCP and will be considered by FAA in their decision-making process on the Port Authority-recommended measures contained in the Final NCP.
	For participants without internet access: If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The Public Hearing will close only after all registered speakers have had the opportunity to speak.	Upon written request to the Port Authority at the address provided above, a hardcopy, CD-ROM, or flash drive of the Draft TEB NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Spanish, Korean, and American Sign Language interpretation services are available for the workshop and hearing upon advance request. To make arrangements for such services, contact the Port Authority Noise Office at NJPART150@panynj.gov or at (212) 435-3777 no later than September 23, 2021.

Want to find out more information?

Please visit: http://panynjpart150.com/TEB_homepage.asp
 The TEB Draft NCP is available at:
http://panynjpart150.com/TEB_DNCP.asp

Can't attend the workshop or hearing but want to provide input?

Please email: NJPART150@panynj.gov.
 All comments must be **postmarked by**
October 15, 2021.

Questions about the workshop or hearing?

Contact the Port Authority Noise Office
 Email: NJPART150@panynj.gov
 Call: 212-435-3777

SE LE INVITA A ASISTIR

Aeropuerto Teterboro

Taller informativo público y audiencia pública virtuales

Estudio de planificación de compatibilidad de ruido de aeropuertos y uso de terrenos 14 CFR Parte 150





En conformidad con los requisitos de 14 CFR Parte 150 y como parte del Estudio continuo de planificación de compatibilidad de ruido de aeropuertos (Estudio Parte 150), la Autoridad Portuaria de Nueva York y Nueva Jersey (Autoridad Portuaria) ha completado el Plan preliminar del Programa de compatibilidad de ruido (NCP, por sus siglas en inglés) del Aeropuerto Teterboro (TEB). Por medio del presente se informa que el Plan preliminar de NCP de TEB está disponible en línea en: http://panynjpart150.com/TEB_DNCP.asp del 1 de septiembre de 2021 al 15 de octubre de 2021.

Los comentarios escritos sobre el Plan preliminar de NCP de TEB deben enviarse a: The Port Authority of New York and New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. Adicionalmente, los comentarios se pueden enviar a NJPART150@panynj.gov. Todos los comentarios deben tener el sello postal a más tardar el 15 de octubre de 2021.

TALLER INFORMATIVO PÚBLICO Y AUDIENCIA PÚBLICA VIRTUALES SOBRE EL PLAN PRELIMINAR DE NCP

Se proveerá información y se dará al público la oportunidad de hacer comentarios sobre el Plan preliminar de NCP de TEB a través de un Taller informativo público y una Audiencia pública virtuales.

FORMATO VIRTUAL DE TALLER Y AUDIENCIA

	Jueves 30 de septiembre de 2021	El Taller informativo público iniciará con una presentación con información referente al proceso 14 CFR Parte 150 y detalles sobre el abatimiento del ruido, uso de terrenos y medidas recomendadas de la administración del programa en el Plan preliminar de NCP. Los asistentes al taller podrán hacer preguntas y participar con el Equipo del Proyecto.
	Taller informativo público virtual 5:00 a 6:30 p.m. (intermedio de 30 minutos) Audiencia pública virtual: 7:00 a 9:00 p.m.	Durante la Audiencia pública, el público tendrá la oportunidad de dar sus comentarios verbales sobre el Plan preliminar de NCP. Un estenógrafo grabará todos los comentarios. Cada orador tendrá el mismo límite de tiempo para hablar, lo cual será de 1 a 3 minutos, dependiendo del número de oradores registrados al inicio de la audiencia. La Audiencia pública cerrará únicamente después de que todas las personas registradas para hablar hayan tenido la oportunidad de hacerlo.
	En línea a través de la plataforma Zoom Debe de registrarse con anticipación drafttebnpc.eventbrite.com	Todos los comentarios (verbales y escritos), junto con las respuestas desarrolladas por la Autoridad Portuaria, se incluirán en el NCP Final y serán considerados por la FAA en su proceso de toma de decisiones sobre las medidas recomendadas de la Autoridad Portuaria contenidas en el NCP Final.
	Para los participantes sin acceso a Internet: Si no tiene acceso a Internet y desea participar, por favor llame a la Oficina de Ruido de la Autoridad Portuaria al (212) 435-3777 para registrarse y recibir información de acceso al taller y a la audiencia. La Audiencia pública cerrará únicamente después de que todas las personas registradas para hablar hayan tenido la oportunidad de hacerlo.	Con solicitud previa por escrito a la Autoridad Portuaria a la dirección indicada anteriormente, se proporcionará una copia impresa, CD-ROM o flash drive del documento del Plan preliminar de NCP de TEB y de la presentación del taller a quienes indiquen específicamente que no tienen una computadora o acceso a Internet.

Habrán disponibles servicios de interpretación al español, coreano y lenguaje americano de señas para el taller y la audiencia con solicitud anticipada. Para hacer arreglos para dichos servicios, comuníquese a la Oficina de ruido de la Autoridad Portuaria a NJPART150@panynj.gov o al (212) 435-3777 a más tardar el 30 de septiembre de 2021.

¿Quiere obtener más información?

Visite: http://panynjpart150.com/TEB_homepage.asp
 El NCP del Plan preliminar de TEB está disponible en: http://panynjpart150.com/TEB_DNCP.asp

¿No puede asistir al taller o a la audiencia pero quiere dar su opinión?

Envíe un mensaje electrónico a: NJPART150@panynj.gov.
 Todos los comentarios deben tener **fecha marcada a más tardar el 15 de octubre de 2021.**

¿Tiene preguntas sobre el taller o la audiencia?

Comuníquese a la Oficina de Ruido de la Autoridad Portuaria
 Correo electrónico: NJPART150@panynj.gov
 Llame al: 212-435-3777

여러분을 초대합니다

테터보로 공항

비대면 온라인 공공정보 워크숍 및 공청회

미국연방규정집(CFR) 제14권 제150부 소음방지 및 토지사용 계획 연구





Port Authority of New York & New Jersey(Port Authority)에서는 미국연방규정집 제14권 제150부에 의거하여 계속 진행 중인 테터보로(TEB) 소음방지계획 연구(제150부 연구)의 일환으로, 동 규정의 요구사항에 따라 공항소음방지 프로그램(NCP) 초안 작성을 테터보로(TEB) 공항소음방지 프로그램(NCP) 초안본은 2021년 9월 1일부터 2021년 10월 15일까지 http://panynipart150.com/TEB_DNCP.asp 에서 온라인으로 보실 수 있습니다.

공항소음방지 프로그램(NCP) 초안을 살펴보고 의견을 주시려면 서면 형태로 다음 주소로 발송해 주시기 바랍니다. The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, 수신인: Ayo Olanipekun. 또한 이메일로 작성해 NJPART150@panynj.gov 로 보내 주셔도 됩니다. 우편으로 보내시려면 늦어도 2021년 10월 15일까지는 소인이 찍혀야 합니다.

공항소음방지 프로그램(NCP) 초안에 관한 비대면 온라인 공공정보 워크숍 및 공청회

주민 여러분께 테터보로(TEB) 공항소음방지 프로그램(NCP) 초안에 관해 설명드리고 귀한 의견을 듣는 기회의 장이 될 워크숍과 공청회를 온라인 공간에서 비대면으로 개최할 예정입니다.

비대면 온라인 워크숍 및 공청회 진행 방식

	2021년 9월 30일 목요일	공공정보 워크숍에서는 CFR 제14권 제150부 프로세스 안내와 더불어 공항소음방지 프로그램(NCP) 초안에서 권고하는 소음저감, 토지사용 및 프로그램 관리방안의 상세 내용을 담은 프레젠테이션이 첫 부분에 진행됩니다. 워크숍에 참가해서 질문을 하거나 프로젝트 팀과 직접 소통하실 수 있습니다.
	비대면 온라인 공공정보 워크숍 오후 5:00 ~ 오후 6:30 (중간 휴식 30분) 비대면 온라인 공청회: 오후 7:00 ~ 오후 9:00	금번 공청회에서는 공항소음방지 프로그램(NCP) 초안본에 관해 주민 여러분이 의견을 발언하실 시간이 마련됩니다. 모든 의견은 속기록으로 기록됩니다. 발언을 신청한 인원 수에 따라 1인당 발언 시간이 1~3분 범위에서 동일하게 정해집니다. 공청회는 참가등록한 모든 분들께 발언 기회가 돌아간 후에 마칠 예정입니다.
	Zoom 플랫폼상에서 온라인으로 진행 사전 등록 필요 drafttebnpc.eventbrite.com	들려 주신 모든 의견(서면·구두)과 Port Authority에서 준비한 답변을 공항소음방지 프로그램(NCP) 최종본에 반영하면, 연방항공청(FAA)에서 이 최종본을 검토한 후 여기에 수록된 PANYNJ 측 권고사항에 관한 의사결정을 내릴 계획입니다.
	인터넷 접속이 불가능한 경우: 인터넷에 접속할 수 없는 상황에서도 참가를 원하시면 Port Authority 소음관리국에 전화 (212) 435-3777로 연락하셔서 참가등록을 한 후 워크숍과 공청회 참가 방법을 안내받으시기 바랍니다.	컴퓨터나 인터넷이 없어서 참가하기 곤란한 분들은 Port Authority에 상기 주소로 서면 요청을 하시면 해당 초안본과 워크숍 프레젠테이션 자료를 CD-ROM 또는 USB 드라이브로 제공해 드리겠습니다.

스페인어, 한국어 통역과 미국 수어로 워크숍과 공청회를 청취하시려면 사전에 해당 서비스를 요청하시기 바랍니다. 통역 서비스가 필요한 경우, 워크숍 개최 시간으로부터 늦어도 2021년 9월 23일까지 Port Authority 소음관리국에 이메일 NJPART150@panynj.gov 또는 전화 (212) 435-3777로 연락해 요청하시기 바랍니다.

자세한 정보를 알아보려면?

관련 정보: http://panynipart150.com/TEB_homepage.asp

테터보로(TEB) 공항소음방지 프로그램(NCP) 초안본:

http://panynipart150.com/TEB_DNCP.asp

워크숍에 참석할 수는 없지만 의견을 제출하고 싶다면?

이메일 NJPART150@panynj.gov 로 문의. 우편은

2021년 10월 15일까지는 소인이 찍혀야 함.

워크숍이나 청문회에 관한 문의사항이 있다면?

Port Authority 소음관리국 이메일

NJPART150@panynj.gov 전화: 212-435-3777

TEB TAC Member Email Reminder – Sent on September 24, 2021

Dear Teterboro Airport Part 150 TAC Member:

The Virtual Public Information Workshop and Hearing for the Teterboro Airport Draft Noise Compatibility Program (NCP) will be taking place on **Thursday, September 30, 2021**. Please see below for information on how to access to the Draft NCP, register for the workshop and hearing, and make official project comments.

Teterboro Airport Draft NCP

The Draft Noise Compatibility Program (NCP) for Teterboro Airport (TEB) is available online at: http://panynipart150.com/TEB_DNCP.asp from **September 1, 2021 through October 15, 2021** for public review and comment.

Written comments on the Draft TEB NCP should be sent to: The Port Authority of New York & New Jersey, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007, Attn: Ayo Olanipekun. In addition, comments may be emailed to NJPART150@panynj.gov. **All comments must be postmarked by October 15, 2021.**

Virtual Public Information Workshop and Virtual Public Hearing on the Draft NCP

Information and an opportunity to comment on the Draft TEB NCP will be provided to the public through one Virtual Public Information Workshop and one Virtual Public Hearing.

Virtual Public Information Workshop:

DATE: Thursday, September 30, 2021

TIME: 5:00 P.M. – 6:30 P.M.

Virtual Public Hearing:

DATE: Thursday, September 30, 2021

TIME: 7:00 P.M. – 9:00 P.M.

Registration for the TEB Workshop and Hearing: drafttebnpc.eventbrite.com.

Format

The Virtual Public Information Workshop and the Virtual Public Hearing will be conducted online via the Zoom platform.

Advance Registration is Required

Advance registration is required to obtain workshop and hearing log-in information and for all who wish to make oral comments during the virtual public hearing. If you do not have internet access and wish to participate, please call the Port Authority Noise Office at (212) 435-3777 to register and to receive workshop and hearing access information. The public hearing will close only after all registered speakers have had the opportunity to speak.



Content

The Virtual Public Information Workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process and details on noise abatement, land use, and program management measures recommended in the Draft TEB NCP. Workshop attendees will be able to ask questions and engage with the Project Team. During the Virtual Public Hearing, the public will have an opportunity to provide oral comments on the Draft NCP document. All comments will be recorded by a stenographer and included in the Final NCP documents. Each speaker will be granted the same time limit to speak, which will be 1 to 3 minutes, depending on the number of speakers registered at the start of the hearing.

The Public Information Workshop presentation will be available on September 28, 2021, on the project website http://panynipart150.com/TEB_DNCP.asp.

Upon written request to the Port Authority at the address provided above, a hard copy, CD-ROM, or flash drive of the Draft TEB NCP document and workshop presentation will be provided for those who specifically indicate that they do not have a computer or access to the internet.

Language Assistance

Spanish, Korean, and American Sign Language interpretation services are available for the workshop and hearing upon advance request. To make arrangements for such services, contact the PANYNJ Noise Office at NJPART150@panynj.gov or at (212) 435-3777.

We thank you for your continued support on this project. If you have any questions or need additional information, please contact Ayo Olanipekun at aolanipekun@panynj.gov or 212.435.3754. For more information about the TEB Part 150 study please visit the project website at: http://www.panynipart150.com/TEB_homepage.asp

Thank you!



TEB Part 150 Website – Materials available



Notice on the Bergen County Website.



**Virtual Public Information Workshops & Public Hearings - 14 CFR Part 150
Airport Noise & Land Use Compatibility Study**



[English](#)
[Spanish](#)
[Portuguese](#)



[English](#)
[Spanish](#)
[Korean](#)



**14 CFR Part 150 Study
Teterboro Airport
Draft Noise Compatibility Program**

COMMENT FORM

Please use the space below to provide your question(s) and/or comments regarding the Draft 14 CFR Part 150 Noise Compatibility Program (NCP) for Teterboro Airport (TEB), or any other matter related to the TEB Part 150 Study. Any questions or comments you provide will be included and addressed in the Final NCP submission to the FAA. If you wish to receive future project updates, please provide your contact information below.


Name:		Organization:	
Street Address:	City:	State:	Zip:
Tel:	Email:		

Completed comment forms and other questions may be sent to:
The Port Authority of NY & NJ, 4 World Trade Center, 150 Greenwich Street, 18th Floor, New York, NY 10007
Attn: Ayo O. Olanipekun
Or emailed to:
NJPart150@panynj.gov

Please note: All comments must be **postmarked by October 15, 2021**, to be included and addressed in the Final TEB NCP. Comments can only be accepted with the full name and address of the individual commenting. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information – may be made publicly-available at any time. While you can ask within your comment to have your personal information withheld from public review, that request cannot be guaranteed.

THANK YOU FOR YOUR PARTICIPATION







Virtual Public Information Workshop

Noise Compatibility Planning Study

Title 14 of the Code of Federal Regulations Part 150
Teterboro Airport
September 30, 2021



TEB Part 150 Study | Public Information Workshop #3



Welcome!

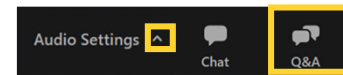
- A pre-recorded video will be followed by a question-and-answer session
- Written questions can be submitted via the Q&A and will be answered by members of the Study Team
- Any question submitted during this workshop *will not* be included as part of the official project record

Zoom Webinar Instructions



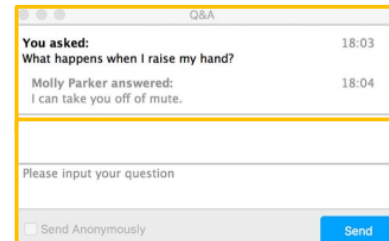
Communicate with the meeting host via the “Q&A” function to:

- Ask the Study Team a question
- Ask for technical support



Check or change your audio settings:

- Click the up arrow to view settings and change your audio output



3

For **technical support**, use the **Q&A** function

For more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp



Making Official Project Comments

All comments must be postmarked by **October 15, 2021**



Go to drafttebnpc.Eventbrite.com to register to speak at tonight's Virtual Public Hearing at 7:00 p.m.



Email comments to NJPart150@panynj.gov



Mail comments to:

The Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007
Attn: Ayo Olanipekun

4

For **technical support**, use the **Q&A** function

For more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp



Project Video

- Placeholder for project video

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Today's Q&A and Official Comments

All comments must be postmarked by **October 15, 2021**

Asking Questions Today:

- Click on the "Q&A" button at the bottom of the screen and type your question
- The moderator will read questions in the order in which they were received, and Study Team members will provide responses
- Please keep questions on topic
- Please use respectful language
- Questions received during this workshop *will not* be included in the official public record

Making Official Comments:

- Go to drafttebncp.Eventbrite.com to register as a speaker at tonight's Virtual Public Hearing at 7:00 p.m.
- Email comments to NJPart150@panynj.gov
- Mail comments to:
The Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007
Attn: Ayo Olanipekun

6

For technical support, use the **Q&A** function

For more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp



PORT
AUTHORITY
NY NJ

We will return shortly

We are awaiting additional questions

To ask a question:

Click on the Q&A button at the bottom of your screen and begin typing

AIR LAND RAIL SEA

Making Official Project Comments

All comments must be postmarked by **October 15, 2021**



Go to drafttebnpc.Eventbrite.com to register to speak at tonight's Virtual Public Hearing at 7:00 p.m.



Email comments to NJPart150@panynj.gov



Mail comments to:

The Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007
Attn: Ayo Olanipekun

**PORT
AUTHORITY
NY NJ**

Thank you!

We will return at 7:00 p.m. for the TEB Draft NCP
Virtual Public Hearing

To register for tonight's hearing:

Go to drafttebnpc.Eventbrite.com

AIR LAND RAIL SEA



Public Information Workshop

Noise Compatibility Planning Study

Title 14 of the Code of Federal Regulations Part 150

Teterboro Airport

September 30, 2021

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TEB Part 150 Study | Public Information Workshop #3



Airport Noise Compatibility Planning Part 150 Overview

- Federal Aviation Administration (FAA) developed the voluntary Part 150 Program in response to the federal Aviation Safety and Noise Abatement Act of 1979 (“ASNA”)
 - Codified under Title 14 of the Code of Federal Regulations (CFR) Part 150
 - Provides airports access to FAA funding for noise compatibility measures
 - Includes a comprehensive public engagement process

2

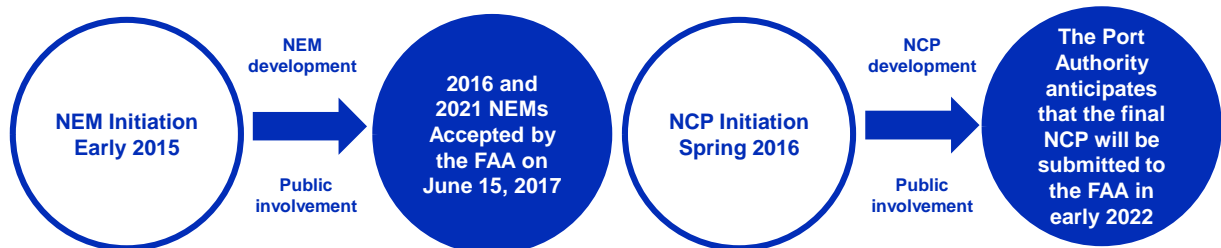


See Draft NCP Document Section 1.3

TEB Part 150 Study | Public Information Workshop #3



Teterboro Airport Part 150 Study Timeline



Upon receipt of the FAA's Record of Approval (ROA) for this NCP, the Port Authority may begin implementation of FAA-approved program measures and apply for federal financial assistance to support implementation of eligible FAA-approved NCP measures at TEB.

3



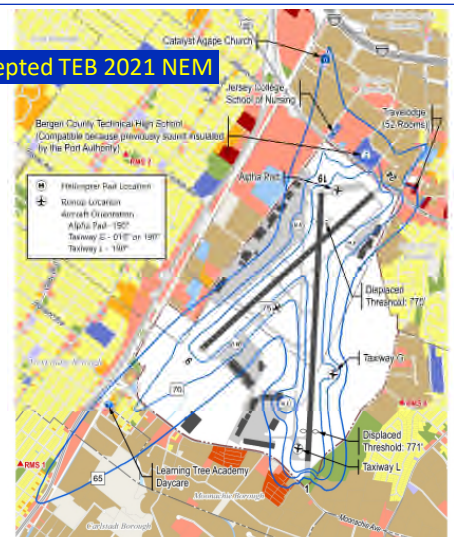
TEB Part 150 Study | Public Information Workshop #3



Airport Noise Compatibility Planning Part 150

- Two primary components
 1. Noise Exposure Map (NEM)
 - Aircraft noise exposure
 - Land use compatibility
 2. Noise Compatibility Program (NCP)
 - Measures to improve land use compatibility including:
 - Noise abatement measures
 - Land use (noise mitigation) measures
 - Program management measures

FAA-Accepted TEB 2021 NEM



4



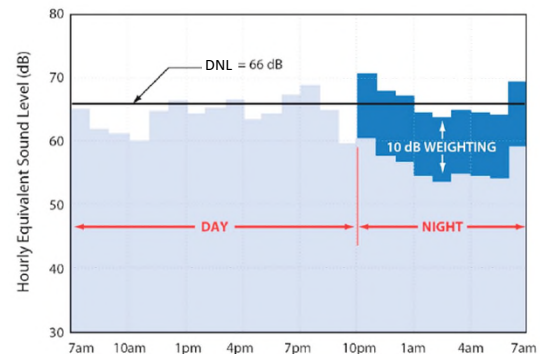
See Draft NCP Document Section 1.3

TEB Part 150 Study | Public Information Workshop #3



Day-Night Average Sound Level (DNL)

- The Day-Night Average Sound Level (DNL) represents the noise energy present during a 24-hour period
- Weighting is applied to noise events occurring at night (10:00 P.M. to 7:00 A.M), with an additional 10 dB added to the actual nighttime sound level to reflect the greater sensitivity to noise at night
- DNL is drawn on maps in terms of lines connecting points of the same decibel.
- The FAA has set 65 DNL as the threshold of compatible noise exposure for noise sensitive land uses



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See Draft NCP Document Section 1.5

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Airport Noise Compatibility Planning Process

Develop Study Protocol

- Finalize methodology
- Establish TAC
- Develop project schedule and milestones

Verification

- Existing Noise Exposure Maps & EA's
- Noise complaint data
- GIS and land use data
- Flight track and noise data from ANOMS
- FAA activity forecasts

Develop NEMs

- Develop noise contours for existing and 5-year forecast conditions
- Collect land use data and policies
- Noise impact evaluation for DNL 65-75 dB
- Prepare maps in accordance with 14 CFR Part 150

Develop NCPs

- Identify land use strategies
- Evaluate noise abatement measures
- Develop Noise Compatibility Plan
- Prepare documentation

Meetings

- Technical Advisory Committee
- Part 150 Information Sessions
- Public Meetings/Hearings
- Special Presentations

6



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Airport Noise Compatibility Planning Roles and Responsibilities

- **The Port Authority of New York and New Jersey**
 - Directs Study as the project sponsor
 - Submits NEM and NCP documentation to FAA
- **FAA**
 - Provides input to, reviews and assists with analysis of noise abatement flight procedures
 - “Accepts” NEM and NCP documentation and “approves” NCP measures
 - Responsible for implementation of noise abatement flight procedures at the sponsor’s request
 - Assists in funding eligible measures in all three categories
- **Local governments**
 - Provide input to recommended land use measures
 - Implement and enforce land use measures to maintain and improve noise compatibility
- **All stakeholders, including aviation interests, residents, and other interested parties**
 - Monitor study process, provide input, assist with implementation

7



See Draft NCP Document Section 1.4

TEB Part 150 Study | Public Information Workshop #3



Airport Noise Compatibility Planning Technical Advisory Committee (TAC)

- The TAC has an advisory role to the Port Authority
- Members include:
 - Key agencies; e.g., Port Authority, FAA, AvPORTS
 - Local land use jurisdictions; e.g., Bergen County
 - Airport tenants and users; e.g., fixed base operators (FBOs), NetJets, etc.
 - Aviation trade associations; e.g., National Business Aviation Association (NBAA), Aircraft Owners and Pilots Association (AOPA),
 - Established advisory bodies; e.g., Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC), Teterboro Users Group (TUG)
 - Newark Liberty International Airport (EWR) Noise/Community Roundtable



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See Draft NCP Document Section 1.4

TEB Part 150 Study | Public Information Workshop #3



Noise Compatibility Program Development Process

Step 1: Identify Noncompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Strategies

Reduce exposure over noncompatible uses
Limit growth in exposure over noncompatible uses

Step 3: Consider Land Use Strategies

Mitigate residual noncompatible uses
Prevent introduction of new noncompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

Noise Compatibility Program Development Process

Step 1: Identify Noncompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

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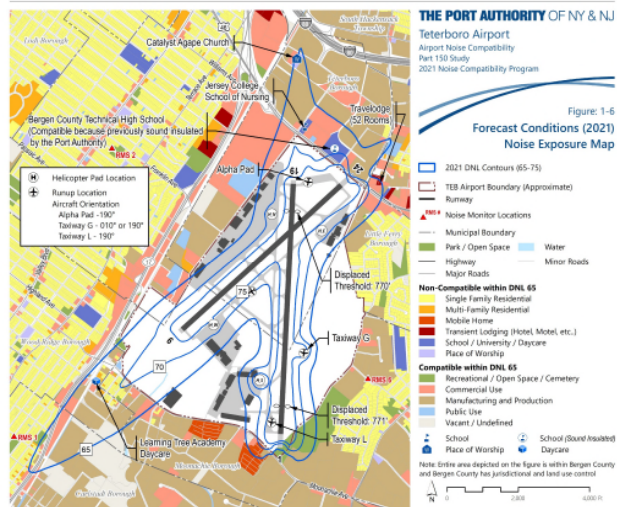
Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

Noise Compatibility Program Development Process – Step 1

- Noncompatible land uses per 2021 Noise Exposure Map
 - 196 residential units
 - 475 people
 - 2 schools
 - 1 place of worship
 - 1 daycare

Note: One (1) school has been soundproofed as part of the School Soundproofing Program and is compatible



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See Draft NCP Document Section 1.7

TEB Part 150 Study | Public Information Workshop #3



Noise Compatibility Program Development Process – Step 2

- Consider noise abatement strategies
 - Reduce noise at the source or in the path of the noise to the receiver
 - Cockpit procedures, flight paths, runway use, noise barriers, etc.
- Port Authority considered 19 noise abatement strategies
- Port Authority is recommending 16 measures for implementation
 - 9 Existing measures
 - 7 New measures

11



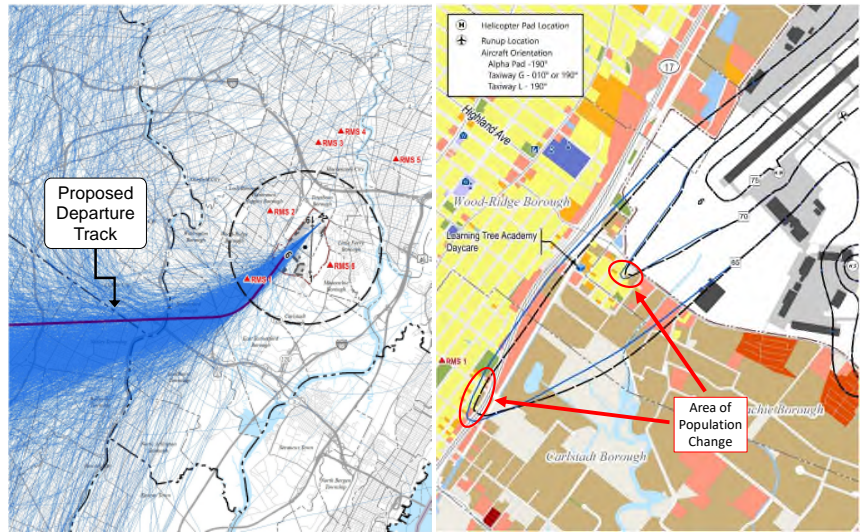
See Draft NCP Document Chapter 2

TEB Part 150 Study | Public Information Workshop #3



NA-1: Implement a Runway 24 Departure Turn to 230 degrees at Night

- Aircraft turn left to a heading of 230 degrees after takeoff, then turn to 280 degrees
- Potential reduction of 17 people in 7 dwelling units exposed to 65 DNL or higher with 50% use of the procedure at night



12



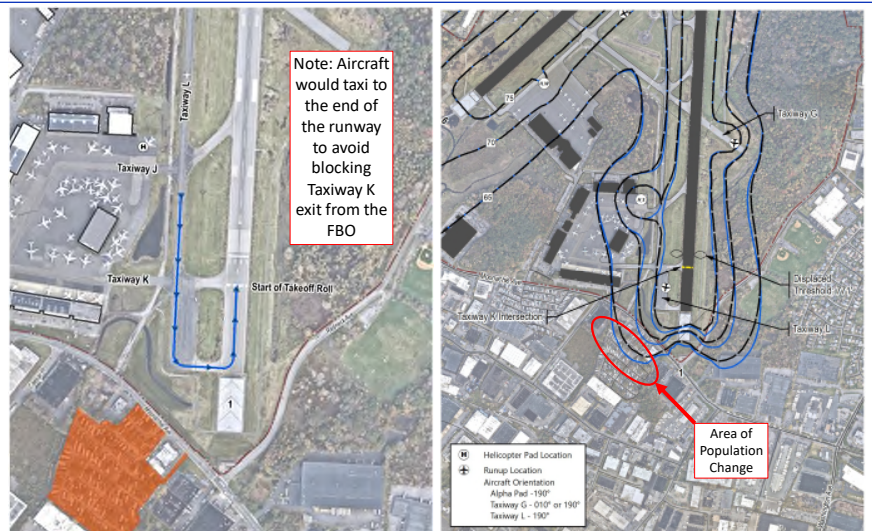
See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



NA-2: Encourage Intersection Departures from Taxiway K on Runway 1 at Night

- Aircraft would enter from the end of the runway, then proceed to Taxiway K before starting takeoff roll
- Potential reduction of 56 people in 23 dwelling units exposed to 65 DNL or higher with 80% use at night



13



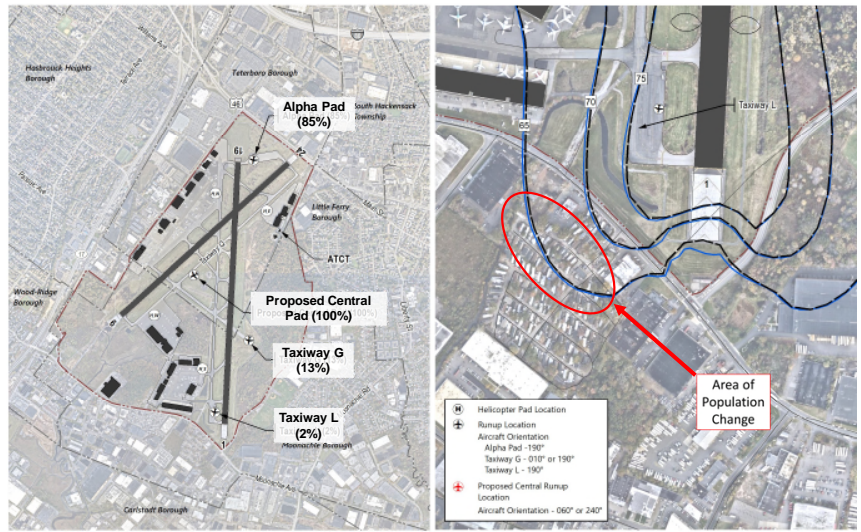
See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



NA-3: Design and Implement a Centralized Aircraft Run-up Pad

- Relocation of all aircraft maintenance run-ups to a new centralized run-up pad adjacent to Taxiway Q
- Potential reduction of up to 13 people in 5 dwelling units exposed to 65 DNL or higher



14



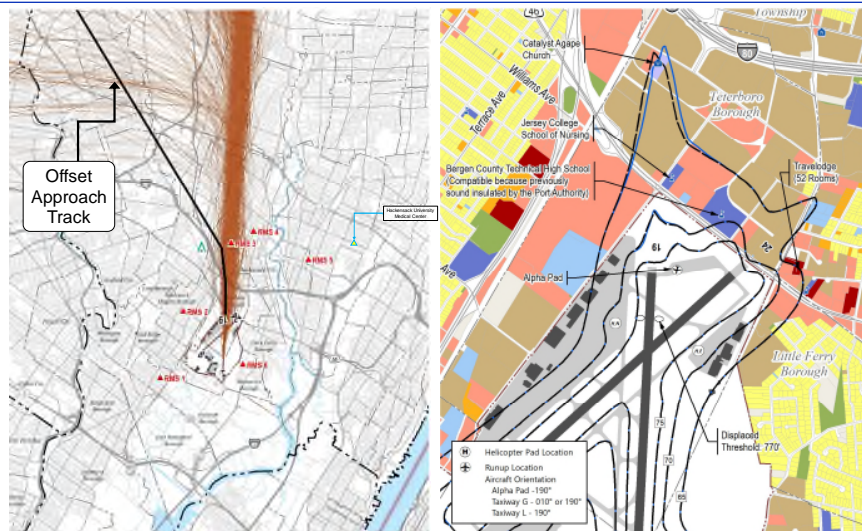
See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



NA-4: Implement an Offset Approach Procedure to Runway 19

- The procedure could reduce the number of overflights of Hackensack University Medical Center
- No reduction of people or dwelling units exposed to 65 DNL or higher with 50% use
- A version of this Measure has been implemented by the FAA



15



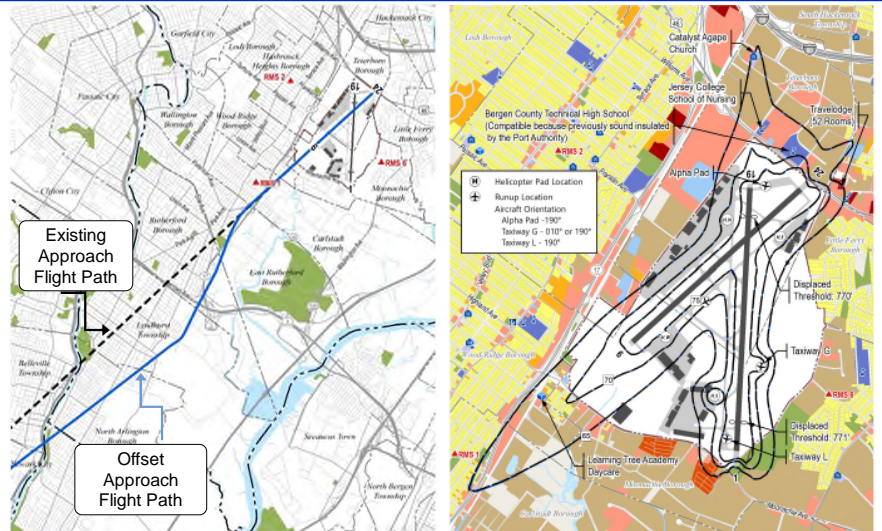
See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



NA-5: Implement an Offset Approach Procedure to Runway 6

- The procedure could reduce the number of overflights of Lyndhurst and Rutherford
- No reduction of people or dwelling units exposed to 65 DNL or higher with 100% use



16



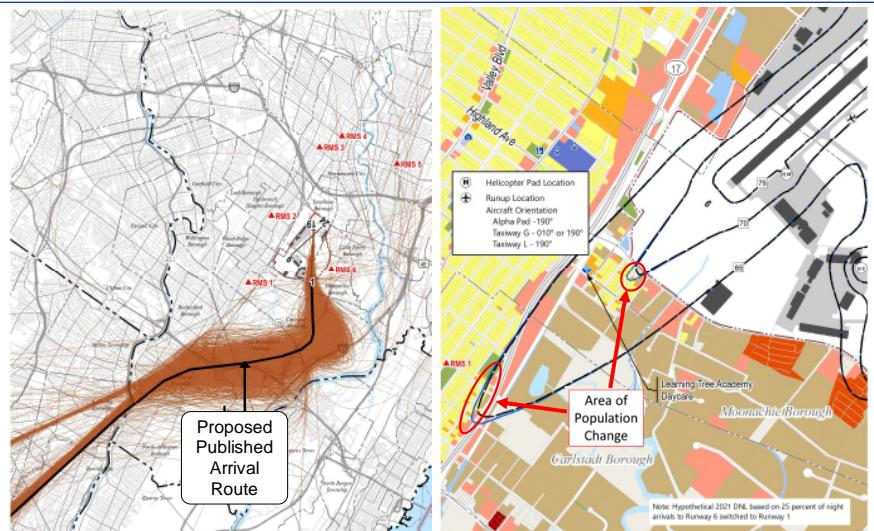
See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



NA-6: Implement a Published Approach Procedure to Runway 1

- Aircraft currently use the Runway 6 approach and turn east to line up with Runway 1 (shift 25% of arrivals at night)
- Potential reduction of up to 17 people in 7 dwelling units exposed to 65 DNL or higher



17



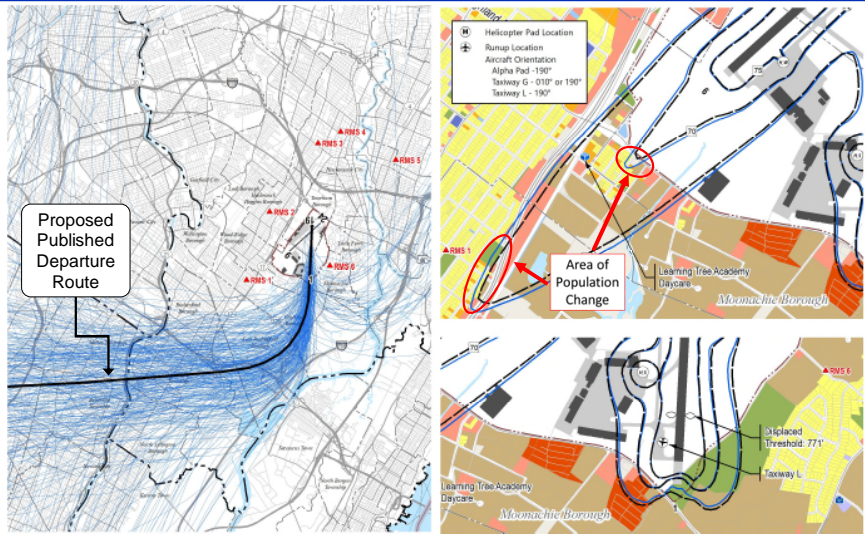
See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



NA-7: Implement a Published Departure Procedure from Runway 19

- Depart Runway 19 turning to 280 degrees (remain at or below 1,300 ft) then climb when clear of EWR arrivals
- Reduction of up to 5 people in 2 dwelling units exposed to 65 DNL or higher 1



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See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



Noise Abatement Measures Recommended – Existing

- NA-8: Existing Mandatory Permission to Operate Jet Aircraft
- NA-9: Existing Mandatory Noise Limits
- NA-10: Existing Mandatory Aircraft Maintenance Run-Up Restrictions
- NA-11: Existing Voluntary Restraint from Operations between 11:00 p.m. and 6:00 a.m.
- NA-12: Existing Voluntary Preferential Runway Use at Night
- NA-13: Existing Voluntary Encouragement of the Use of National Business Aviation Association (NBAA) Noise Abatement Departure Procedures (NADP)
- NA-14: Existing Voluntary Restraint from the Use of Reverse Thrust
- NA-15: Existing Voluntary IFR and VFR Approach and Landing Procedures to Runway 1 at Night
- NA-16: Existing Voluntary Helicopter Routes

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See Draft NCP Document Section 2.2

TEB Part 150 Study | Public Information Workshop #3



Noise Abatement Strategies Considered Not Recommended

- Construct a new North-South Runway
 - Reason to not recommend
 - Would disrupt airfield operations
 - Would potentially expose new areas of noncompatible land uses to 65 DNL
 - Potential environmental effect on nearby wetlands
 - Cost
- Increase Night Departures from Runway 6
 - Reason to not recommend
 - Would expose new areas of noncompatible land uses to 65 DNL north of Runway 24
- Noise Barriers
 - Reason to not recommend
 - Obstruction restrictions
 - To be effective, noise barriers must be close to the noise source or the structure



Noise Barrier



Noise Berm



Ineffective Noise Barrier

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See Draft NCP Document Section 2.3

TEB Part 150 Study | Public Information Workshop #3



Noise Compatibility Program Development Process – Step 3

- Consider land use strategies
 - Mitigate residual noncompatible uses
 - Prevent introduction of new noncompatible uses
- Port Authority considered nine (9) land use strategies
- Port Authority is recommending four (4) measures for implementation:
 - Three (3) corrective mitigation measures
 - One (1) preventive mitigation measures

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See Draft NCP Document Chapter 3

TEB Part 150 Study | Public Information Workshop #3



LU-1: Acquire Noncompatible Residential Parcels

- The Port Authority has identified one parcel for potential acquisition (a mobile home park with approximately 200 units) south of Runway 1
 - While this parcel is eligible for acquisition, the Port Authority has not determined whether it would acquire this parcel at this time



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See Draft NCP Document Section 3.2

TEB Part 150 Study | Public Information Workshop #3



LU-2 and LU-3: Sound Insulate Eligible Structures (2 measures)

- Provide sound insulation treatment to:
 - Eligible dwelling units
 - Eligible non-residential noise-sensitive structures
- Sound insulation treatments include:
 - Windows
 - Doors
 - Caulking
 - Weather stripping
 - Positive ventilation

Depending on availability of program funding and construction schedules, LU-2 & LU-3 may take many years to complete

An aviation easement (or right of overflight in the airspace above a particular property) will be required

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See Draft NCP Document Section 3.2

TEB Part 150 Study | Public Information Workshop #3



Eligibility for Sound Insulation Treatments

- Parcel within the 65 DNL contour
- Structure constructed prior to June 15, 2017
- Adherence to local building codes



Residential Structures

- Average noise level in habitable rooms at or above 45 DNL

Non-Residential Noise-Sensitive Structures

- Average noise level in habitable rooms at or above 45 dB based on the hours of use

Note: If the average interior noise level is less than 45 dB, the structure may be eligible to receive positive ventilation

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See Draft NCP Document Section 3.2

TEB Part 150 Study | Public Information Workshop #3



Eligibility for Sound Insulation Treatments

- Parcel within the 65 DNL contour
- Structure constructed prior to June 15, 2017
- Adherence to local building codes



Residential Structures

- Average noise level in habitable rooms at or above 45 DNL

Non-Residential Noise-Sensitive Structures

- Average noise level in habitable rooms at or above 45 dB based on the hours of use

Note: If the average interior noise level is less than 45 dB, the structure may be eligible to receive positive ventilation

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See Draft NCP Document Section 3.2

TEB Part 150 Study | Public Information Workshop #3



LU-4: Assistance with Establishing Airport Noise Overlay Zones

- Airport overlay zones are intended to prevent noncompatible land uses from being developed near the Airport
 - Neither Port Authority nor FAA have control over land uses
- Port Authority could support the local jurisdictions' desire to establish an airport noise overlay zone
- Local land use jurisdictions that expressed interest include:
 - New Jersey Sports and Exposition Authority
 - Bergen County
 - City of Hackensack
 - Borough of East Rutherford
 - Borough of Hasbrouck Heights
 - Borough of Little Ferry
 - Township of South Hackensack
 - Borough of Teterboro

The Port Authority will respond promptly to any requests by jurisdictions for assistance in evaluating potential preventive land use measures

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See Draft NCP Document Section 3.2

TEB Part 150 Study | Public Information Workshop #3



Land Use Strategies Considered Not Recommended

- Acquire avigation easements
- Implement cooperative land use agreements
- Raise minimum building standards
- Implement rezoning of land uses
- Include airport aircraft noise real estate disclosures

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See Draft NCP Document Section 3.4

TEB Part 150 Study | Public Information Workshop #3



Noise Compatibility Program Development Process – Step 4

- Consider program management strategies
 - Implement and promote measures
 - Monitor and report on effectiveness
 - Update NEMs and revise NCP as appropriate
- Port Authority considered 14 program management strategies
- Port Authority is recommending 13 measures for implementation

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See Draft NCP Document Chapter 4

TEB Part 150 Study | Public Information Workshop #3



Program Management Measures Recommended – Existing

- PM-1: Maintain Noise Office
- PM-2: Maintain Noise and Operations Management System (NOMS)
- PM-3: Maintain public flight tracking portal
- PM-4: Maintain noise complaint management system
- PM-5: Maintain Noise Office website
- PM-6: Continue community outreach activities

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See Draft NCP Document Section 4.2

TEB Part 150 Study | Public Information Workshop #3



Program Management Measures Recommended - New

- PM-7: Establish a community planners forum
- PM-8: Establish a Fly Quiet Program
- PM-9: Make aircraft noise contours available in geographic information system (GIS)
- PM-10: Update the Noise Exposure Map
- PM-11: Update the Noise Compatibility Program
- PM-12: Update Airfield Noise Abatement Program Signage
- PM-13: Coordinate with the FAA on development and implementation of NextGen procedures



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See Draft NCP Document Section 4.2

TEB Part 150 Study | Public Information Workshop #3



Program Management Measures Recommended - New

- PM-7: Establish a community planners forum
- PM-8: Establish a Fly Quiet Program
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- PM-12: Update Airfield Noise Abatement Program Signage
- PM-13: Coordinate with the FAA on development and implementation of NextGen procedures



29



See Draft NCP Document Section 4.2

TEB Part 150 Study | Public Information Workshop #3



Program Management Strategy Considered Not Recommended

- Incentivize a Quieter Aircraft Fleet
 - Reasons to not recommend
 - Changes in Federal regulations over time have resulted in a quieter fleet at Teterboro Airport
 - Due to the diverse nature of the Teterboro Airport fleet additional measures would not be administratively feasible

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See Draft NCP Document Section 4.3

TEB Part 150 Study | Public Information Workshop #3



Airport Noise Compatibility Planning Consultation, Engagement and Outreach

- Port Authority:
 - Consulted with
 - All local, state, and federal entities with land use control within DNL 65+ dB
 - FAA regional officials
 - Regular aeronautical users of the airport
 - All interested parties in review of and comment on draft items
 - Engaged with the Technical Advisory Committee at 14 meetings
 - Reached out to the public with three workshops and hearing on the recommended Noise Compatibility Program

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See Draft NCP Document Chapter 5

TEB Part 150 Study | Public Information Workshop #3



Measure Initiation Plan

Measures to be Initiated within One Year of FAA Record of Approval*

TEB Noise Abatement Measure 1: Implement a Runway 24 Departure Turn to 230 degrees at Night
TEB Noise Abatement Measure 2: Encourage Intersection Departures from Taxiway K on Runway 1 at Night

TEB Noise Abatement Measure 5: Implement an Offset Approach Procedure to Runway 6

TEB Noise Abatement Measure 6: Implement a Published Approach Procedure to Runway 1 and Increase Usage at Night

TEB Noise Abatement Measure 7: Implement a Published Departure Procedure from Runway 19

TEB Land Use Measure 4: Port Authority Assistance with Establishing an Airport Overlay Zone

TEB Program Management Measure 7: Establish a Community Planners Forum

TEB Program Management Measure 8: Establish a Fly Quiet Program

Measures to be Initiated within Two Years of FAA Record of Approval*

TEB Noise Abatement Measure 3: Design and Implement a Centralized Aircraft Run-up Pad

TEB Program Management Measure 12: Update Airfield Noise Abatement Program Signage

Measures without Identified Timeline/Schedule Dependent Upon External Factors/Pandemic Recovery

TEB Land Use Measure 1: Acquire Noncompatible Residential Parcels

TEB Land Use Measure 2: Sound Insulate Eligible Dwelling Units

TEB Land Use Measure 3: Sound Insulate Eligible Non-Residential Noise-Sensitive Structures

TEB Program Management Measure 10: Update the Noise Exposure Map

TEB Program Management Measure 11: Update the Noise Compatibility Program

** Date is tentative and subject to change*

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See Draft NCP Document Appendix H

TEB Part 150 Study | Public Information Workshop #3



Next Steps

- Comments collected through October 15, 2021
- Final Noise Compatibility Program Report
 - Will include public comments and responses
 - Submission to FAA – Early 2022*
- FAA will have 180 days to review
- FAA will issue Record of Approval
- Port Authority will release the Final Noise Compatibility Program Report

** Date is tentative and subject to change*

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TEB Part 150 Study | Public Information Workshop #3





Virtual Public Hearing

Noise Compatibility Planning Study

Title 14 of the Code of Federal Regulations Part 150
Teterboro Airport
September 30, 2021



TEB Part 150 Study | Virtual Public Hearing



Welcome!

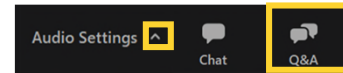
- Opening remarks will be followed by oral comments for the project record
- Oral comments will be accepted during the comment period from pre-registered participants
- You can register to speak anytime via the Q&A until 9:00 p.m.
- This hearing is being recorded for Port Authority record keeping purposes only

Zoom Webinar Instructions



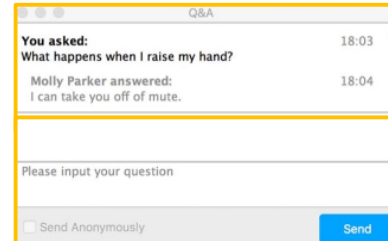
Communicate with the meeting host via the “Q&A” function to:

- Register to provide oral comments
- Ask for technical support



Check or change your audio settings:

- Click the up arrow to view settings and change your audio output



3

For **technical support**, use the **Q&A** function

For more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp



Commenting Later

All comments must be postmarked by **October 15, 2021**



Email comments to:
NJPart150@panynj.gov



Mail comments to:
***The Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007
Attn: Ayo Olanipekun***

4

For **technical support**, use the **Q&A** function

For more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp



Commenting Today

If you registered to provide an oral comment:

- The moderator will call your name in the order of registration
- Elected officials will speak first
- When your name is called, your microphone will be unmuted
- You will have 3 minutes to comment
- Please use respectful language

If you DID NOT register to provide an oral comment:

- You may request to provide an oral comment once the meeting has begun through the Q&A function until 9:00 p.m.
- Once all pre-registered speakers have made their statements, those who have requested to speak via Q&A will be called

5

For **technical support**, use the **Q&A** functionFor more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp

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NJPart150@panynj.gov



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The Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007
Attn: Ayo Olanipekun

6

For **technical support**, use the **Q&A** functionFor more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp

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If you registered to provide an oral comment:

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7

For technical support, use the **Q&A** functionFor more information about the TEB Part 150 Study, visit panynjpart150/TEB_homepage.asp

Speaker Time Remaining



**PORT
AUTHORITY
NY NJ**

We will return shortly

We are awaiting registered speakers

To register to provide oral comments:

Click on the Q&A button at the bottom of your screen
and type your request

AIR LAND RAIL SEA

Thank you for Attending

All comments must be postmarked by **October 15, 2021**



Email comments to:
NJPart150@panynj.gov



Mail comments to:
***The Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007
Attn: Ayo Olanipekun***

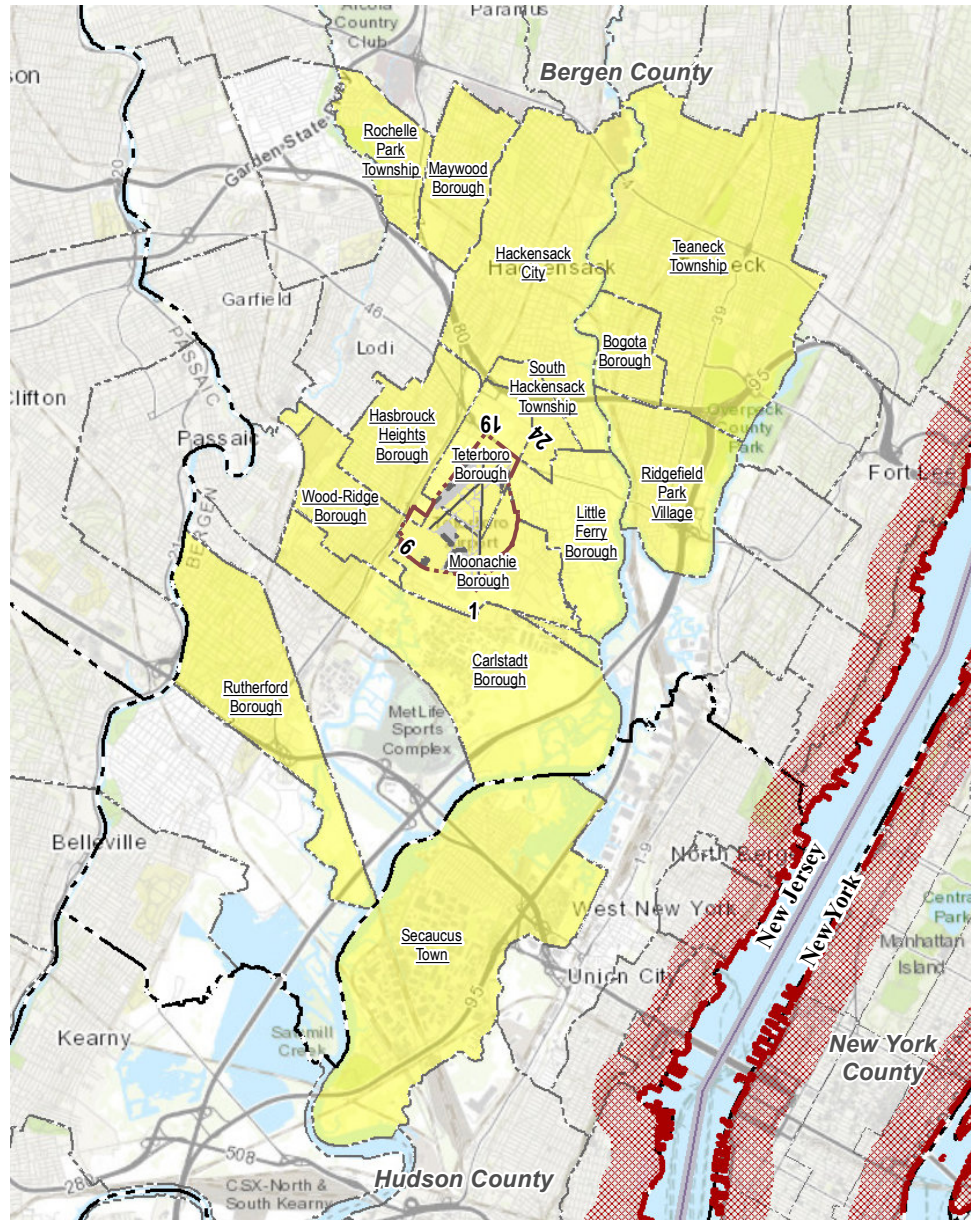
Appendix E.2

TANAAC Meetings

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The Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC) was established in February 1987. Its main purpose is to maintain meaningful ongoing dialogue between the airport community and the residential communities surrounding TEB, and to oversee noise abatement, while insuring the safe and efficient operation of the airport. TANAAC is comprised of the airport operator, federal, state, and local elected officials, FAA representatives, airport users, and representatives of 15 municipalities surrounding the airport as shown in Figure E-1.

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THE PORT AUTHORITY OF NY & NJ

Teterboro Airport

Airport Noise Compatibility
Part 150 Study
2021 Noise Compatibility Program

Figure: E-1
TANAAC Towns

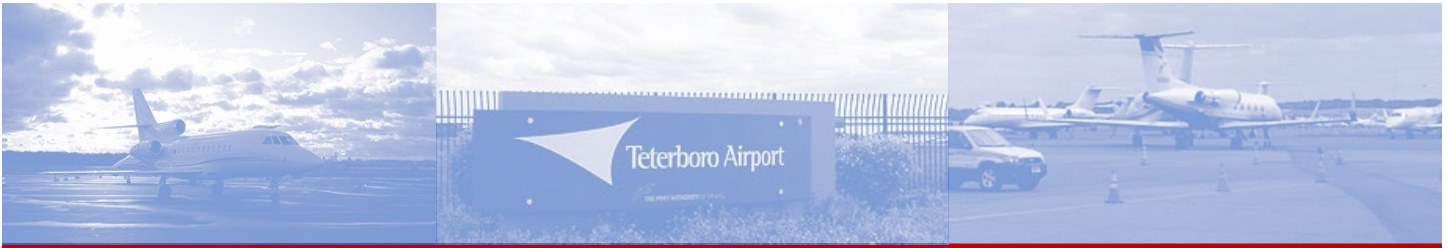
- TEB Airport Boundary (Approximate)
- Runway
- Extent of Municipal Boundaries within TEB Study Area
- TANAAC Member Towns
- State Boundary
- Municipal Boundary
- County Boundary
- Park / Open Space
- Water
- Highway
- Minor Roads
- Major Roads



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Welcome!

Teterboro Airport

14 CFR Part 150 Noise Compatibility Study

Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC) Briefing

July 27, 2016

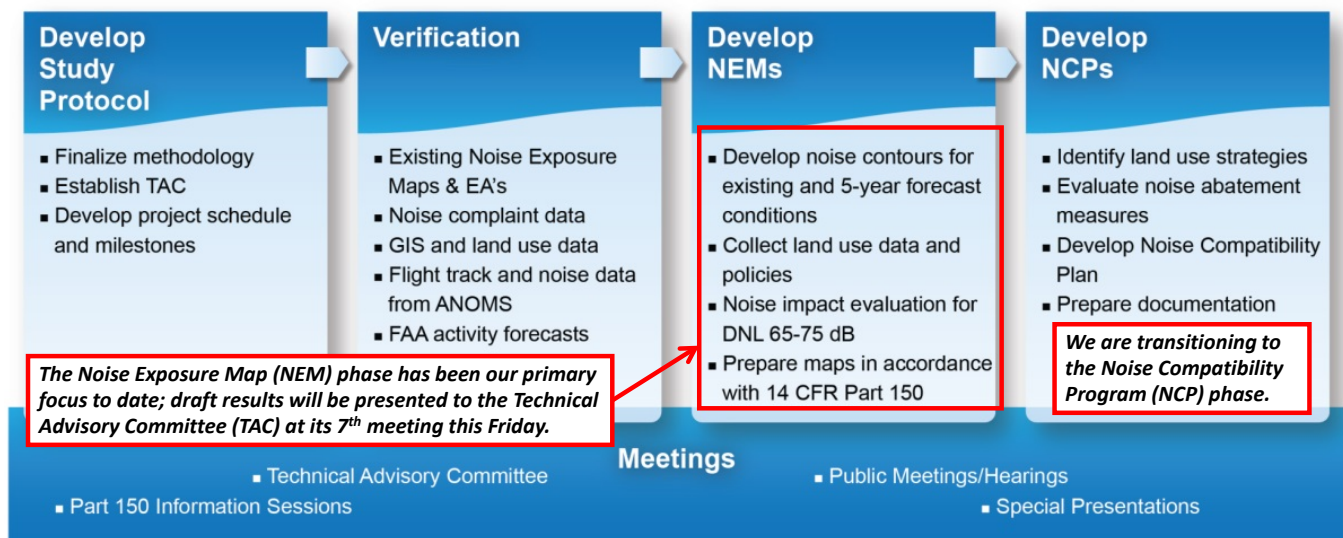
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TANAAC Presentation - July 27, 2016

THE PORT AUTHORITY OF NY & NJ

Refresher on Generalized Part 150 Study Process



2



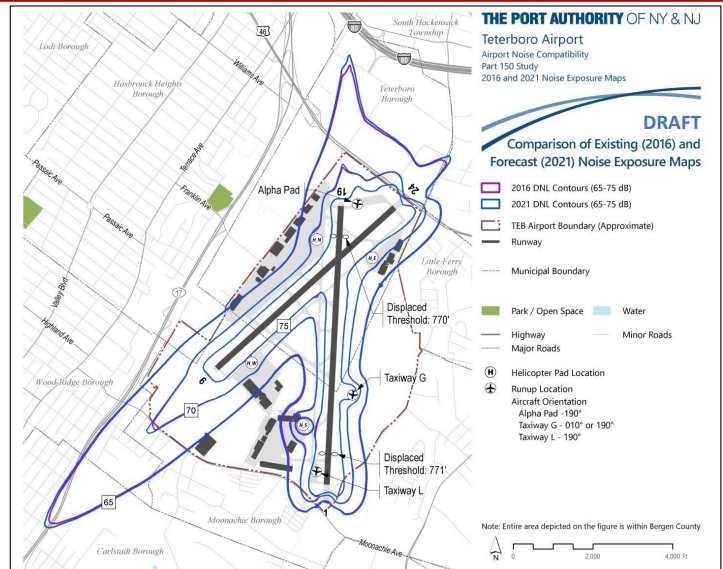
TANAAC Presentation - July 27, 2016

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Comparison of Draft 2016 and 2021 DNL Contours

- 2021 contours are slightly larger than those for 2016
- Slight extensions in 2021, relative to 2016, off both ends of Runway 6/24 and the north end of 1/19
 - Associated with 9% increase in activity
- Detailed information on the noise modeling process, inputs, and data sources was presented at the first 6 TAC meetings, as summarized at:
 - http://panynjpart150.com/TEB_TAC.asp



3

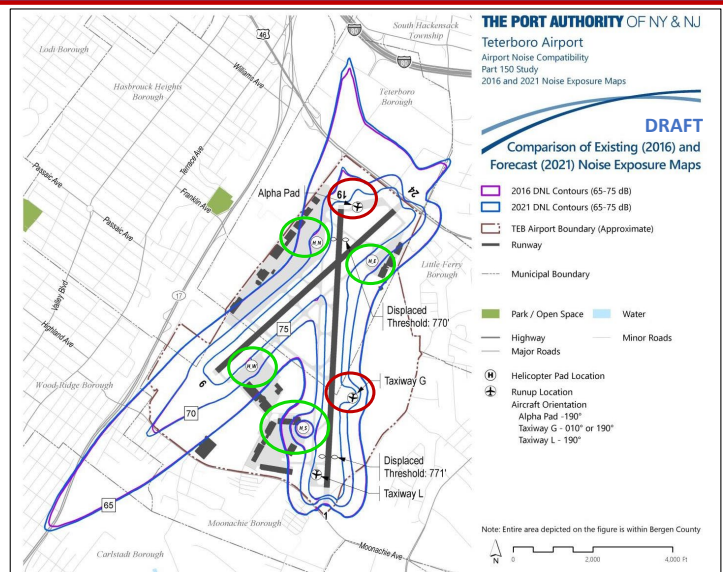


TANAAC Presentation - July 27, 2016

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Contributions to Draft 2016 and 2021 DNL Contours

- Fixed-wing landings and takeoffs account for the distinct shape of the contours
 - Contours generally in line with extended runway centerlines
- There are some on-airport effects from:
 - **Maintenance runups (effect at two major locations only)**
 - **Helicopter operations**



4



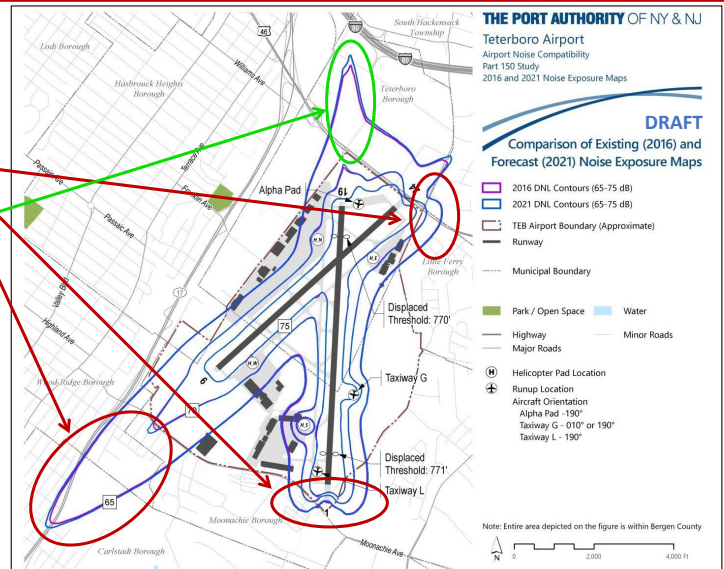
TANAAC Presentation - July 27, 2016

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We will present land use analyses to the TAC this Friday

- Residential land use is anticipated within the contours off both ends of 6/24 and the south end of 1/19
 - None off the north end of 1/19
- A small number of other sensitive receptors (school, church, etc.) are also expected
- Join us at Friday's TAC or check out the study website next week to see the results!**



5



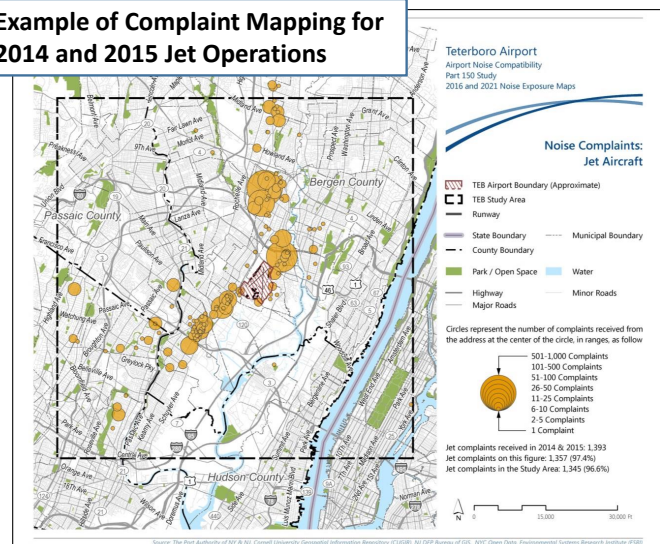
TANAAC Presentation - July 27, 2016

THE PORT AUTHORITY OF NY & NJ

We have been considering complaints

- The TAC has expressed interest in complaints to supplement noise contours in identifying noise issues to address in the NCP phase
- We provided plots for jet, propeller, helicopter, and "unspecified" operations at the 6th TAC
 - See: http://panynipart150.com/TEB_TAC.asp
- The TAC requested day and night breakdowns
 - We will present them to the TAC on Friday; come and see them!**

Example of Complaint Mapping for 2014 and 2015 Jet Operations



6



TANAAC Presentation - July 27, 2016

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Overview of Noise Compatibility Program Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step is
completed

*We're just starting the NCP phase; we'd like
any and all input!*

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Next step

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred "package" of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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TANAAC Presentation - July 27, 2016

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Major Upcoming Opportunities for Public Review and Input

- 2nd Public Workshop - September 22, 2016 (6:00-9:00 pm)
 - **Format:** Open House— all are welcome to come and go as you wish during the event
 - **Location:** Multi-purpose room at the Bergen County Complex in Hackensack
 - Presentation information will include:
 - Noise Exposure Maps (NEMs), NEM background, data, and detailed analyses.
 - Please join us and encourage your constituents to come as well
- You and your constituents are always welcome at TAC meetings
 - 7th TAC - this Friday, July 29, 2016 (9 am to noon)
 - NEM results and solicitation of noise abatement suggestions
 - 8th TAC - September 23, 2016 (9 am to noon)
 - Presentation and discussion of first round of noise abatement alternatives
 - Solicitation of further abatement suggestions
- *How else can we get the word out?*

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TANAAC Presentation - July 27, 2016

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TAC & Public Meeting Topics, 2015-16

Date	Meeting	Major Actual / Anticipated Topics
July 2015	TAC 1 - Complete	Introduction to Part 150, TAC process, etc.
September 2015	TAC 2 - Complete	Overview of noise modeling process and inputs
October 2015	Workshop 1 - Complete	Introduction to Part 150 and TEB study process
November 2015	TAC 3 - Complete	Present initial draft noise modeling inputs and land use inventory status
January 2016	TAC 4 - Complete	Present remaining draft noise modeling inputs
March 2016	TAC 5 - Complete	Present final modeling input assumptions
May 2016	TAC 6 - Complete	Present draft contours and introduce Noise Compatibility Program phase
July 29, 2016	TAC 7 (9 am - noon)	Present Draft NEM contours and land use compatibility
Sept. 22, 2016	Workshop 2 (6 - 9 pm)	Present Draft NEM contours and land use compatibility
Sept. 23, 2016	TAC 8 (9 am to - noon)	Present first-round noise abatement alternative analysis
3 rd quarter 2016	NEM comment period	30-day period will overlap Workshop 2

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TANAAC Presentation - July 27, 2016

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 (1 - 4 pm)	Present second-round noise abatement alternative analysis
January 2017	TAC 10	Present first-round compatible land use alternatives
March 2017	TAC 11	Present second-round compatible land use alternatives
May 2017	TAC 12	Recommend abatement and compatibility measures
June 2017	Workshop 3	Present draft NCP recommendations
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Review NCP recommendations
September 2017	TAC 15	Discuss Draft NCP and public input
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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TANAAC Presentation - July 27, 2016

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Thanks for your consideration and assistance

- Please attend TAC meetings and workshops
 - Or, follow the study via the website
- Help us get the word out to your constituents and other interested groups
- Are you getting our emailed newsletters?
- Can you suggest email lists for us to add to our distribution?
 - Anyone can sign up to be included on the mailing list at:
http://panynjpart150.com/TEB_Mail_List.asp
- What else can we do to encourage public participation in this very important process?

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TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)

MEETING

SUMMARY OF MINUTES

July 27, 2016

ATTENDANCE

Renee Spann, Manager, Teterboro Airport
 Ralph Tragale, Asst Director, Aviation-Community Relations
 Rick Vander Wende, Manager Contract Svcs.
 Cheryl Albiez, Sr. Public Information Officer
 Tim Middleton, Project Manager, Part 150 Study
 Gabriel Andino, Manager, Noise Abatement
 Michael Fiscus, Asst. Manager, Noise Abatement
 Daniel Gardon, Specialist, Noise Abatement
 Gary Palm, TEB ATCT Manager
 Frederick Dressel, TANAAC Co-Chair
 Pierre Gaillard, Representative
 Fritz Rethage, Representative
 Kathy Muller, Representative
 Rick DeHeer, Representative
 Hugo Poli, Representative
 Bill McKeever, Representative
 Gary Brugger, Mayor
 Ken Goffstein, Representative
 Tom Gonnella, Representative
 Peter Kortright, Representative
 Steve Riethof, Guest
 Peter Byrne, Consultant
 Jennifer Hogan, Consultant
 Ted Baldwin, Consultant
 Kristen Ahlfeld, Consultant
 Bill Laforet, Mayor, Guest
 Tom Giordano, Mayor, Guest
 Joe Oravetz, Council, Guest
 Rich Heslin, Guest
 Ron Kistner, Guest
 Patrick Andrewin, Guest
 John Esposito, Guest
 Dave Belastock, Guest
 Roy Luyster, Guest
 Carol Skiba, Guest
 Paul Berger, Reporter

Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 FAA
 Borough of Moonachie
 City of Hackensack
 Borough of Hasbrouck Heights
 Borough of Little Ferry
 Borough of Maywood
 Village of Ridgefield Park
 Town of Secaucus
 Township of South Hackensack
 Township of Teaneck
 Borough of Wood-Ridge
 Bergen County
 AOPA – ASN
 VHB (for the Port Authority)
 VHB (for the Port Authority)
 HMMH, (Part 150 Study Consultant)
 HMMH, (Part 150 Study Consultant)
 Township of Mahwah
 Borough of Waldwick
 Borough of Waldwick
 Township of Teaneck
 Borough of Allendale
 Jet Aviation, Teterboro
 Jet Aviation, Teterboro
 Teterboro Users Group
 Township of Rochelle Park
 Borough of Hasbrouck Heights
 Bergen Record

TANAAC

Teterboro Airport

July 27, 2016

90 Moonachie Avenue, PA Conference Room

Minutes Summary

Renee Spann, Teterboro Airport Manager and TANAAC Co-Chair, called the meeting to order and welcomed attendees. She introduced Mr. Steve Riethof who presented a belated plaque on behalf of AOPA to Mr. Richard Heslin, former General Manager of New Jersey Airports, who retired earlier this year.

Ms. Spann introduced Mr. Peter Byrne, of VHB Consultants, who presented some information about the Teterboro Airport Facility Study, formerly called the Port Authority Optimization Study at previous TANAAC meetings.

Mr. Byrne gave a brief overview of the study.

- First, we will consider factors that could play a role in Teterboro Airport's future, such as:
 - Aircraft operating at the Airport
 - Policy changes by FAA
 - Other GA airports
 - Other State policy changes (NY)
- Considering those, we will identify the potential effects of those factors on TEB.
- Then we will develop different scenarios in light of those potential effects.
- The Port Authority wants to consider the long-term implications of their decisions that respond to these potential changes in order to avoid unintended consequences.
- Of particular concern is understanding the environmental, financial and operational/development implications of alternatives based on the study's scenarios.
- The purpose of this study is to:
 - Identify and evaluate potential future scenarios
 - Inform the Port Authority to help them make informed decisions
 - Help the Port Authority to avoid unintended consequences

The Mayor of South Hackensack among others raised questions concerning the potential growth and expansion of Teterboro Airport, especially in light of environmental and noise issues. The consultant explained that the scope of the study is not to make recommendations to the Port Authority on how to proceed, but only to provide information to help them in their decision making process. Ms. Spann added that the Port Authority is working with the Rebuild by Design Program and is also studying environmental issues on many fronts. She said what the Optimization Study is really designed to do is to provide the Port Authority with a snapshot of where things are heading at this point. It is not a very in depth study, it has a quick timeline, but we want VHB to tell us what is going on now, and if those trends continue, what will that mean for the airport. This will help the Port Authority make informed decisions about the future operations at Teterboro Airport.

Ms. Spann presented some airport information.

- This year, the Teterboro Airport Community Benefit Fund presented 10 area high school students with \$1200 scholarships.

- The airport also hosted a luncheon for the scholarship recipients and their families at the Dassault Falcon Jet Hangar in June.
- The airport recognized a graduating student from the Robert Craig School for outstanding achievement in mathematics.
- The Teterboro Airport Community Benefit Fund Golf Outing is coming up on September 19. This event funds the scholarship program. Flyers are available in the back of the room.
- On May 27, we had a Career Day event in which about 30 students from Becton Regional High School and individual students from other schools received a tour of the airport and some information about careers in aviation.
- The 19th Annual Teterboro Airport / Bergen County United Way 5K run took place at the airport on July 16. Over 500 runners participated. Since its inception, this event has raised approximately \$500,000 for the Bergen County United Way and its associated charities.
- In March of 2014, the Port Authority Board of Commissioners approved leasehold extensions for all five FBOs at TEB. At the July 21, 2016 meeting, the Board approved a revised project for Jet Aviation. Jet has modified the scope of its project and it will no longer include any wetlands impacts. They will tear down a hangar and replace it with an updated structure.

OLD BUSINESS

Mr. Gary Palm gave an update on the status of Charted Visual Flight Procedure (CVFP) for Runway 19. The FAA test period for this approach began on April 4. The approach was not utilized until April 19 for one flight. To date, there have been 239 aircraft that have flown the procedure. However, there is a coding issue with the Jeppesen plate, which prevents the information from being uploaded onto an aircraft's Flight Management System (FMS), so no flights have used the approach since June 27. The FAA is working diligently to resolve this situation. The testing period is not to exceed 180 days and currently there is no discussion to extend the test past that time period.

Discussion ensued about the impact of this new approach on the towns in northern Bergen County. Mayor Laforet of Mahwah voiced his concern about the impact on his constituents. Mr. Andino presented a breakdown of noise complaints received from the towns along the new flight path since the beginning of April. The total number of complaints received for this time period is 605, with 335 coming from Mahwah and approximately 150 from Ramsey. Mr. Andino noted that this is the total number of complaints received, however later in the regular presentation he will report on the portion of those complaints that actually apply to Teterboro traffic. Mayor Laforet insisted that the large increase in the number of complaints from Mahwah indicates that something must be impacting his constituents. He is concerned that these complaints won't be considered in the review of the test data. Mr. Palm reported that an FAA environmental review will be part of the decision making process following this test. This review does look at noise impacts as well as other environmental issues. Mr. Andino added that when the CVFP was flown at its peak use in late June, when about 200 flights used the approach, the airport only received 13 complaints that could be directly tied to the use of the approach. It appears that the flight track data related to the CVFP does not fully substantiate the number of complaints received. It was also suggested that due to the media coverage, residents might have a heightened sensitivity to aircraft noise. After some further discussion, it was agreed that Mr. Andino would provide Mayor Laforet (and the Mayor of Ramsey at his request) with detailed data and any other pertinent information he needs to be able to address his constituents' concerns.

Part 150 Noise Compatibility Study at Teterboro and Newark Airports.

- Mr. Tim Middleton, Project Manager for the study, introduced Mr. Ted Baldwin of HMMH Consultants.
- Mr. Baldwin presented an update of the Part 150 Study process.
- The first step was to develop the study protocol. Secondly, existing information was verified.
- Currently, the focus has been drafting the noise exposure maps (NEMs), and those results will be presented at the TAC meeting on July 29. The NEMs include contours based on the existing conditions and 5-year forecast conditions. The team also collected land use data and policies, and evaluated the noise impacts for DNL 65-75 dB.
- The next steps will be transitioning into the Noise Compatibility Program (NCP) phase. This phase will examine land use strategies, evaluate noise abatement measures, develop a noise compatibility plan and prepare documentation.
- Mr. Baldwin noted that at the meeting of the Technical Advisory Committee (TAC) at TEB on July 29 at 90 Moonachie Avenue in the Port Authority conference room, they will present the land use analyses. The study team, at the request of TAC, has considered complaints in the development of the noise contours, and a day / night breakdown of the information.
- The next steps in the NCP will be to consider noise abatement strategies and programmatic strategies.
- Mr. Baldwin urged the community members to attend the TAC meetings to receive the detailed information provided at those meetings and to give their input.
- There will be a public workshop / open house on September 22, from 6 to 9 p.m. in the multi-purpose room at the Bergen County Complex in Hackensack.
- He also noted that the next TAC meeting after July is September 23 from 9 to noon at 90 Moonachie Avenue.
- Mr. Baldwin reiterated the importance of the public's input and participation in this study.
- All information about the study is online. The link to the website is: http://panynjpart150.com/TEB_homepage.asp

NEW BUSINESS

Mr. Andino reviewed the statistics for the first half of 2016.

Total operations for the six months were 81,659, an increase of 1.63% over the first half of 2015. Jet movements were 67,368, which was a decrease of .93%. Nighttime operations (between 11:00 pm and 6:00 am) for the year were 4,011, which was 4.91% of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first half of 2016. RMS 1 in Wood-Ridge showed a very slight increase. RMS 2 in Hasbrouck Heights, RMS 3 at Hackensack hospital, and RMS 6 in Moonachie all showed slight decreases. RMS 4 in Hackensack showed no change. RMS 5 in Bogota showed a 3.3-decibel (dB) increase due to the increase in arrivals to Rwy 24.

In the first half of 2016, 1,024 Noise complaints related to Teterboro Airport traffic were received from 391 residents, which include 89 complaints from Hackensack, 91 from South Hackensack, and 221 from Maywood. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from thirty-two non-TANAAC towns for the first half of 2016. A total of 482 complaints were received from 249 residents. These numbers include 168 complaints from 75 residents in Mahwah, 115 complaints from 50 residents in Ramsey, and 54 complaints from 15 residents in Paramus.

With regard to noise violations, there were 61 first violations during the first half of 2016, which was slightly higher than the same period in 2015 (48). There were 7 second violations and no aircraft were banned.

OPEN DISCUSSION

A question was raised as a follow up to the question posed at the last meeting about the appearance of scheduled service at TEB. Ms. Spann noted that she has contacted both operators personally and neither is operating scheduled service at Teterboro Airport. Teterboro Airport strictly adheres to the FAA definition of scheduled service, which is prohibited at the airport.

With no other business to come before the committee, the meeting was adjourned to the BBQ.

The next regular meeting of TANAAC is **October 26, 2016**, at 7:00 p.m.



**SUMMARY OF MINUTES
October 26, 2016**

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING**

Renee Spann, Manager, Teterboro Airport
Pam Phillips, Manager Ops and Security
Rick Vander Wende, Manager Contract Svcs.
Tim Middleton, Project Manager, Part 150 Study
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Daniel Gardon, Specialist, Noise Abatement
John Panarello, Manager of Airport Services
Gary Palm, TEB ATCT Manager
Frederick Dressel, TANAAC Co-Chair
Pierre Gaillard, Representative
Fritz Rethage, Representative
George Muller, Representative
Rick DeHeer, Representative
Paul Griffo, Representative
Gary Brugger, Mayor
Frank Cagas, Deputy Mayor
John P Watt, Mayor
Jim O'Dwyer
Jessica Goetz, Representative
JD LaRocca, Good Neighbor Award Recipient
Katherine Ingrassia, Good Neighbor Award Recipient
Dean Anthonson, Guest
Patrick Andrewin, Guest
John Esposito, Guest
Roy Luyster, Guest
Jules and Lisa Mesa, Guests

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
Borough of Moonachie
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Borough of Maywood
Borough of Rutherford
Township of South Hackensack
Township of South Hackensack
Borough of Teterboro
Borough of Teterboro
Congressman Pascrell
L Brands Inc.
EWA Holdings, LLC
Comcast
Jet Aviation, Teterboro
Jet Aviation, Teterboro
Township of Rochelle Park
City of Hackensack

The following attended the meeting as guests representing a citizens group, (C.R.A.F.T) in Rutherford:
Kristen Friendak, Maureen Friendak, Bill Bown, Dana, Detrizio, Michael Gonderas, Maggie McGill, Charles Iano, Kate Lichtotz, Joe Sonia, Beth Schmais, Deirdre Beitel, David Rothblatt

**TANAAC
Teterboro Airport
October 26, 2016
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Renee Spann, Teterboro Airport Manager and TANAAC Co-Chair, called the meeting to order and welcomed attendees. She turned the meeting over to Mr. Gabriel Andino to present the Teterboro Airport Good Neighbor Awards for 2014 and 2015. These awards go to based aircraft operators or frequent users of the airport who have met the quiet flying criteria regarding noise levels and nighttime use. The winning companies for 2014 and 2015 are listed below:

2014

- | | | |
|-------------------------|------------------------------|---------------------------------|
| ▪ AirSprint Inc. | ▪ Dominion Aviation Services | ▪ Starr Equipment Corporation |
| ▪ CC Industries Inc. | ▪ Glen Levenson | ▪ VF Corporation |
| ▪ Centurion Air, LLC | ▪ L Brands Inc. | ▪ WestRock Shares Services, LLC |
| ▪ Chester Charter Inc. | ▪ Meridian Air Group | ▪ White Mountains Capital, LLC |
| ▪ Citizens Bank | ▪ Quad Air, LLC | |
| ▪ Classic Services Inc. | ▪ R&F Wings III, LLC | |

2015

- | | | |
|---|------------------------|----------------------------------|
| ▪ AT&T Management Services | ▪ EWA Holdings, LLC | ▪ Prior Aviation Service Inc. |
| ▪ Citizens Bank | ▪ FedEx Corporation | ▪ West Rock Shares Services, LLC |
| ▪ Conner, Strong, & Buckelew Companies Inc. | ▪ Gruss & Company | ▪ White Mountains Capital, LLC |
| ▪ CRK Studio | ▪ Hertz Corporation | ▪ William C. Morris |
| ▪ Eagle Air Inc. | ▪ Kelso & Company LP | |
| | ▪ LR Enterprises | |
| | ▪ Management, LLC | |
| | ▪ Meredith Corporation | |

In addition, White Mountains Capital, LLC in 2014 and West Rock Shares Services LLC in 2015 were recognized for having the lowest average noise levels for their respective years. Three awards were personally presented at the meeting. The others will be delivered to the recipients.

Ms. Spann presented some airport information.

- Ms. Spann thanked the winners of the Good Neighbor Awards for their quiet flying efforts because it demonstrates their consideration and concern for the local communities.
- She noted that the demolition of the Meridian hangar is complete and the required permits for the replacement construction have been received. Completion of the new hangar is expected to be July 2017.
- It was Renee's sad duty to inform the group of the passing of Ms. Susan Baer, former Director of Aviation of the Port Authority after her long battle with cancer. Ms. Baer was the first person to manage all 3 major NYC airports, as well as the first woman to become Director of the Aviation Department. She will be sorely missed.

- Renee also announced the retirement of Ms. Pam Phillips, Manager of Operations and Security for the Port Authority at Teterboro Airport. Pam will retire at the beginning of January, so this is her last TANAAC meeting. She has been an invaluable asset to the airport. Pam thanked everyone for their kindness.

OLD BUSINESS

Mr. Gabriel Andino turned the meeting over to Mr. Gary Palm who reported that despite all the effort of TANAAC, the Charted Visual Flight Procedure (CVFP) for Runway 19 was not made permanent by the FAA. The district office cited lack of usage as one factor in their determination.

Part 150 Noise Compatibility Study at Teterboro and Newark Airports.

- Mr. Tim Middleton, Project Manager for the study, reported that there was a public workshop / open house on September 22, from 6 to 9 p.m. in the multi-purpose room at the Bergen County Complex in Hackensack.
 - Approximately 55 people attended the workshop and made approximately 30 comments.
 - Those comments are being incorporated in the final report to the FAA.
- He also noted that there was TAC meeting September 23 from 9 to noon at 90 Moonachie Avenue.
 - At this meeting, the noise exposure maps were presented and reviewed.
 - The consultant is targeting the end of November for presenting the final maps to the FAA.
- The study is moving into Phase 2, which is the noise compatibility phase, where noise mitigation measures will be considered.
- Mr. Middleton reiterated the importance of the public's input and participation in this study.
- All information about the study is online. The link to the website is: http://panynjpart150.com/TEB_homepage.asp

NEW BUSINESS

Airport staff will attend the National Business Aviation Association Annual Convention in early November. The convention affords the opportunity to educate aircraft owners and operators about the noise sensitive issues at Teterboro Airport and raise their awareness of the community impacts, such as nighttime airport usage. At this year's event, a new mobile application will be launched that will provide noise abatement and airport operational information, as well as a copy of the Flight Crew Handbook. Staff believes this will reach an even broader base of airport users.

Mr. Andino reviewed the statistics for the first three quarters of 2016.

Total operations for the nine months were 124,146, an increase of 2.05% over the same nine-month period of 2015. Jet movements were 99,663, which was a decrease of .39%. Nighttime operations (between 11:00 pm and 6:00 am) for the three quarters were 6,054, which was 4.88% of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first three quarters of 2016. RMS 1 in Wood-Ridge and RMS 4 in Hackensack showed a very slight increase. RMS 2 in Hasbrouck Heights, and RMS 6 in Moonachie all showed slight decrease.

RMS 5 in Bogota showed a 2.4-decibel (dB) increase due to the increase in arrivals to Rwy 24. RMS 3 at Hackensack hospital showed no change.

In the first nine months of 2016, 1,690 Noise complaints related to Teterboro Airport traffic were received from 572 residents, which include 141 complaints from Hackensack, 136 from South Hackensack, 128 from Rutherford, and 354 from Maywood. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from thirty-two non-TANAAC towns for the first three quarters of 2016. These numbers include 276 complaints from 96 residents in Mahwah, 184 complaints from 71 residents in Ramsey, and 72 complaints from 24 residents in Paramus.

With regard to noise violations, there were 89 first violations during the first nine months of 2016, which was slightly higher than the same period in 2015 (81). There were 9 second violations and no aircraft were banned.

OPEN DISCUSSION

A letter was received from the Borough Council of Moonachie citing the numerous complaints received from residents about helicopter noise over their neighborhoods caused by the frequency and altitude of helicopters flying over residential areas. A discussion ensued about helicopter operations, routes, and possible actions that could be taken to help alleviate this problem. Mr. Andino had addressed the Eastern Region Helicopter Council earlier this year to discuss this issue. He will contact them again and try to schedule a representative to attend the January TANAAC meeting. He will continue working with the based helicopters to raise their awareness.

A discussion was initiated by the citizen's group, Concerned Residents Along Flightpath of Teterboro (C.R.A.F.T), from Rutherford. They voiced their discontent with the increased traffic over their town and the resultant noise. After a lengthy discussion, it was determined that a separate meeting would be held with the group. The Noise Office staff will work with the group to set up a meeting in the near future.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **January 25, 2017**, at 7:00 p.m.

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

January 25, 2017

ATTENDANCE

Renee Spann, Manager, Teterboro Airport
Scott Marsh, Manager Ops and Security
Tim Middleton, Project Manager, Part 150 Study
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Daniel Gardon, Specialist, Noise Abatement
John Panarello, Manager of Airport Services
Gary Palm, TEB ATCT Manager
Pierre Gaillard, Representative
Fritz Rethage, Representative
George Muller, Representative
Bruce Surak, Representative
Paul Griffo, Representative
Bill McKeever, Representative
Gina Affuso, Representative
Peter Kortright, Representative
Steve Chandoha
Jeffery Smith
Ted Baldwin
Rhea Gundry
Gene Reindel
Roy Luyster, Guest
Jeff Morgan, Guest

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Borough of Moonachie
Borough of Rutherford
Town of Secaucus
Borough of Wood-Ridge
Bergen County
Meridian, Teterboro
Eastern Region Helicopter Council
Part 150 Study, HMMH, TEB
Part 150 Study, HMMH, EWR
Part 150 Study, HMMH, EWR
Township of Rochelle Park
City of Newark

**TANAAC
Teterboro Airport
January 25, 2017
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Renee Spann, Teterboro Airport Manager and TANAAC Co-Chair, called the meeting to order and welcomed attendees. She introduced Mr. Scott Marsh, who has taken over as Manager of Operations and Security for the Port Authority at Teterboro Airport. He replaces Pam Phillips, who retired at the beginning of the year. Scott greeted the group.

Ms. Spann presented some airport information.

- Upcoming Construction at the Airport
 - Storm water drainage improvements
 - Phase 1 of this project is out to bid, with bids due back by the end of January.
 - This phase includes regrading Taxiway F and correction to one of the major outfalls
 - We will have more information at the April TANAAC meeting.
 - Repair to Airfield Circuits
 - The airfield electrical circuits were damaged by the saltwater that flooded the airport during Superstorm Sandy.
 - Airport Maintenance has done a great job of maintaining the circuits, however, they continue to deteriorate.
 - The airport has received FEMA funding to replace the damaged circuits.
 - This project will include significant runway and taxiway closures.
 - We will have more information at the April TANAAC meeting.
- Safety Management System (SMS)
 - One of the projects that Mr. Marsh will be undertaking is the development of an SMS manual for Teterboro Airport.
 - This effort is predicated on an FAA regulation requirement.
 - The scope of work is to enhance safety at Teterboro Airport.
- Family Day
 - It has been difficult for local schools to participate in a Career Days at the airport.
 - In our continued effort to open the airport to the community, we are planning a Family Day at Teterboro Airport.
 - This will not only include elements of a Career Day, but also activities for the whole family.
 - Mr. Rick Vander Wende is organizing the event.
 - We will have more information at the April TANAAC meeting.
- The NJDOT recently released the findings of a Statewide Airport Economic Impact Study. Teterboro Airport statistics are as follows:
 - Employment – 4901 jobs
 - Payroll -- \$352,117,900
 - Output -- \$1,147,039,000
 - These numbers represent:
 - 38% of General Aviation Employment
 - 39% of General Aviation Payroll

- 40% of General Aviation Output
- Including commercial service airports, Teterboro numbers represent:
 - 7% of Employment
 - 6% of Payroll
 - 6% of Output
- 37 airports were included in the study, which was performed in 2013.

Renee turned the meeting over to Mr. Gabriel Andino.

OLD BUSINESS

Mr. Andino reviewed general information about TANAAC since it is the first meeting of year new year. TANAAC started in February of 1987 with “the main purpose of establishing a meaningful dialogue between the airport community and the residential communities. The primary goal is to enhance the quality of life of the residents of local communities while insuring the efficient operation of the airport.” Gabriel also reviewed the by-laws and noise rules.

On December 7, 2016, the airport met with residents, from the Rutherford area, who formed a group called CRAFT (Concerned Residents Along the Flightpath of Teterboro.) The group had attended the last TANAAC meeting, where it was determined that they would benefit from a separate more instructional meeting. Paul Griffo who was present at the meeting noted that the presentation and materials provided were well received.

Mr. Andino introduced Mr. Ted Baldwin of Harris Miller Miller & Hanson Inc. (HMMH), the consultants for the Part 150 Noise Compatibility Study at Teterboro and Newark Airports.

- Mr. Baldwin, who heads the Teterboro Airport study, reported that the Part 150 Study, which is voluntary for the airport operator, is being conducted according to FAA regulations. The Port Authority currently has 4 studies in progress. (JFK, LGA, EWR, TEB)
- He noted that they have finished the process of overlaying the land use maps with the noise contour maps to determine the land use compatibility.
- Currently they are addressing the non-compatible land use areas to propose what possible mitigation measures may be applicable.
- The consultants have had beneficial meetings with several local communities. The information that the community representatives shared at these meetings has been very helpful in the study’s progress. More community meetings are being scheduled.
- There is a Technical Advisory Committee (TAC) meeting on Friday, January 27, 2017. Mr. Baldwin noted that the meeting is open to the public and encouraged attendance.
- Mr. Tim Middleton, Project Manager for the study, added that over a year ago, the study projected the total operations for TEB for 2016 and their projected number was only around 200 operations off of the actual total.
- He noted that about this time next year the study’s final results should be ready for submittal to the FAA for approval.
- There will be another public hearing in late summer or early fall on all proposals.
- They will continue to report at TANAAC meetings.
- Mr. Middleton reiterated the importance of the public’s input and participation in this study.
- All information about the study is online. The link to the website is:
http://panynjpart150.com/TEB_homepage.asp

Mr. Andino introduced Mr. Jeffery Smith, Vice President of Operations and Community Affairs for the Eastern Region Helicopter Council, (ERHC) to talk about helicopter operations at Teterboro Airport.

- The Eastern Region Helicopter Council, Inc., a non-profit organization representing approximately 97% of the helicopter operators in the New York metropolitan area.
- The members are actively concerned about 3 primary principles, safety, professionalism and public relations.
- Mr. Smith showed the designated helicopter routes into and out of Teterboro Airport.
- Helicopter operators endeavor to stay on the prescribed routes unless otherwise directed by the ATCT.
- Helicopter operations must be coordinated with the airport’s fixed wing operations. This may require that a helicopter hover near the airport for a short period before they can land. They cannot be too high as they have a minimal amount of time to land once instructed to do so.
- The ERHC has a noise complaint line which is 1-800-319-7410. Complaints may also be made online by going to www.flyneighborly.net. Mr. Smith acknowledged the robust noise program of Teterboro Airport and for that reason he encouraged noise complaints be directed to the TEB noise office, with which they closely coordinate.
- Teterboro Airport Air Traffic Control Tower Manager Gary Palm followed with a brief presentation of the helicopter routes in and around Teterboro Airport and provided information on how controllers direct helicopter traffic in the vicinity of the airport.
- A discussion ensued about the helicopter operations and routing. Specific questions can be addressed to the ERHC at the web address above.

NEW BUSINESS

Mr. Andino reviewed the statistics for 2016.

Total operations for the year were 171,146, an increase of 2.49% over 2015. Jet movements were 138,373, which was an increase of 0.47%. Nighttime operations (between 11:00 pm and 6:00 am) for 2016 were 8,299, which was 4.86% of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for 2016. Compared to 2015 levels, RMS 1 in Wood-Ridge and RMS 4 in Hackensack were static. RMS 2 in Hasbrouck Heights showed a decrease of 3.2-decibel (dB). RMS 3 at Hackensack hospital and RMS 6 in Moonachie showed a slight increase of .4 and .2 (dB) respectively. RMS 5 in Bogota showed a 2.0 (dB) increase due to an increase in arrivals to Runway 24 in 2016.

In 2016, 2,519 Noise complaints related to Teterboro Airport traffic were received from 765 residents, which include 598 complaints from Rutherford, 358 from Maywood, 205 from South Hackensack, and 162 from Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from thirty-two non-TANAAC towns for 2016. These numbers include 290 complaints from 98 residents in Mahwah, 224 complaints from 80 residents in Ramsey, and 79 complaints from 25 residents in Paramus. The total noise complaints in 2016 was about 500 more than 2015, with individual residences increasing from 216 to 765. That increase is primarily attributed to the northern towns which complained about the new Quiet Visual approach that was being tested by the FAA. The approach was not made permanent by the FAA.

In 2016, airport staff gave a total of 2,090 Flight Crew briefings to educate them on the noise rules and community concerns at TEB. There were 416 in the first quarter of 2016, 526 in the second quarter, 569 in the third and 589 in the fourth.

With regard to noise violations, there were 115 first violations during 2016, which was slightly higher than 2015 (109). There were 12 second violations and no aircraft were banned.

OPEN DISCUSSION

Open discussion included noise concerns voiced by a guest from Newark. It was recommended that he get involved with the Part 150 Study. In addition, an approach to Runway 6 proposed by the CRAFT membership that would shift aircraft traffic away from some Rutherford neighborhoods is being reviewed by the Port Authority and may be subsequently forwarded to the FAA for review and approval.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **April 26, 2017**, at 7:00 p.m.

TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)

**MEETING
SUMMARY OF MINUTES**

April 26, 2017

ATTENDANCE

Members and Staff

Renee Spann, Manager, Teterboro Airport
 Scott Marsh, Manager Ops and Security
 Rick Vander Wende, Manager Contract Services
 Tim Middleton, Project Manager, Part 150 Study
 Gabriel Andino, Manager, Noise Abatement
 Michael Fiscus, Asst. Manager, Noise Abatement
 Daniel Gardon, Specialist, Noise Abatement
 John Panarello, Manager of Airport Services
 Gary Palm, TEB ATCT Manager
 Christopher Kelemen, Mayor
 Kathryn Gates-Ferris Representative
 Kathleen Canestrino, Deputy Mayor
 Pierre Gaillard, Representative
 Fritz Rethage, Representative
 George Muller, Representative
 Rick DeHeer, Representative
 Frederick Dressel, TANAAC Co-Chair
 Hugo Poli, Representative
 Paul Griffo, Representative
 Bill McKeever, Representative
 Ken Goffstein, Representative
 Peter Kortright, Representative
 Zack McCue, Representing

Guests

Douglas Frank, Mayor
 Carlos Rendo, Mayor
 Deborah Keeling-Geddis, Councilwoman
 David Sims, Councilman
 Leonardo Battaglia, Councilman
 Stephanie Von Rudenborg
 Gary Terzzano
 Jeffrey Liva, Borough Official
 Diana Frankel
 Roy Luyster
 Palmer Yale
 Charles Iorio
 Anne-Marie Ceruso

Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 FAA
 Borough of Bogota
 Borough of Bogota
 City of Hackensack
 City of Hackensack
 Borough of Hasbrouck Heights
 Borough of Little Ferry
 Borough of Maywood
 Borough of Moonachie
 Village of Ridgefield Park
 Borough of Rutherford
 Town of Secaucus
 Township of Teaneck
 Bergen County
 Office of Cory Booker

Borough of Hillsdale
 Borough of Woodcliff Lake
 City of Hackensack
 City of Hackensack
 City of Hackensack
 City of Hackensack
 City of Hackensack
 Borough of Saddle River
 Borough of Saddle River
 Township of Rochelle Park
 CRAFT, Rutherford
 CRAFT, Rutherford
 NJ Media Group

In addition, a group representing the Hackensack Condominiums was in attendance. The following are those attendees as best could be identified by their handwriting on the sing-in sheet: Constance Bovino, Gerald Weber, Annette Jankowski, Dorothy Monopoli, P.V. Regupathy, Harveena Regupathy, Naomi Weber, Jules and Lisa Mesa, Joseph Zippolifo, Monica Keenan, Judith Montelbano, Luis Sanchez, Rachel Sanchez, Teri Binder, Gabe Wells, Bill Berzak, Peter Marchesani, Jason Some, Michael Williams, Diane Jehle,



**TANAAC
Teterboro Airport
April 26, 2017
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mayor Fred Dressel, TANAAC Co-Chair, called the meeting to order and welcomed attendees. He began the meeting with introductions of the TANAAC Committee for all the guests in the room. The guests included the Mayors of Hillsdale and Woodcliff Lake, and representatives from Hackensack and Saddle River. In addition, a group of residents from Hackensack were present to discuss their issues regarding noise and safety in the area of Prospect Avenue. Mayor Dressel explained to the group that the committee would hold its usual business meeting first and at the conclusion would hear the group's concerns.

Ms. Renee Spann, TANAAC Co-Chair presented some airport information.

She announced that an Aviation Job Fair was being held at Newark Airport (Terminal B) by the Council for Airport Opportunity (CAO) on May 4, 2017. Copies of the flyer have been mailed to the local mayors' offices and additional copies are available for attendees in the back of the room.

Ms. Spann also announced that Teterboro Airport received an Honorable Mention this year at the annual International Aviation Snow Symposium, which is presented by the Northeast Chapter of the American Association of Airport Executives. The Balchen/Post Award is given to five categories of airports in the U.S. snow belt to reward the dedicated efforts of their snow crews in maintaining their airports in safe and operational status during the winter weather season. Teterboro was recognized in the category of "Large General Aviation Airports". Ms. Spann publicly congratulated John Panarello and his team at AvPORTS for the great job they did throughout the winter season.

Ms. Spann advised that we became aware of difficulty in locating or accessing the noise abatement/TANAAC information on the Port Authority website. The airport recently launched a project to correct that problem and increase the amount of information that is available. Once we have the final product, we will send all the TANAAC members information on how to access that data on the website so that they can share that information with their communities.

Renee returned the meeting to Mayor Dressel, who initiated the regular agenda.

OLD BUSINESS

Mr. Timothy Middleton, Port Authority Project Manager for the study, reported on the 14 CFR Part 150 Study.

- Mr. Middleton noted that they expect to submit of the noise exposure map to the FAA in May.
- There is a Technical Advisory Committee (TAC) meeting on Thursday, June 29, 2017, at 90 Moonachie Avenue, from 2 p.m. to 5 p.m.
- Mr. Middleton, added the updated schedules for the study will be uploaded to the website next week.
- He noted that the Spring Newsletter of the study will be issued in May. You can sign up to receive the newsletter by going to the website and providing your email address.
- Mr. Middleton reiterated the importance of the public's input and participation in this study.

- All information about the study is online. The link to the website is: http://panynjpart150.com/TEB_homepage.asp

Mr. Scott Marsh reported on construction projects at and around the airport.

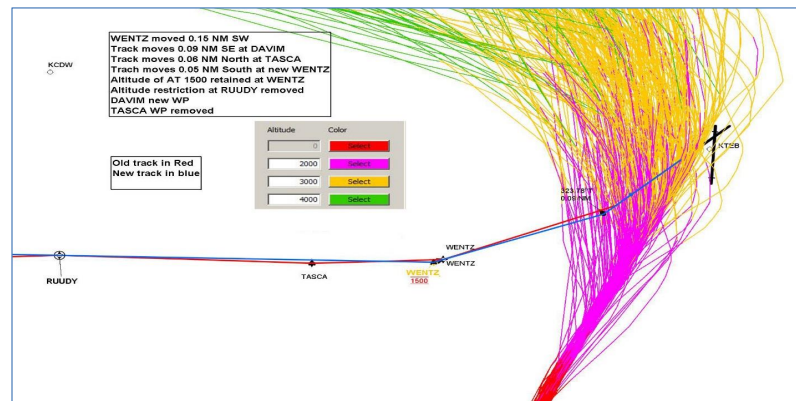
- There is one project at the airport slated to start in August that could have operational impacts. We don't have the staging information yet, but we will report on this project at the July TANAAC meeting.
- The other construction project is not on airport, but will impact the area. Beginning on May 15, Malcolm Avenue (aka Franklin Avenue) will be repaved. From May 15 to June 2, there will be lane closures. Then on June 2 and 3, the road will be closed during the evening into overnight hours.

NEW BUSINESS

Mayor Dressel introduced the report on the RUUDY Six departure route.

Mr. Gary Palm, Manager of the Teterboro Airport Air Traffic Control Tower, introduced Mr. Joey Medders and Mr. Bill Wise, who assisted him in reporting on the RUUDY Six departure.

- This departure is named after a gentleman who was instrumental part of many procedures at TEB and a big proponent of noise abatement procedures at the airport. The number is simply the version of the departure. (Six replaces version Five)
- What is in process right now is a slight variation in the established SID - Standard Instrument Departure - that has been used at the airport for years.
- Originally the modification was proposed by the NY TRACON to address some issues with pilots not adhering to the procedure, in particular course deviations and altitude restrictions. This could have serious implications to EWR approaches.
- The purpose of the modifications is to provide TEB departures off Runway 24 (departing to the south) 1000 feet separation from EWR arrivals to Runway 22 until course divergence can be established. This means that we want their flight paths to deviate, not follow the same path.
- After the gentlemen from the FAA shared some technical data, Mr. Palm noted that there were navigational fixes added to the procedure to ensure that pilots fly the route more accurately. The variations are small, just a few hundred feet.
- The Flight Management System (FMS) in the aircraft navigate to these fixes.



Mr. Andino reviewed the statistics for first quarter of 2017.

Total operations for the first quarter of the year were 39,381, an increase of 6.04% over the same quarter in 2016. Jet movements were 33,611, which was an increase of 7.09%. Nighttime operations (between 11:00 pm and 6:00 am) for the first three months of 2017 were 2,001, which was 5.08 % of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first quarter of 2017. Compared to the same period of 2016, levels, RMS 101 in Carlstadt had a very slight increase of .02 decibel (dB). RMS 102 in Hasbrouck Heights showed a decrease of 5.4 (dB). RMS 103 at Hackensack hospital and RMS 104 in Hackensack showed increases of 1.5 and 1.6 (dB) respectively. RMS 105 in Bogota was static. RMS 106 in Moonachie had technical difficulties so there was no data to report.

In the first quarter of 2017, 311 Noise complaints related to Teterboro Airport traffic were received from 108 residents, which include 106 complaints from Rutherford and 46 from South Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from thirty-two non-TANAAC towns for the quarter. These numbers included 44 complaints from Ho-Ho-Kus, 10 complaints from Mahwah, 8 from Newark and 7 each from Ramsey, Waldwick, and Woodcliff Lake.

With regard to noise violations, there were 15 first violations during the first quarter of 2017, which was the same as the first quarter of 2016. There were 3 second violations and 2 aircraft were banned during the first quarter of 2017. Aircraft are banned if they receive 3 noise violations in a 2-year period. This is our primary enforcement measure to motivate aircraft to adhere to the noise level restrictions at TEB.

OPEN DISCUSSION

At the conclusion of the regular business, Mayor Dressel opened the floor for discussion to the Hackensack contingency.

The TANAAC Representative from Hackensack, Deputy Mayor, Kathleen Canestrino made a statement.

“Our primary concern for the City of Hackensack is the air traffic over, especially that flies over with such close proximity to Prospect Avenue, which is without a doubt the most densely populated area in this part of Bergen County. In addition to that, it flies over a number of our schools, and it flies over the Hackensack University Medical Center. We were thrilled last year when we heard of the alternate flight plan to bring the air traffic down and over Route 17. And we were very excited to hear that testing was to be done and folks were really taking action. And we feel really the need for proactive action. Fortunately, we have not had an incident in Hackensack. We don’t want to have an incident in Hackensack, and that is primarily why we’re here today. From my understanding, limited understanding, there was not a lot of usage of that particular experimental flight plan over Route 17. And I look at it this way - if I am going to visit the gentleman next to me and I do it frequently, I have a way that I drive there. And if someone comes to me and says well, we’d like you to try this other way. I may try it, I may not. I’m going to go back to the way I’m accustomed to. To me, if you are going to make a decision, you need to have a fair amount of data collected in a uniform and even way to make that decision. And, correct me if I’m wrong, but from what I’m hearing that was not done. Tonight, the discussion, when we talked about the changes for your departures to eliminate a potential conflict with Newark arrivals, that change was made rather quickly, it seems. I mean, you have an FMS system that you are using in your aircraft, I asked specifically, GPS monitored, driven to make those kinds of changes, to alter and make changes. It’s not all that difficult. Your pilots are equipped with a flight management system that is guiding them. So why not give us a fair shot at this optional flight plan. Put it into effect seriously. Collect the data and see where we are. For example, we also have had numerous problems with our schools. And to that point, the airport and FAA together actually admitted the problems we had in our Jackson Avenue School, replaced windows, provided air conditioning because our students couldn’t hear due to the noise. We’re having the same issue at our Hillers School. You go up there, I’ve spoken to those teachers, the warm weather is coming, they cannot leave the windows open. So the school must be very warm because the students cannot hear the teachers if the windows are open with the aircraft noise. That’s how bad it is. The Medical Center – I was there this week. The Hackensack University Medical Center is probably the finest medical institution in probably the tristate area. To maintain their standard of excellence, they are doing a significant improvement, an addition to the medical center with state-of-the-art operating rooms, etc. So the traffic into that hospital will only increase. While I was there, viewing the property, a helicopter was landing bringing patients, and an aircraft was not that far away. You know, this is to me such a potentially dangerous situation that could all be avoided. And the residents that are here are very upset about this, very concerned, and we’ve asked for your help. We thought we were on the right track, and now we’re back peddling it again. Please listen to us, listen to the residents who are going to speak here tonight, and let’s fix this problem before we have a horrific accident in the City of Hackensack. Thank you for giving me the opportunity to speak and I hope you’ll hear from other residents here tonight.”

Mayor Dressel replied, “I think it would be in the Committee’s best interests if I just took a few minutes of your time to tell you where you are when you come to a TANAAC meeting. This group was put together by myself and about six other mayors thirty years ago. And it was done because we saw some plans that the Port Authority intended for the airport that we weren’t so happy about. We were unhappy about increasing noisy jets, and at that time they were increasing by leaps and bounds. So we got together with then manager of the airport, which was with Johnson Controls at that time. The Port Authority didn’t have a presence at the airport then like they have today. He convinced a committee of mayors to work with the Port Authority and create this committee. We have no authority. We are an advisory group and we take under consideration the comments that we get from the members of the committee. And we extended the effect of the committee to a five-mile radius around the airport. Any community that was within 5 miles of the airport was welcome to come and have a representative of that community come and sit here and be involved in whatever discussion we had. And because airport noise, like any other noise, if you move it 10 feet, somebody else is going to get more noise than they had before. So it’s very necessary that we have all the communities being involved in whatever course we want to take. Ten or twelve years ago, myself and another mayor who was very concerned about the hospital brought up the point about the flights headed at

the hospital. I was a patient in the hospital and could see the planes coming up in the windows. So for someone who wasn't used to it, it could be alarming. We thought it was a worthwhile suggestion and the airport and the hospital at that time agreed with us, so we made the suggestion to the FAA to look into the situation to see what might be done to provide a more practical safety solution to what we perceived as a potential problem. That was all we could do. That's all you can do. That's all that could be done here. The Port Authority has no authority move planes around in the air. Once those planes are in the air, they under the complete jurisdiction of the federal government in the power of the FAA. As you saw this program up here, this minor revision to avoid violations of airspace of different flights goes through a long and tedious process. So for whatever reason we made that proposal, it went to the FAA, last fall or late summer we got notified that they were taking the proposal under consideration and establish a timeframe for test flights. Then it was in the hands of whoever has to fly the plane and evaluate the effectiveness of that. So that's it. It did not work out well as far as we're concerned. And strangely enough when the news went out, a lot of people got upset in the Mahwah area that felt there was going to be noise over their homes that they never had before. I knew that was going to happen, we knew that was going to happen, so we sent letters to all the towns that were going to be newly affected to let them that this was happening so they would have a right to voice their opinion as to what they thought and how they felt. Just like everyone else has that right. We felt that it was fair to them that if the FAA decided that it was a worthwhile project to be aware that it was happening. So there was as much excitement about that as we have here today. We had almost as many people at that meeting as we have here tonight. And the test went on according to FAA procedures." Deputy Mayor Canestrino asked for a copy of the FAA's report on the test. Mayor Dressel replied, "If there has been a report generated, I'm sure we would be able to get a copy of it for you. Strangely enough, once the flight plan was announced that it was going to be taking place, we had complaints from areas that had never complained before. The flights had not taken place on the new route yet and we had complaints."

Ms. Canestrino continued, "Noise is one thing, it's very unpleasant. But safety has to be taken into consideration."

"Safety is the prime goal of the FAA and these people here (at the table). The people who operate this airport, they don't want planes falling out of the sky. Nobody wants that. And not to be picky here, but the plane that flew into the Strawberry warehouse was taking off. And it was ill-loaded and improperly managed. It wasn't landing. My point is this, we don't have the authority to do anything. We can help you to some extent if the committee decides to implore the FAA to resurrect this plan to get some more specific data, I don't think that is an undoable thing. We cannot solve your problems. We can show you how, we can help you if we decide it's in our best interests and if other people come along and object to what we're trying to do. Well, the devil is in the details there. What's going to happen once that's done. There is no doubt in my mind about what you said or in anyone's mind what you say the bothersome of the airport. I've lived for 52 years in Moonachie. I sit in my bedroom and I can see helicopters and planes landing and listen to them. I know what you mean. We have a school in our town and unfortunately that school is outside of the noise zone and doesn't qualify for aid to quiet it down. Strange. But that's it. You're here for a purpose. You have a spokesman, your committee spokesman. I know some people talked to Renee..."

A question was raised about the FAA being present to speak to the group. Another question was raised about TANAAC speaking to the FAA on the group's behalf.

"If the committee agrees to lend assistance, we can do that. However, there needs to be discussion before that can be determined."

Ms. Spann interjected, "The Quiet Visual Approach, which was the approach that the Deputy Mayor alluded to, that had been tested last year, was about 10 years in development. I'm not sure how long the FAA was actually working on the RUUDY Six. But none of these approaches happen overnight. So, once one airplane or one flight track is moved, it impacts a huge number of operations because we really do have quite

a bit of air traffic that happens in this area. We are probably the busiest from an airspace perspective of any other part of the country. So I know it sounds easy to say, just move it over a few feet, but it really isn't. I don't have the expertise in that but there are people in this room that do have that expertise. This evening we had planned a discussion to talk about the RUUDY Six, which is depicted here on the screen. To just make those few changes, a few hundred feet one way or the other, took months, maybe over a year. I know we've been talking about this for a really long time. It takes a lot of planning. We wanted to sit down with your group in a separate forum so that we could talk specifically to your concerns. Talk you through the entire process of the development of the Quiet Visual, how it was tested, what the issues were and why ultimately the FAA made the decision not to move forward. We are here to work with the communities surrounding the airport. There are 14 communities that are invited to participate in this process and unfortunately, we have not had the level of participation that we would like to have and that we need to have. But that's why we're here. We're here to hear and understand your concerns and as the representative that sits around the table, it is really your responsibility to bring these issues to the airport before it becomes a crisis. So, I am begging you, all of you who are here today as committee members, please continue to participate on this committee. We meet quarterly, we send out information on anything that is of critical importance that is happening at this airport that affects your communities. And we need you to be invested. We urge you to continue to participate and bring these issues to us. Now as Mayor Dressel said, we are not the authority in airspace issues, but we can facilitate your contact with the FAA. We did for the Quiet Visual, we're working now with the town of Rutherford. They had some concerns, they brought them to us. We set up a separate meeting so that we could talk through, very specifically, what their issues were. They had someone as part of their group that had some airspace knowledge. He gave us an idea that we are currently work through with the FAA. That's why the committee is here. So, I'm sorry that people who were for information on how to get in touch with the airport, of how to get in touch with the FAA, or complaints about noise, I apologize if you weren't able to find that information on the Port Authority website, on the Teterboro website, we are looking at that now. We hear you. This is not the first time that it has come to attention recently, so we are going to work to fix that. But we have resources. There are phone numbers that you can call. Noise complaints, I think are fairly prominent on the website."

Deputy Mayor Canestrino agreed to speak to Ms. Spann after the meeting to set up a follow-up meeting, and continue to pursue the proactive approach that the Hackensack citizens are here tonight to employ.

Mr. Gary Palm noted that he is present as a representative of the FAA and although, he cannot make changes himself, concerns are funneled through him to other areas of the agency for consideration. He added that changes to any approaches or departures take varying lengths of time depending on many, many factors. But he would gladly bring information to a separate meeting as Renee as described and work with the group there. He would gladly review and explain all aspects of the Quiet Visual approach from beginning to end.

A concern was raised about air pollution preventing residents from opening their windows in the summer. Mayor Dressel replied that a few years ago, the Port Authority sponsored an air quality study at the airport. The result of that study was that the air quality was not good in the area, but source could not be distinguished between all the road traffic and the airport. He added that pollution is a major factor about living in this area. And that is one reason that he has stayed part of TANAAC all these years. To keep a presence of the community under the nose of the Port Authority and let them know that we are concerned and that we are bothered by what the existence of the airport poses on our community. It's manageable to some degree, not always to our satisfaction, but it's manageable.

Mr. Gerald Weber spoke, "The Condominium, Cooperative Unit Owners and Apartment Dwellers Advisory Board was created by the city of Hackensack government to improve the quality of life in our town affecting the residents of condos, coops and multi-family dwellings outlined in the enabling ordinance. As members of that Board, we object to the noise and pollution and most of all the danger that these flight pose to our

community. We are cognizant of the issues. We feel that the test for the alternate approach was not a good test.”

Ms. Spann responded, pilots are responsible for the operation of their aircraft. They have the decision what route they are going to fly.

A resident asked if they wrote a letter, would TANAAC support them. Mayor Dressel replied that the history of the committee indicates that we probably would, but he couldn’t speak for the committee at this time. ** Upon further urging from the resident, Ms. Spann replied, “You have to understand that we are not the experts. At the end of the day, it is the FAA that will have to come up with whatever possibilities there are for any kind of change in approach paths to this airport that will accomplish what you’re looking to accomplish. I will support the effort to look at it again. But at the end of the day, it has to be something that the FAA can endorse, that the pilot community can endorse, and that does not endanger anybody else in making this happen. So in other words, you can’t move it from here to there but, oh, there is a chance that it is negative affecting this town over there. That is one of the guidelines the FAA has to follow. So that’s why it’s not a simple process. And no, I’m not easing out of your question, but I’m not going to commit to endorsing your plan, I don’t know what your plan is. I will commit to working with the community and the FAA to try to come up with another plan that can address your concerns. That I will commit to. That is what our mission is here on this committee. So we have always been committed to that. But I have to say, your town has to continue to participate on this committee.”

*** This part of the conversation took place later in the meeting, but was placed with the initial conversation for continuity purposes.*

A nurse from HUMC reiterated her concerns for safety.

Mayor Dressel repeated that the committee has shared those same concerns and that is why they initiated the request to the FAA for an alternate approach ten or twelve years ago.

A question was raised about the reported noise levels whether they were the average or the peak. {Average.} A resident indicated that he would like the committee to report the peak noise levels.

Mayor Dressel reviewed the noise level restrictions at TEB. Depending on the Runway in use, the limits are 90 or 95 (dB) and 80 (dB) at night.

Ms. Spann continued Teterboro has the premier noise abatement program in the country. The ‘3 strikes you’re out’ rule is unique to TEB. We are very serious about our noise abatement program. We banned 2 aircraft this year, and if you could hear the responses from those aircraft, you would see that being banned is taken very seriously by users because operating at TEB is critical to their business. This has proven to be an effective tool for managing noise levels. As you have seen from the presentation tonight, the number of repeat offenders drops significantly after they receive their first violation. We knew that noise was an issue at the airport so that’s why we worked with the FAA proactively years ago for a solution to these issues. She reiterated her offer to hold a separate meeting so that, we can constructively work with you to teach you a little bit about how airports operate and we can also learn from you. Then we can work together to come to some resolution to hopefully address at least some of your concerns.

A resident voiced her concerns about altitude of the aircraft and the frequency of their flights. Again, Ms. Spann urged that her offer to hold a separate meeting be accepted

Carlos Rendo, Mayor of Woodcliff Lake, noted he believes that there seems to be a transparency issue concerning the report from the testing / study of the alternate approach. “We live in the most densely

populated area in the nation, and we need to find the path of least resistance. The current route is not the path of least resistance. Why wasn’t the path over Route 17 implemented? We have no information and as a body, we are requesting that we address the FAA about this issue. Secondly, the size of the planes is getting larger, the frequency is getting more, who controls that? Teterboro.” Mayor Dressel responded, “Teterboro Airport is certificated as a General Aviation Airport with 24-hour operation. The size limitations that are imposed by the airport are due to the limits of the airfield infrastructure. In fact, the Port Authority fought with Boeing years ago against bringing in a business jet because it would be too heavy for the pavement. Any operation of any aircraft in the air is governed by the FAA. And the airport has to operate under the guidelines of the FAA.”

Mayor Rendo continued that “it seems that we as a public body could address the FAA with our concerns.”

Mayor Dressel noted that “the members of TANAAC are just concerned citizens like yourselves (the attendees at the meeting) who represent the concerns his or her town. We understand your concerns, we share them, and we as a committee work with the airport, the Port Authority, to seek resolution / relief. That is why it is so important that the group (from Hackensack) accept Ms. Spann’s offer to have a separate meeting to be educated about how the airport and air traffic work within the confines of the FAA regulations. It is important to understand the limitations that the airport operates under and what we can and can’t do. We will work with you to address your concerns. We will have the appropriate representatives from the FAA as well as airport management and staff at the meeting so we can properly answer your questions and work toward some resolution.”

A question was raised about when the FAA will be contacted. A suggestion was made by Ken Goffstein of Teaneck to contact the FAA on social media, like Twitter.

Mayor Dressel spoke to the term transparency, which he said has a connotation of people keeping secrets that they don’t want out. “The report in question has not been hidden or buried. We were notified that the FAA decided, because of lack of use, not to move forward with the alternate approach. The committee didn’t ask for more information.”

Mr. Griffo added that Representative Torricelli helped TANAAC get the money for the noise abatement system and we installed it. And Representative Rothman was a big defender of what TANAAC was doing. Mr. Griffo explained that he is not an elected official, he represents Rutherford on the committee as a concerned citizen. He has been on the committee since about 1991 and one of the first concerns that came up before the group was noise levels at the Hackensack University Medical Center (HUMC). The group worked very hard for a long time to get the FAA to consider changing that route. The committee was elated when the testing and then when it didn’t happen, they were devastated. Things that happen that are outside the committee’s ability to do anything. The committee has been fighting on behalf of the HUMC for a long time. Mr. Griffo added that committee is not against the group from Hackensack. They very much want to see some relief for the hospital. He noted that the committee has worked very hard for a long time on noise abatement issues for the whole area around Teterboro Airport. And there is frustration between what can be done and what we would like to see. But Mr. Griffo urged that group to accept Ms. Spann’s offer for a separate meeting. He attended such a meeting with a group from Rutherford not too long ago and the information shared was extremely helpful. It is important to understand the magnitude of the problems that the airport faces every day. And what that means for the things this committee wants to do.

Mr. Zack McCue reported that he was in attendance representing Senator Cory Booker’s office. He added that the Senator is very interested in the issues brought up tonight.

Mr. Middleton noted that he has a copy of a letter written in 2007 at the request of TANAAC to the FAA asking them to look at changing the approach over the hospital signed by Senator Lautenberg, Senator Menendez, and Congressman Rothman.

Deputy Mayor Canestrino expressed her concerns that the test of the alternate approach was not valid. Mr. Palm emphasized that the FAA will continue to work with TANAAC. The group's desires will need to be funneled through TANAAC, and then those can be brought forward. "Your concern right now is the validity of the test. We can take that concern and work that through the committee and see what options are available and we'll bring those forward. Cannot say if there will be options, but your concerns will be brought to the attention of the appropriate authorities. Start with the whole picture, have the meeting that Ms. Spann is offering, and have your TANAAC representative bring your desires to the committee."

Several concerns were raised about getting the FAA to attend a TANAAC meeting. Mr. Palm regularly represents the FAA at TANAAC, and he is able to relay requests to the appropriate parties in the agency. Laura Stensland, FAA District Administrator, who was in attendance for the RUUDY Six discussion agreed to return with the necessary information for future discussion of the concerns that the Hackensack residents posed tonight.

Members of the group continued to express their concerns for safety.

Deputy Mayor Canestrino summarized by saying that she thinks the follow-up meeting is critical to their cause and she would like the FAA to bring the report / documentation about the development and testing of the alternate approach. She would like to work together with the FAA, the Port Authority and TANAAC proactively to find a solution to the situation they face with flights going over the high rise condos and the Medical Center before there is an incident in their town.

Mr. John Panarello interjected for clarity that the FAA did not develop the alternate approach. Pilots who utilize Teterboro Airport in conjunction with TANAAC designed it. Then the proposal was submitted to the FAA for acceptance and approval. The FAA has a lot of rules. Conversation at this meeting has been about aircraft in the air and separation, but we need to consider aircraft landing. A safe speed and altitude for descent are very critical. So those along with obstructions and runway proximity are some of the things that must be considered in making any change. It was a partnership from the beginning with the airport, the pilots and the FAA with safety being the number one consideration.

Deputy Mayor Canestrino reiterated her concerns for safety.

A resident of Rutherford who is part of the CRAFT group added that residents need to also consider the future of the airport -- what plans there are for more and larger aircraft.

Ms. Spann announced that the airport will work with Deputy Mayor Canestrino to coordinate a follow-up meeting.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **July 26, 2017**, at 6:00 p.m. Please note the earlier start time.

TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)

MEETING

SUMMARY OF MINUTES

July 26, 2017

ATTENDANCE

Members and Staff

Renee Spann, Manager, Teterboro Airport
 Scott Marsh, Manager Ops and Security
 Rick Vander Wende, Manager Contract Services
 Tim Middleton, Project Manager, Part 150 Study
 Gabriel Andino, Manager, Noise Abatement
 Michael Fiscus, Asst. Manager, Noise Abatement
 Daniel Gardon, Specialist, Noise Abatement
 Gary Palm, TEB ATCT Manager
 Ted Zimmerman, TEB ATCT Ops Manager
 Ron Stull, Representative
 Kathleen Canestrino, Deputy Mayor
 Fritz Rethage, Representative
 George Muller, Representative
 Rick DeHeer, Representative
 Frederick Dressel, TANAAC Co-Chair
 Hugo Poli, Commissioner
 Ken Goffstein, Representative
 Peter Kortright, Representative
 Ian Godfrey, Representing

Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 FAA
 FAA
 Borough of Carlstadt
 City of Hackensack
 Borough of Hasbrouck Heights
 Borough of Little Ferry
 Borough of Maywood
 Borough of Moonachie
 Village of Ridgely Park
 Township of Teaneck
 Bergen County
 Office of Bill Pascrell

Guests

Steve Riethof
 Pierre Gaillard
 Roy Luyster
 Tom Panso
 Carol Skiba
 Eileen Modeste
 Christie Emden
 David Fegelman
 Gid Fisher
 Pamela King

AOPA-ASN / AHOF
 City of Hackensack
 Township of Rochelle Park
 Borough of Woodcliff Lake
 Coalition for Public Health & Safety
 Atlantic Aviation, TEB
 Atlantic Aviation, TEB
 Good Neighbor Award Recipient
 Good Neighbor Award Recipient
 Good Neighbor Award Recipient

FAA Presenters

Jim Peters
 David Swanson
 Kevin Thompson
 David Johnson

Teterboro Airport

July 26, 2017

90 Moonachie Avenue, PA Conference Room

Minutes Summary

Mayor Fred Dressel, TANAAC Co-Chair, called the meeting to order and welcomed attendees. He began the meeting with introductions of the TANAAC Committee.

Ms. Renee Spann, TANAAC Co-Chair presented some airport information.

She announced that, as discussed at the last meeting, the noise abatement/TANAAC information on the Port Authority website has been enhanced for easier access. A demonstration of the website was presented at the meeting. By going to www.panynj.gov, one can access the Teterboro homepage and the access point to the noise abatement/TANAAC information is located in the lower right corner of that page. By clicking on the topics, one can view information about TANAAC, the Part 150 Study, the Noise Office, and WebTrak.

In June, the Teterboro Airport Community Benefit Fund hosted the annual scholarship luncheon at which 10 students from local high schools each received a \$1,200 scholarship. The students qualified for the award to pursue higher education in math, science or other aviation related subject and were nominated by their schools. The airport scholarship program has been one of the most rewarding community outreach projects we do at the airport. The students, their families and the school counsellors always appreciate receiving the award.

Renee turned the meeting over to Scott Marsh to report on construction at the airport.

Mr. Marsh noted that the project to improve the airfield drainage should be starting in September. The work will require some closures of Runway 1-19 in the early stages of the project.

There will be an airport closure on August 12 from 5 a.m. to 11 a.m. for painting in the runway intersection. The rain date will be August 19.

OLD BUSINESS

Mr. Timothy Middleton, Port Authority Project Manager for the study, reported on the 14 CFR Part 150 Study.

- Mr. Middleton reported that the noise exposure maps were approved by the FAA on June 15, and published on June 22. This completes Phase 1 of the study.
- Phase 2 is the Noise Compatibility Program, which includes proposals for noise mitigation. The options, which will be discussed at the Technical Advisory Committee (TAC) meetings, will be included in a report to the FAA, and that report will be subject to public hearings.
- The Study consultants have met with officials from every jurisdiction around the airport and will continue to communicate information to them.
- A TAC meeting scheduled on Thursday, November 9, June 29, 2017, at 90 Moonachie Avenue.
- Tim will have more information at the TANAAC meeting in October.
- Mr. Middleton reiterated the importance of the public's input and participation in this study.



- All information about the study is online. The link to the website is: http://panynjpart150.com/TEB_homepage.asp

NEW BUSINESS

Mr. Gary Palm introduced some FAA subject matter experts who had come to the meeting to speak on the ILS approach to Runway 19 and some options being explored for a possible offset approach to that runway.

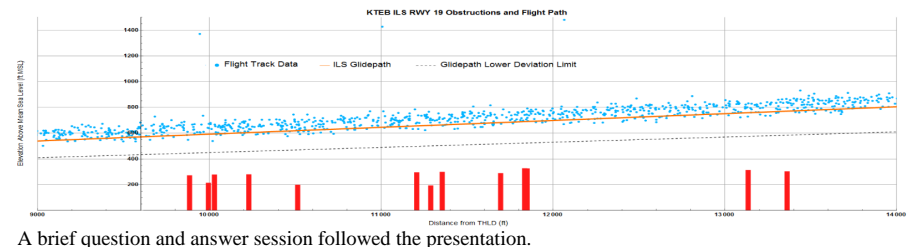
Mr. David Swanson, from the Eastern Region Flight Standards Office, presented information relative to the Instrument Landing System (ILS) 19.

General ILS information:

- Instrument landing systems have been in use for commercial air operations since the mid-1940s.
- There are currently over 1,500 published ILS approaches in the United States and territories.
- Every ILS approach is developed in accordance with the United States Standard for Terminal Instrument Procedures (TERPS) criteria, inspected by FAA Flight Inspection, and periodically re-evaluated by procedure specialists and Flight Inspection.

Teterboro Airport ILS

- The ILS is a precision approach.
- ILS RWY 19 was originally published 06/17/1999.
- It was designed in accordance with TERPS, FAA Order 8260.3 (as amended)
- The FAA design team surveyed the area, calculated obstructions, and determined the flight path with all that data by using mathematical formulas according to the rules of TERPS.
- Electronic signals are transmitted from equipment at the airport that establish the vertical and lateral path for the ILS 19.
- Aircraft receive the electronic signals and the guidance is displayed in the cockpit. The aircraft can electronically follow this path (auto pilot).
- ILS Glide path is the vertical path flown and referenced in the cockpit. The standard glide path is a 3-degree descent. The localizer keeps the aircraft on the path laterally.
- The ILS gives the best opportunity for the pilot to accurately control the aircraft onto the runway.
- A Lower Deviation Limit altitude is established. Aircraft must discontinue flying the ILS if they drop below that limit.
- There is also an Obstacle Clearance Surface (OCS) established, which is well below the ILS Glide path, and also well below the Lower Deviation Limit.
- No obstacle is allowed to penetrate the OCS.
- The OCS represents an absolute limit that provides for safe operations, considering all contributing elements.
- Aircraft generally get on the ILS approach about 5 to 6 miles out from the airport.
- Any off-set to the ILS approach is limited by design and must comply with the criteria mandated in TERPS.



A brief question and answer session followed the presentation.

Mr. David Johnson, from the FAA office in Atlanta, Georgia, presented some information about offset approaches to Runway 19.

- Instrument Flight Rules (IFR)
 - IFR means navigating entirely on instruments, or under ATC control.
 - When any pilot flies under IFR, they are required to be under the direction of Air Traffic Control (ATC), who direct the Captain regarding the aircraft direction course, speed, altitude.
- Visual Flight Rules (VFR)
 - VFR flight is based on the principle of “see and avoid.”
 - VFR usually means that you are flying without definite control from ATC.
 - However, there are certain airspace rules that require a pilot to speak to ATC even when flying VFR.
- Some reasons that an offset ILS approach to Runway 19 is deemed unfeasible
 - There is a 693-foot-tall ABC Antenna in the path of flight.
 - Loss of glideslope.
 - Weather minimums will be raised.
- In order to retest the Quiet Visual approach, the following must be considered:
 - Environmental analysis is required prior to retest.
 - Greater operator commitment to use the procedure would be required prior reinvesting in environmental analysis.
 - Previous test was underutilized because operators prefer to fly utilizing instruments versus a visual procedure.
 - FAA cannot require the Pilot in Command to fly this procedure.
 - The approach is only available in VFR daytime only.
 - TANAAC’s support and request would be required.
- Two options are presently being considered by the FAA:
 - RNAV(RNP) Runway 19
 - It may be feasible to mimic current Quiet Visual flight path.
 - Use of technology would enhance confidence and consistency, reduce complexity of terminal operations, and reduce the risk of communication errors.
 - Currently there are a limited number of qualified pilots to fly RNP approaches.
 - RNAV(GPS) Offset Runway 19
 - Avoid overflying Hackensack Hospital

- Navigation waypoints will be coded
- Current operators more than likely to use this approach over the Quiet Visual
- Can be used in VFR and IFR conditions

After a question and answer period, Ms. Spann turned to meeting over the Mr. Gabriel Andino to present the Good Neighbor Awards. The FAA will present more information about the RNAV approaches at the October TANAAC meeting.

Mr. Andino shared some information about the Awards.

- The awards are presented to companies that did not have any noise violations nor operations during the voluntary curfew hours in 2016.
- They are presented to both based aircraft and frequent users of the airport. Non-based operators must have at least 100 flights.
- There are 16 companies who received the award this year:

○ 2J2G LLC	○ L BRANDS INC
○ ARC REAL ESTATE PARTNERS	○ MEREDITH CORPORATION
○ ARGO AVIATION LLC	○ MORRIS, WILLIAM C.
○ CITIZENS BANK	○ NORTHWESTERN MUTUAL LIFE INS CO
○ CORNING INC - AVIATION DEPT	○ <u>Based Winners</u>
○ EVERTZ MICROSYSTEMS LTD	○ OLIVER STERLING
○ FEDEX CORPORATION	○ PLANESENSE INC.
○ GOLD AVIATION SERVICES INC.	○ RICHARDSON AVIATION
	○ SBJ AVIATION LLC

Two of those companies, ARC Real Estate Partners, and L Brands, Inc., were in attendance and received their plaques in person. The other plaques will be mailed.

A Congratulatory letter from U.S. Senator Cory Booker's office to six of the winners, recognizing them for receiving a Good Neighbor Award multiple years. Recipient companies were

- Citizens Bank
- FedEx
- William C. Morris
- SBJ Aviation, LLC
- Meredith Corporation
- L Brands Inc.
- Evertz Microsystems Ltd.

Ms. Spann congratulated the recipients and expressed her appreciation for their efforts to "fly quiet".

Mr. Andino reviewed the statistics for the first half of 2017.

Total operations for the six months were 87,257, an increase of 3.95% over the first half of 2016. Jet movements were 71,252, which was an increase of 5.77%. Nighttime operations (between 11:00 pm and 6:00 am) for the half-year were 4,196, which was 4.81% of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first half of 2017. RMS 1 in Wood-Ridge showed a very slight increase. RMS 2 in Hasbrouck Heights, RMS 3 at Hackensack hospital, RMS 5 in Bogota, and RMS 6 in Moonachie all showed decreases. RMS 4 in Hackensack showed a 1.0 decibel increase.

In the first half of 2017, 1,009 Noise complaints related to Teterboro Airport traffic were received from 272 residents, which include 304 complaints from Rutherford and 109 from South Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from thirty non-TANAAC towns for the first half of 2017. A total of 388 complaints were received from residents mostly north of the airport. These numbers include 67 complaints from Ho-Ho-Kus, 38 complaints from Waldwick, 39 from Stockholm, and 43 complaints Woodcliff Lake.

With regard to noise violations, there were 55 first violations during the first half of 2017, which was equal to the same period in 2016. There were 7 second violations and 2 aircraft were banned.

OPEN DISCUSSION

Mr. Andino brought a request before the committee from Mr. Paul Griffo for a portable noise monitor to be located in Rutherford. The committee unanimously approved the request. TEB Noise Office staff will work with Mr. Griffo to fulfill the request.

With no other business to come before the committee, the meeting was adjourned to the annual BBQ.

The next regular meeting of TANAAC is **October 25, 2017**, at 7:00 p.m.

TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)

MEETING

SUMMARY OF MINUTES

October 25, 2017

ATTENDANCE

Renee Spann, Manager, Teterboro Airport
 Scott Marsh, Manager Ops and Security
 Rick Vander Wende, Manager Contract Svcs.
 Tim Middleton, Project Manager, Part 150 Study
 Gabriel Andino, Manager, Noise Abatement
 Michael Fiscus, Asst. Manager, Noise Abatement
 Zachary Miller, Specialist, Noise Abatement
 John Panarello, Manager of Airport Services
 Gary Palm, TEB ATCT Manager
 Ted Zimmerman
 Maria Aviles
 Jim Peters
 Frederick Dressel, TANAAC Co-Chair
 Kathy Ferris, Representative
 Ron Stull, Representative
 Kathy Canestrino, Dep. Mayor
 Fritz Rethage, Representative
 George Muller, Representative
 Rick DeHeer, Representative
 Paul Griffo, Representative
 Frank Cagas, Mayor
 Ken Goffstein, Representative
 Frank Valenzuela, Mayor
 Peter Kortright, Representative
 Ian Godfrey, Representative
 John Esposito, Guest
 Steve Riethof, Guest
 Pierre Gaillard, Guest
 Roy Luyster, Guest

Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Port Authority of NY & NJ
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 Teterboro Airport/AvPORTS
 FAA
 FAA
 FAA
 FAA
 Borough of Moonachie
 Borough of Bogota
 Borough of Carlstadt
 City of Hackensack
 Borough of Hasbrouck Heights
 Borough of Little Ferry
 Borough of Maywood
 Borough of Rutherford
 Township of South Hackensack
 Township of Teaneck
 Township of Rochelle Park
 County of Bergen
 Congressman Pascarella
 Jet Aviation, Teterboro
 APOA/ ASN/ AHO
 City of Hackensack
 Township of Rochelle Park

The following attended the meeting as guests representing the Condo Board in Hackensack:

Joe Korn, Bruce McPherson, Mary Ann Gargano, Frank and Judy Albolino, Gerald Weber, Eric Simon, Nathan Riley Jr., David Lender, Annette Jadboeule, Murray Runin, Connie Booies, Margaret King, Dorothy Moropoli, Gale Willis

(please note that this roster of attendees is taken directly from the sign-in sheet provided at the meeting. Therefore, persons may have been in attendance who are not listed here and/or names may be spelled incorrectly due to difficulty in reading some handwriting.)

TANAAC

Teterboro Airport

October 25, 2017

90 Moonachie Avenue, PA Conference Room

Minutes Summary

Fred Dressel, TANAAC Co-Chair, called the meeting to order and welcomed attendees. He noted that a letter was received from Rochelle Park about being represented at TANAAC. He welcomed Rochelle Park Mayor, Frank Valenzuela to the table.

Roll call of TANAAC members present was made.

Ms. Renee Spann announced two upcoming construction projects for Signature Flight Support, one at their East location and the other at their South location. Each project will include the construction of hangars, (two at the south location and one at the east location with office space); additional ramp space and vehicle parking. Signature has received their permits from NJDEP and has submitted application to the Army Corps of Engineers.

Mr. Scott Marsh reviewed construction at the airport.

- Currently, work is taking place to improve airfield drainage in 2 areas of the airfield.
- Upcoming projects include:
 - The replacement of airfield electrical circuits that were damaged in Superstorm Sandy.
 - The replacement of Taxiway B to help improve aircraft movements in a critical area of the airfield.
 - Resurfacing Taxiways L, G, and P.

Mr. Gabriel Andino briefly reviewed an article citing new quieter aircraft technology that will be required in 2018. This technology will meet stricter noise criteria and reduce the average noise level from the current technology by 7dB.

OLD BUSINESS

Mr. Andino turned the meeting over to Mr. David Johnson, Mr. Joey Medders and Mr. Kevin Thompson who reported on two proposed alternate landing approaches for Runway 19 at Teterboro Airport. The options explored were designed to avoid overflying the Hackensack University Medical Center (HUMC), have coded waypoints, increase operator use, and be available in VFR and IFR conditions.

- Option 1 - TEB RNAV (RNP) RWY 19 – This route mimics the former Quiet Visual route, but would utilize on-aircraft technology. This meets all the criteria listed above with the exception of increase operator use. This procedure requires aircraft to be equipped with costly new navigation equipment and pilots to have received costly training. Not many current users of Teterboro have this technology and training so consequently this approach would not be utilized by many aircraft. It is the less viable option.
- Option 2 – TEB RNAV (GPS) X RWY 19 – This route also mimics the former Quiet Visual route and would not require new costly equipment in aircraft. This procedure meets all the criteria above except it can only be used in VFR conditions. It would be limited to when the ceiling is at least 1000 feet and visibility is greater than 3 miles. This procedure is a more viable option because it doesn't require additional costly equipment or training, but relies on technology that aircraft already have. It

cannot be flown when weather / visibility is a factor, but it does move some flights away from the HUMC. It will introduce more activity over Rochelle Park and Maywood however.

- The FAA has given TANAAC some time to review and discuss these options and has requested that a decisional letter from TANAAC be sent to them before March 16, 2018 as to whether they would like the FAA to pursue these options.

Questions and answers were part of the presentation. Some points from that part of the discussion included, but were not limited to the following:

- At this time, the GPS approach is the most preferred option. The RNP technology will likely be more readily available in the future, so that approach can be revisited as more and more operators acquire that equipment.
- Both of these proposed procedures are off-set procedures.
- The FAA would make the alternate approach a permanent approach. Therefore, there would not be a testing period as took place with the Quiet Visual.
- The current GPS technology provides vertical but not lateral guidance.
- Both proposed approaches are equally as safe as the ILS approach. Safety is the FAA's primary mission.
- These proposals are in addition to the current ILS approach. They would not replace it. They would offer some relief for the HUMC, but also would shift some of the burden to other areas, particularly Rochelle Park and Maywood.
- Pilots would still have the option of utilizing the ILS approach regardless of which option is pursued.
- With the GPS approach option, only the ILS approach will still be used in bad weather.
- The FAA reiterated that the first directive for their design of these alternate approaches was to provide some relief to the HUMC.
- The timeframe for development and implementation of the route that is selected by TANAAC would be around 16-18 months.

Mr. Tim Middleton spoke about the Part 150 Noise Compatibility Study at Teterboro and Newark Airports.

The November Technical Advisory Committee (TAC) meeting for the Teterboro Airport Part 150 study will focus on the development of the Noise Compatibility Program (NCP). The meeting will take place on November 9 from 1 to 4 p.m. at 90 Moonachie Avenue.

The meeting agenda includes: a discussion on the NCP Document Outline; what is required to be addressed by regulation and the formatting and structure of the final document.

Additionally, an in depth discussion on potential Noise Abatement measures, including:

- Review of NCP discussion from TAC Meeting #12
- Additional evaluation of intersection departures from Taxiway K on Runway 1
- Additional evaluations of the 230 degree heading for Runway 24 departures
- Central maintenance run-up location evaluation
- Evaluation of community proposed arrival procedures
- Recommended combination noise abatement cases evaluation
- Existing TEB restrictions

The meeting will conclude with a discussion of upcoming Part 150 milestones, and the next required steps in the NCP process.

Mr. Middleton reiterated the importance of the public's input and participation in this study.

All information about the study is online. The link to the website is:

http://panynjpart150.com/TEB_homepage.asp

Mr. Andino noted that a portable noise monitor was installed at a residence in Rutherford at the beginning of September as requested at the last TANAAC meeting. The monitor will remain in place for 6 months. Staff will review the readings regularly during this time. Following a brief discussion, the Mayor of South Hackensack expressed interest in having the portable monitor in his town due to the noise from helicopter operations.

NEW BUSINESS

The FAA made another presentation regarding the agency's Community Outreach.

Mr. Joey Medders talked about the FAA community involvement policies.

- The FAA would brief TANAAC on all changes coming to TEB.
- They would provide information to TANAAC regardless of the size or scope of the change.
- The FAA welcomes community input and will continue to work with the TANAAC representatives to address community concerns.

To that end, he noted two new procedures that are being implemented.

- TEB RNAV Transition to ILS and RNAV (GPS) RWY 19
 - Decouples TEB from Essex County and Morristown Airports, allowing independent flow of air traffic to each airport instead of one at a time.
 - Proposed publication is March 2019.
- TEB RNAV (GPS) RWY 24
 - Provides lower minimums than the current VOR Approach
 - Decouples TEB from LGA providing better flow of air traffic between TEB and LGA.
 - Proposed Publication is March 2019.

A brief discussion followed the presentation.

Mr. Andino reviewed the statistics for the first three quarters of 2017.

Total operations for the nine months were 127,881, an increase of 2.69% over the same nine-month period of 2016. Jet movements were 104,373, which was an increase of 4.73%. Nighttime operations (between 11:00 pm and 6:00 am) for the three quarters were 6,285, which was 4.91% of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first three quarters of 2017 compared to the same time period in 2016. RMS 1 in Wood-Ridge was static, RMS 2 in Hasbrouck Heights showed a slight decrease, RMS 3 at Hackensack hospital also showed a slight decrease, RMS 4 in Hackensack showed a slight increase, RMS 5 in Bogota also showed a slight increase, and RMS 6 in Moonachie all showed a 3.6 decibel (dB) decrease.

In the first nine months of 2017, 1,693 Noise complaints related to Teterboro Airport traffic were received from 460 residents, which include 542 complaints from Rutherford, 185 from South Hackensack and 124 from Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from thirty-two non-TANAAC towns for the first three quarters of 2017. A breakdown of those complaints by town includes 76 complaints from Ho-Ho-Kus, 61 from Woodcliff Lake, 60 from Ramsey and 50 from Stockholm. In addition, Mahwah, Waldwick and Paramus had 40, 41, 45 complaints respectively. The majority of the complaints fell in the categories of: “low and loud”, “too early/too late” and “too frequent”.

With regard to noise violations, there were 63 first violations during the first nine months of 2017, which was lower than the same period in 2016 (89). There were 9 second violations and 2 aircraft were banned.

OPEN DISCUSSION

Given the request from the FAA for a directional letter regarding the proposed new RNAV approach to Runway 19, it was determined that a special meeting of TANAAC was necessary to discuss and determine how the committee wanted to direct the FAA. It was decided that the committee would meet in Executive Session on November 29.

A group, Concerned Residents Along Flightpath of Teterboro (C.R.A.F.T), from Rutherford had proposed an alternate approach to Runway 24. Mr. Griffo asked the status of that proposal. It is currently with the FAA for review. It has also been reviewed in the Part 150 Study.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **January 24, 2018**, at 7:00 p.m.

TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)

**MEETING
SUMMARY OF MINUTES**

January 24, 2018

ATTENDANCE

Renee Spann, Manager, Teterboro Airport
Scott Marsh, Manager Ops and Security
Rick Vander Wende, Manager Contract Svcs
Tim Middleton, Project Manager, Part 150 Study
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Zachary Miller, Specialist, Noise Abatement
Gary Palm, TEB ATCT Manager
Kathryn Ferris, Representative
Kathy Canestrino, Representative
Fritz Rethage, Representative
George Muller, Representative
Matthew Garofalow, Representative
Bruce Surak, Representative
Roy Luyster, Representative
Karlito Almeda, Representative
John Esposito, guest
Dave Kingma, guest
Pierre Gaillard, guest

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
Borough of Bogota
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Borough of Maywood
Borough of Moonachie
Township of Rochelle Park
Congressman Bill Pascrell
Jet Aviation
Township of Rochelle Park
City of Hackensack

**TANAAC
Teterboro Airport
January 24, 2018
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mayor Fred Dressel, TANAAC Co-Chair called the meeting to order and welcomed attendees. He turned the meeting over to Ms. Renee Spann, Teterboro Airport Manager and TANAAC Co-Chair. Ms. Spann introduced Mr. Karlito Almeda, who was in attendance representing Congressman Bill Pascrell. She then reported that the annual FAA Part 139 Certification Inspection will take place at the airport on April 2. This is a very thorough inspection performed by the FAA for specific safety and operational standards in order for the airport to maintain its Part 139 Certificate. Teterboro is one of the few General Aviation airports that holds a Part 139 Certificate. Renee also noted that the new hangar recently constructed by Meridian TEB, should be open by the end of February. She turned the meeting over to Mr. Scott Marsh.

Mr. Marsh provided an airport construction update.

Currently, construction at the airport includes a project to improve storm water drainage in two areas. This project should be completed by the next TANAAC meeting. Upcoming construction projects at the airport include repairs to airfield circuits that were damaged during Superstorm Sandy. All wiring will be replaced. In addition, Taxiway B will be replaced by Taxiway V, which will facilitate enhanced safety and efficiency on the airfield.

Ms. Spann turned the meeting over to Mr. Gabriel Andino.

OLD BUSINESS

Mr. Andino reviewed general information about TANAAC since it is the first meeting of the new year. TANAAC started in February of 1987 with "the main purpose of establishing a meaningful dialogue between the airport community and the residential communities. The primary goal is to enhance the quality of life of the residents of local communities while insuring the efficient operation of the airport."

Gabriel also reviewed the by-laws. Included in each of the packets for members was a draft of the by-laws that were amended to include Rochelle Park as a voting TANAAC member. A roll call vote was called to accept the by-laws as amended. The following representatives voted "yea": Hasbrouck Heights, Bogota, Hackensack, Moonachie, Little Ferry, and Maywood. There were no "nay" votes presented. The by-laws were accepted as amended by unanimous vote. A copy of the finalized document will be distributed to the membership.

Mr. Andino also reviewed noise rules and noted the inclusion of reference material in the members' packets about the measurement of aircraft sound.

Mr. Gary Palm reported on the progress of the TEB RNAV (GPS) Runway 19 offset approach.

On Jan 10, 2018, New York Area Program Integration Office (NYAPIO) on behalf of the Acting Regional Administrator, submitted a request through the Instrument Flight Procedure (IFP) Gateway Portal to proceed with the development and implementation of the TEB offset RNAV (GPS) Rwy 19 presented to Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC) on October 25, 2017. A copy of the letter from TANAAC was attached to the request and forwarded to the Eastern Service Area Operations Support Group

(ESA/OSG) Leadership. The OSG Airspace and Procedures North team has initiated environmental review. The Publication Date is yet to be determined.

Mr. Timothy Middleton reported on the FAA Part 150 Study.

A Technical Advisory Committee (TAC) meeting took place in November. Currently there is ongoing internal discussion about land use mitigation measures. Another TAC meeting will be scheduled to take place by the end of May. We anticipate having a draft of the report for the FAA by summer, which then will be presented in a public forum in the fall.

The study has focused on three areas, noise abatement, land use compatibility and programmatic issues. Teterboro already has a robust noise abatement program, but we may see some changes and enhancements at the conclusion of the study.

Deputy Mayor Canestrino asked about land use compatibility. The areas within the 65DNL threshold are considered for land use compatibility and noise mitigation. Staff working on the study met with the planning boards of the towns in those areas. The noise exposure and land use maps are updated every 5 years and compatibility is re-evaluated.

Timothy will continue to report at TANAAC meetings and encouraged the public's input and participation in this study. All information about the study is online.

The link to the website is: http://panynjpart150.com/TEB_homepage.asp

NEW BUSINESS

Mr. Andino reported that he has submitted a formal request to the FAA through the IFP Gateway Portal to develop an offset approach to Runway 6 as requested by CRAFT, the citizen's group from Rutherford. In addition, Mr. Andino requested that the FAA develop a GPS approach to Runway 1. The alternate approach to Runway 6 and the GPS approach to Runway 1 would both help with the airport's efficiency and help mitigate some noise concerns. We are awaiting a response on these requests from FAA.

Gabriel reviewed the statistics for 2017.

Total operations for the year were 174,870, an increase of 2.02% over 2016. Jet movements were 144,117, which was an increase of 4.15%. Helicopter operations were 15.13% lower than 2016. Nighttime operations (between 11:00 pm and 6:00 am) for 2017 were 8,432, which was 4.82% of total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for 2017. Compared to 2017 levels, RMS 1 in Carlstadt, RMS 3 and RMS 4 in Hackensack showed very slight increases in the noise levels. RMS 2 in Hasbrouck Heights showed an increase of 2.4-decibels (dB). RMS 5 in Bogota showed a very slight decrease and RMS 6 in Moonachie showed a decrease of 1.9 (dB).

In 2016, 2,259 Noise complaints related to Teterboro Airport traffic were received from 542 residents. This includes 741 complaints from Rutherford, 294 from South Hackensack, and 163 from Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from 43 non-TANAAC towns for 2017. These numbers include several towns north of the airport like Ho-Ho-Kus with 88 complaints, Ramsey with 66, Paramus with 63, Woodcliff Lake with 61, Stockholm with 59, and Bloomfield with 51. Waldwick, Mahwah and Allendale had 42, 43, 45 complaints respectively, and Wyckoff had 32. The

majority of the complaints were "too loud and too low", the second highest category was "too early or too late".

With regard to noise violations, there were 83 first violations during 2017, which was considerably lower than 2016 (115). There were 12 second violations and 2 aircraft were banned.

In 2017, airport staff gave a total of 1,771 Flight Crew briefings to educate them on the noise rules and community concerns at TEB. There were 372 in the first quarter of 2016, 539 in the second quarter, 492 in the third and 368 in the fourth.

Mayor Dressel requested that the Noise office report the helicopter statistics separately in the future as helicopters continue to be a source of concern for Moonachie. The report will reflect this at the next TANAAC meeting.

OPEN DISCUSSION

Open discussion included a lengthy discussion about future operations at Teterboro Airport, including but not limited to more traffic, larger aircraft, and new construction at the airport. In addition, it was noted that the funding for construction of the new Air Traffic Control Tower at Teterboro Airport is on hold at the present time.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **April 25, 2018**, at 7:00 p.m.

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

April 25, 2018

ATTENDANCE

Scott Marsh, Manager Ops and Security
Rick Vander Wende, Manager Contract Svcs
Tim Middleton, Project Manager, Part 150 Study
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
David Johnson

Kathryn Gate-Ferris, Representative
Ron Stull, Representative
Kathy Canestrino, Representative
Fritz Rethage, Representative
Matthew Garofalow, Representative
Bruce Surak, Representative
Hugo Poli, Representative
Roy Luyster, Representative
Paul Griffo, Representative
Ken Goffstein, Representative
Gina Affuso, Representative

Steve Riethof, guest
Joseph D'Arco, guest
Dave Kingma, guest

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA

Borough of Bogota
Borough of Carlstadt
City of Hackensack
Borough of Hasbrouck Heights
Borough of Maywood
Borough of Moonachie
Village of Ridgefield Park
Township of Rochelle Park
Borough of Rutherford
Township of Teaneck
Borough of Wood-Ridge

AOPA-ASN / AHOF
Borough of Paramus
Township of Rochelle Park

**TANAAC
Teterboro Airport
April 25, 2018
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mayor Fred Dressel, TANAAC Co-Chair called the meeting to order and welcomed attendees. He turned the meeting over to Mr. Scott Marsh, who was filling in for Renee Spann, Teterboro Airport Manager and TANAAC Co-Chair.

Mr. Marsh reported that Ms. Diane Papaanni, General Manager, NJ Airports retired last month. Mr. Doug Stearns is acting General Manager at this time.

Scott also noted that the last week of May is Fleet Week. As in the past, military aircraft will be present for the event. Some of those aircraft are louder than the usual traffic at Teterboro Airport. We will try to keep the public informed as to when those aircraft will be operating in the area.

Scott added that work has begun for the annual presentations of the Teterboro Airport Community Benefit Fund scholarships to local high school students who are pursuing higher education in aviation or related fields.

Mr. Marsh also provided an airport construction update.

There are two current projects in progress.

1. Airfield drainage rehabilitation. This project is cleaning out ditches and catch basins on the airport to better manage the stormwater drainage at critical areas on the airport. The project is designed to release water with a gradual flow into the East Riser ditch.
2. Replace electrical wiring damaged in Superstorm Sandy. All of the airfield cables and wiring will be replaced.

An upcoming project will be the replacement of Taxiway B with Taxiway V. This project will improve the airfield operating environment and address a possible safety concern. This project along with the airfield electrical project will require runway and airport closures which will be scheduled during the nighttime hours. We will keep the local communities informed of the schedule of these closures as the projects progress.

There are two Teterboro Airport tenants with construction projects currently ongoing.

1. Meridian Teterboro is near completion of the replacement of their hangar on Industrial Avenue.
2. Jet Aviation is beginning work for the replacement of one of the hangars in their complex.

Mr. Marsh called on Mr. Tim Middleton to report on the Teterboro Airport Part 150 Study.

Mr. Middleton reported that the project is still in the process of internal deliberations concerning mitigation measures. Tim anticipates being able to give an update with more specific information at the next TANAAC meeting. A question was raised about preferential funding for the mitigation measures among the Port Authority airports. There is no preference, all documents must be in line with Port Authority protocols.

The most current information about the study is online.

The link to the website is: http://panynjpart150.com/TEB_homepage.asp
Mr. Marsh turned the meeting over to Mr. Gabriel Andino.

OLD BUSINESS

Mr. Andino called on Mr. David Johnson of the FAA to provide a status update on the TEB RNAV (GPS) Runway 19 offset approach.

Mr. Johnson reported that the FAA is currently in the process of the Environmental Review for this approach. This includes a noise analysis of the present routes as well as determining the noise impact of the new route and community outreach. The process is going smoothly, and we expect to have more information at the next TANAAC meeting. The publish date for the new approach procedure is set for August 2019.

A question was raised about the FAA's approval for the proposed expansion of the Hackensack University Medical Center. Mr. Johnson did not have specific information about this, however it is an FAA regulation that any proposed structure over 200 feet must file a form with the FAA for approval.

NEW BUSINESS

Mr. Andino reviewed the statistics for the 1st Quarter of 2018.

Total operations for the first quarter of the year were 39,457, an increase of 0.19% over the first quarter of 2017. Jet movements were 34,521, which was an increase of 2.71%. Helicopter operations were 25.25% lower than the same period in 2017. Nighttime operations (between 11:00 pm and 6:00 am) were 1,934, which was 4.90% of the total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first quarter of 2018 compared to first quarter 2017 levels.

- RMS 1 in Carlstadt was static.
- RMS 2 in Hasbrouck Heights showed an increase of 4.4 decibels (dB). Although this site showed an increase, the LDN(A) is still relatively low.
- RMS 3 at the Hackensack University Medical Center (HUMC) showed an increase of 3.3 dB. Our research indicates that the noise monitor is also registering the medical helicopters operating at the hospital helipad. Staff is working to separate those operations for the report at the next TANAAC meeting.
- RMS 4 in Hackensack showed a slight decrease of 1 dB.
- RMS 5 in Bogota showed a slight decrease of .8 dB.
- RMS 6 in Moonachie had an LDN(A) of 49.3 dB in the first quarter of 2018. However the monitoring equipment at this site encountered technical problems in early 2017 so we do not have previous year data to compare.

There were 705 noise complaints related to Teterboro Airport traffic received from 107 residents in the first quarter of 2018. This includes 287 complaints from 25 residents in Rutherford, and 169 from 6 residents in South Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from 23 non-TANAAC towns for the quarter. These show Allendale with 86 complaints and the rest of the towns with between 1 and 14 complaints. Most of the complaints were "too loud and too low", the second highest category was "too early or too late" and the third was "too frequent".

A question was raised about the method used for complaints. The vast majority come in through the Port Authority website and some by phone.

Noise violations for the first quarter of 2018 were: 19 first violations, 2 second violations and no aircraft were banned.

A brief discussion ensued concerning helicopter traffic. A request was made to show the statistics separately for the medical helicopters that operate at the HUMC. Staff will include those statistics in the July report. Helicopters continue to be a source of concern for Moonachie. Staff will request the necessary information from TRACON to be able to identify helicopter flight tracks and overlay those on the designated routes for the report in July also.

OPEN DISCUSSION

General discussion included a question about the proposed construction at TEB by Signature Flight Support. They have their NJDEP permits and are still working with the Army Corps of Engineers. TANAAC members expressed their concerns for wetlands mitigation and stormwater runoff. The rehabilitation of the airport drainage system will improve the flow of water coming off the airport.

In addition, a question was raised about the construction of the new Air Traffic Control Tower at Teterboro Airport. Funding has been approved and the process continues to progress.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **July 25, 2018, at 6:00 p.m.**

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

July 25, 2018

ATTENDANCE

Renee Spann, Manager Teterboro Airport
Scott Marsh, Manager Ops and Security
Rick Vander Wende, Manager Contract Svcs
Tim Middleton, Project Manager, Part 150 Study
Juan Rojas, TEB Gov. & Community Affair Rep.
Frederick Dressel, TANAAC Co-Chair
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Zack Miller, Noise Specialist
Gary Palm, TEB ATCT Manager
Peter Kortright, Representative
Ron Stull, Representative
Kathy Canestrino, Representative
Fritz Rethage, Representative
George Muller, Representative
Roy Luyster, Representative
Xavier Minervini, Representative
Frank Cagas, Representative
Ken Goffstein, Representative
J. P. Watt, Representative

Steve Riethof, guest
Karlito Almeda, Represtative
Nick Saros, guest
Dave Kingma, guest
Charlie Iorio, guest
Kristen Frendak, guest

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Borough of Moonachie
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
County of Bergen
Borough of Carlstadt
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Township of Rochelle Park
Borough of Rutherford
Township of South Hackensack
Township of Teaneck
Borough of Teterboro

AOPA-ASN / AHOF
Congressman Bill Pascrell
Borough of Teterboro
Township of Rochelle Park
Borough of Rutherford
Borough of Rutherford

J.D. La Rocca was present to accept the Good Neighbor Award on behalf of L. Brands, Inc.

**TANAAC
Teterboro Airport
July 25, 2018
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Ms. Renee Spann, TANAAC Co-Chair called the meeting to order and welcomed attendees. She turned the meeting over to Mr. Scott Marsh to provide an airport construction update.

Mr. Marsh reported that there are two current projects in progress.

1. The airfield stormwater drainage rehabilitation project is almost completed.
2. Replacing the electrical wiring damaged in Superstorm Sandy is ongoing. All of the airfield cables and wiring are being replaced. This project is nighttime work and involves periodic runway closures.

An upcoming project will be the replacement of Taxiway B with Taxiway V. This project will improve the airfield operating environment and address a possible safety concern. This project will also require runway and airport closures which will be scheduled during the nighttime hours. We will keep the local communities informed of the schedule of these closures as the projects progress.

There are two Teterboro Airport tenant construction projects.

1. Meridian Teterboro has recently received the Certificate of Occupancy for their new hangar that replaced their old one on Industrial Avenue.
2. Jet Aviation has begun work for the replacement of one of the hangars in their complex on the south end of the airport.

Ms. Spann called on Mr. Tim Middleton to report on the Teterboro Airport Part 150 Study.

Mr. Middleton reported that the project is still in the process of developing the draft NCP; internal deliberations concerning mitigation measures and consistency among airports are continuing. The consultant expects to have the documents ready for public review and comment during the first quarter of 2019. Workshops will be scheduled to coincide with the release of the draft documents. The study should be near completion by the end of 2019.

The most current information about the study is online.

The link to the website is: http://panynjpart150.com/TEB_homepage.asp

Ms. Spann turned the meeting over to Mr. Gary Palm for his report.

Mr. Palm reported that the proposed new approach for Runway 19 is currently in Environmental Review at the FAA, which includes a noise analysis to determine the noise impact of the new route and community outreach. The process is moving along and the publish date is still expected to be August 2019.

Mr. Palm discussed the helicopter operations at Teterboro Airport. He showed an instructional video that is given to the pilots, which explains the designated, approved helicopter routes at Teterboro Airport. He further explained that, just like fixed wing aircraft, helicopters flying into or out of TEB must be in communication with the ATCT. The four helicopter routes (Echo, November, Sierra and Whiskey) each serve for both arrivals and departures and are designed to follow major highways as much as possible. Once a helicopter is within a half mile of the airport, Air Traffic Controllers take over to sequence the helicopter

operations in with those of the fixed wing aircraft. Helicopters can land in various areas of the airport, most often they land on a taxiway (about 90% of the time) or they land on the ramp of an FBO.

A question was raised about the medical helicopter operations at the Hackensack University Medical Center (HUMC). Was staff able to separate that activity from the other operations that are recorded on the noise monitor at the HUMC? At the last meeting, it was mentioned that the medical helicopters may be a contributing factor in the noise levels recorded on the monitor at the hospital. However, further investigation showed that the medical helicopter operations were not a factor as they were not recorded by our monitor.

Further discussion included continued concerns that the helicopters may not be flying the prescribed routes near the airport. Moonachie reported that they still experiencing helicopters flying over residential areas. Little Ferry reported seeing a lot of helicopter operations over Route 46 (instead of 80 as defined in the route). Rutherford reported helicopters flying over the downtown area, which were not previously seen. Mr. Palm responded that helicopters can't come into Teterboro airspace without being on one of the specific routes. There are helicopters that transition through our airspace that would not be on one of the arrival or departure routes. Flight tracks do indicate that most of the helicopters into and out of Teterboro Airport do travel on the designated routes.

It was determined that Mr. Jeff Smith of the Eastern Region Helicopter Council (ERHC) will be invited to attend the next TANAAC meeting to continue the discussion and answer any questions related to helicopter activity near TEB.

Mr. Palm added that Congress has released funds for the construction of the new ATCT at TEB. There are enough funds to conduct the environmental phase. Currently the FAA is working on the lease with the Port Authority and wetlands mitigation with Little Ferry. After the environmental phase, the project would go into the design-build phase. Current estimate is "shovel in the ground" in 2020 and completion in 2024.

OLD BUSINESS

Mr. Gabriel Andino reported on old business.

A portable noise monitor was placed in Rutherford by request at a previous TANAAC meeting. Staff has been gathering data from the monitor, however, it has been intermittent because the monitor is solar powered and the location of the monitor may not have allowed for sufficient sunlight. The unit has since been connected to an electrical outlet for continued operation. Readings from the monitor (located on Summit Cross, 2.9 miles from the center of the airport) from April to May indicated the average day/ night noise level at 51.9 dB. Due to the intermittent results during the summer months, the monitor will remain in place until probably the end of September. This will give us more conclusive data as the airport is busier in September than in the summer.

The alternate approach to Runway 6 as proposed by CRAFT has been accepted by FAA for further review. The FAA Flight Procedure Team deems it feasible, but is looking at some concerns they have about nearby antennae in the area as well as conflicts with EWR airspace. The team is looking at possibly designing it as a RNAV approach. If that is not possible, it could be a visual approach. Also, Gabriel submitted a proposal for an instrument approach to Rwy 1 that would also move traffic away from Rutherford. This approach idea is also being reviewed by FAA.

NEW BUSINESS

Mr. Andino noted that the Good Neighbor Awards are presented each year at the July TANAAC meeting and he shared some information about the Awards.

The awards are presented to companies that did not have any noise violations or operations during the voluntary curfew hours in 2017. They are presented to both based aircraft and frequent users of the airport. Non-based operators must have at least 100 flights.

There are 15 companies who received the award for 2017:

- o 2J2G LLC
- o ARC Real Estate Partners
- o AirTime, LLC
- o CRK Studio
- o FEDEX Corporation
- o Gold Aviation Services, Inc.
- o Jackson National Life
- o L Brands Inc.
- o LR Enterprises Management, LLC
- o Massachusetts Mutual Life Ins Co.
- o Meredith Corporation
- o Northwestern Mutual Life Ins Co.
- o R & F Wings III, LLC
- o SBJ Aviation, LLC
- o White Mountains Capital, Inc.

ARC Real Estate Partners were unable to attend the meeting tonight, but stopped by the Noise Office to receive their award this afternoon. J.D. La Rocca received the award for L Brands, Inc. at the meeting. The other plaques will be mailed.

Ms. Spann congratulated the recipients and expressed her appreciation for their efforts to be good neighbors.

Mr. Andino reviewed the statistics for the first half of 2018.

Total operations for the first half of the year were 82,927, a decrease of 2.71% over the first half of 2017. Jet movements were 72,493, which was an increase of 1.74%. Helicopter operations were 34.68% lower than the same period in 2017. Nighttime operations (between 11:00 pm and 6:00 am) were 4,218, which was 5.13% of the total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first half of 2018 compared to first half 2017 levels.

- RMS 1 in Carlstadt showed a 0.2 decibels (dB) decrease.
- RMS 2 in Hasbrouck Heights showed an increase of 2.9 dB. (Although this site showed an increase, the LDN(A) is still relatively low).
- RMS 3 at the Hackensack University Medical Center (HUMC) showed an increase of 0.2 dB.
- RMS 4 in Hackensack showed a slight decrease of 0.6 dB.
- RMS 5 in Bogota showed an increase of 1.4 dB.
- RMS 6 in Moonachie had an LDN(A) of 49.4 dB in the first half of 2018, which registered at a 3.6 dB increase, however there was partial data loss due to an equipment malfunction.

There were 1,641 noise complaints related to Teterboro Airport traffic received from 298 residents in the first half of 2018. This includes 517 complaints from 59 residents in Rutherford, and 288 from 8 residents in South Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from 23

non-TANAAC towns for the half. These show Allendale with 295 complaints from 4 residents. The rest of the towns have between 1 and 10 complaints. Most of the complaints were “too loud and too low”, the second highest category was “too early or too late” and the third was “too frequent”.

It was noted that included in the total number of complaints were 70 complaints related to military aircraft, including 40 complaints for a single occurrence when 3 F-18 fighter jets landed at Teterboro during the evening hours. The airport didn’t receive prior notification that these jets were coming to TEB, so no advanced information could be circulated. The airport does send an advisory to local towns as well as the Bergen County Office of Emergency Management (OEM) whenever we are advised of military aircraft operating at or near TEB.

Noise violations for the first half of 2018 were: 41 first violations, 6 second violations and no aircraft were banned.

OPEN DISCUSSION

The Deputy Mayor of Hackensack requested that the Fanny Meyer Hillers elementary school be reconsidered for soundproofing. Mr. Middleton responded that that school was considered in the Part 150 study. It is not within the FAA approved noise exposure footprint, but he will ask that the study to relook at the school to see if something can be done. He will get back to Ms. Canestrino.

With no other business to come before the committee, the meeting was adjourned to the annual BBQ.

The next regular meeting of TANAAC is **October 24, 2018** at 7:00 p.m.

TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)

**MEETING
SUMMARY OF MINUTES**

October 24, 2018

ATTENDANCE

Renee Spann, Manager Teterboro Airport
Rick Vander Wende, Manager Contract Svcs
Tim Middleton, Project Manager, Part 150 Study
Juan Rojas, TEB Gov. & Community Affair Rep.
Ranie Rampersaud, TEB Properties Dept.
Frederick Dressel, TANAAC Co-Chair
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Zack Miller, Noise Specialist
Gary Palm, TEB ATCT Manager
Kevin Thompson
David Johnson
Kathy Canestrino, Representative
Fritz Rethage, Representative
George Muller, Representative
Matthew Garofalow, Representative
Roy Luyster, Representative
Paul Griffo, Representative
Gina Affuso, Representative
Katarzyna Wac, Representing
Dave Kingma, guest
Melissa Gardner, guest

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Borough of Moonachie
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
FAA
FAA
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Borough of Maywood
Township of Rochelle Park
Borough of Rutherford
Borough of Wood Ridge
Congressman Josh Gottheimer
Township of Rochelle Park
Township of Teaneck

TANAAC

**Teterboro Airport
October 24, 2018**

**90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mr. Frederick Dressel, TANAAC Co-Chair, called the meeting to order.

Ms. Renee Spann, TANAAC Co-Chair, welcomed attendees and gave an airport construction update.

Ms. Spann reported that there are three significant projects in progress.

- Replacing the electrical circuits damaged in Superstorm Sandy is ongoing. About 50% of the lights have been replaced. The target date for completion is November 2019, however the contractor is ahead of schedule currently.
- Installing the new taxiway V. The old taxiway, (Twy B) was designated an operations hot spot for safety reasons. The new Twy V will alleviate that issue. The contractor is currently working on drainage mitigation as there is significant ponding in the area of the new taxiway, and the pavement cannot be installed until that issue is resolved.
- Phase 1 of the airfield stormwater drainage rehabilitation project is substantially complete. A final inspection is scheduled for October 25. The 2nd phase is in stage 3 design with the Port Authority Engineers and is budgeted in the Port Authority Capital Plan. We anticipate this phase to begin next year as the weather allows.
- The Port Authority was asked to look at some possible solutions to the flooding/drainage issues in the area. Recently the Port Authority contracted with Jacobs Civil Consultants to do a Regional Stormwater Drainage Improvement Study. They will be looking specifically at 6 options based on some recommendations they made to the Port Authority in a previous report in 2014. For these options they will look at feasibility, constructability, cost benefit and cost impact, as well as other issues like power access, required permits, wetlands and riparian mitigation. The options are: cleaning and dredging the East and West Riser ditches, a pump at the West Riser tide gate, a force main from Vincent Place pump station to beyond the West Riser tide gate, and underground storage for the West Riser ditch. They may also make additional recommendations. The initial draft of the report is expected sometime in the first quarter of 2019.

Discussion ensued, which included a conversation about how difficult it is for the local municipalities to obtain necessary permits to do any work in the East or West Riser ditches or to do other projects that would help alleviate the flooding issues. The Port Authority experiences the same limitations.

The Port Authority consultant has been talking to the Rebuild By Design group, who is working on the issues arising from East Riser ditch. There is a coordinated communication effort with Jacobs, Rebuild By Design and Bergen County. Ms. Spann made it clear that the Port Authority has no funds allocated for performing the work for any project that might be recommended by the study. Carrying out that work will require a coordinated effort with all entities / municipalities involved.

Ms. Spann also reported on the FAA Reauthorization Bill, which includes 20 provisions related to aircraft noise that make significant strides toward improving FAA accountability to the public on noise, environmental and safety issues. Some items included in the bill are:

- Establishing Regional Noise Ombudsmen – liaisons between the FAA and the public on aircraft noise, pollution and safety issues (within one year)
- A study of an alternative metric rather than DNL65 for measuring noise (within one year)
- A study for phasing out Stage 3 aircraft.

Ms. Spann noted that Teterboro Airport is fortunate to already have a great working relationship and support from our FAA partners.

Ms. Spann turned the meeting over to Mr. Gabriel Andino for Old Business.

OLD BUSINESS

Mr. Andino called on Mr. Tim Middleton to report on the Teterboro Airport Part 150 Study.

- Mr. Middleton reported that the project is still in the process of working on the Noise Compatibility Program (NCP). The consultant expects to have the draft NCP ready for public review and comment during the first quarter of 2019. We should have more detailed information at the January TANAAC meeting.
- The most current information about the study is online. The link to the website is: http://panynjpart150.com/TEB_homepage.asp
- Mr. Andino reported that the portable noise monitor that has been located in Rutherford will remain in place until the end of the month. Once it is removed, staff will study the data retrieved and report at the January meeting, including a graph of the peak noise events. Preliminary results indicate about a 55.5 DNL reading.
- Mr. Andino covered some flight tracks for helicopter activity at TEB. The tracks represent 3 days of helicopter arrivals and departures during the prior week. There are 4 helicopter routes at the airport -- north, south, east and west. The tracks indicate that the majority of operations are on the Sierra Route, from the south, which generally follows Moonachie Avenue. Additional slides showed some deviations from the regular routes. The first reason we may see these deviations is that the helicopters are not coming to TEB, but rather transitioning through the airspace. These could be law enforcement or media helicopters for example. Another slide depicted an arrival on the Whiskey route from the west. This operation had to deviate to avoid the fixed wing traffic. Another track showed a helicopter coming from the east on Sierra route that flew over Little Ferry and Moonachie. At this point, the operation was at the pilot's discretion. When that happens, we review the operation to see if and what extenuating circumstances exist. Then we go directly to the operator regarding the noise complaint. Another slide showed a departure to the east along the Echo route. These types of operations sometimes cut across the corner of Little Ferry in order to avoid the fixed wing traffic. Another slide showed a helicopter circling as it waited while a fixed wing operation preceded.

A question was raised about whether helicopters follow the north or south flow that the fixed wing aircraft follow. No, helicopters do not need to be the same flow as the fixed wing aircraft, however there are helicopters that use Instrument Landing System (ILS) approaches, so they would be on the same flow.

Another question was raised about an observed helicopter operation that appeared to turn on the west side of the airport and head north. There are possible scenarios of why this might happen, but without knowing the exact operation, it would be only a guess where that helicopter might be going. However, it is fairly possible that it was a medical helicopter flying to the HUMC helipad.

A discussion ensued about flight tracks information. Web-Trak, the system that the Port Authority uses does distinguish helicopter operations from fixed wing operations. The new Teterboro Airport noise monitors can now be seen on Web-Trak, so that data is available for viewing as well.

NEW BUSINESS

Mr. Andino introduced Dave Johnson from the FAA to report on the Environmental Review process for the proposed new offset approach for Runway 19.

Mr. Johnson reviewed the Environmental Policy, Practices and Processes of the FAA.

First, the FAA must adhere to the National Environmental Policy Act (NEPA) which requires the following:

- All Federal agencies to prepare a detailed statement for major federal actions significantly affecting the quality of the human environment
- Consideration of the environment in decision making, consultation and coordination with federal, state and local agencies, and public disclosure of impacts
- Mandates a process; does not dictate a particular result that must be achieved.
- Establishes the Council on Environmental Quality (CEQ)

The CEQ provides more specific content and a processes for an Environmental Impact Statement (EIS) and introduces and defines other levels of NEPA review / documents such as an Environmental Assessment (EA) and a Categorical Exclusion (CATEX), among other things.

Categorical Exclusion (CATEX) – is a category of actions which do not individually or cumulatively have a significant effect on the human environment and do not require either an EA or an EIS. CATEXes shall provide for extraordinary circumstances in which a normally excluded activity may have significant impacts.

The FAA has further defined CATEX as a category of actions that the agency has determined does not individually or cumulatively have a significant effect on the quality of the human environment.

The FAA requires an Environmental Assessment (EA) to be prepared when the review of the proposed action shows that it is not:

- Categorically excluded
- Involves at least one extraordinary circumstance with the potential to significantly impact the human environment
- Does not normally require an EIS

The purpose of and EA is to determine the significance of the environmental impacts, and to identify and consider alternative means to achieve the agency's objectives.

An EA should include:

- The purpose and need for the proposal
- Alternative courses of action (when necessary)

- The effected environment
- The environmental impacts of the proposed action and alternatives
- A list of agencies and people consulted

It provides for Public disclosure and comment

- Which are used for informed decision-making
- And it facilitates compliance with applicable environmental laws, regulations and Executive Orders.

Based on these policies and procedures, it was determined that the RNAV (GPS) X RWY 19 Offset, which avoids the HUMC will require an EA. The FAA is currently in the process of performing that assessment. Funding has been approved for this undertaking.

The estimated publish date of August 2019 has not changed, however, the outcome of the EA could affect that date, because an EA process could take up to 36 months. The FAA has identified the areas that will be impacted and will work with TANAAC to open a dialogue with those municipalities. The FAA will have an Environmental Specialist at the January TANAAC.

Teterboro Airport Activity Report for the first three quarters of 2018

Mr. Andino reviewed the statistics for the first nine months of 2018.

Total operations for the first three-quarters of the year were 125,672, a decrease of 1.73% over the first three-quarters of 2017. Jet movements were 104,717, which was an increase of 0.33%. Helicopter operations were 16.21% lower than the same period in 2017. Nighttime operations (between 11:00 pm and 6:00 am) were 6,141, which was 4.89% of the total operations.

Mr. Andino also reviewed the LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for the first nine months of 2018 compared to first nine months of 2017 levels.

- RMS 1 in Carlstadt showed a 0.1 decibels (dB) decrease.
- RMS 2 in Hasbrouck Heights showed a decrease of 0.7 (dB).
- RMS 3 at the Hackensack University Medical Center (HUMC) showed an increase of 1.0 (dB).
- RMS 4 in Hackensack showed a decrease of 0.8 (dB).
- RMS 5 in Bogota showed an increase of 0.8 (dB).
- RMS 6 in Moonachie had an increase of 1.5 (dB).

There were 2,119 noise complaints related to Teterboro Airport traffic received from 371 residents in the first three-quarters of 2018. This includes 622 complaints from 66 residents in Rutherford, and 423 from 13 residents in South Hackensack. Mr. Andino also included a breakdown of the complaints regarding TEB traffic from 23 non-TANAAC towns for the half. These show Allendale with 298 complaints from 5 residents. Other towns noted were: Cedar Grove had 16 complaints, Hillsdale had 31, Lyndhurst – 36, Mahwah – 31, Oradell – 48, Paramus – 32, Suffern – 15 and Woodcliff Lake had 17. The rest of the towns had 12 or less. Most of the complaints were “too early or too late”, the second highest category was “too loud and too low” and the third was “too frequent”.

Noise violations for the first nine months of 2018 were: 62 first violations, 9 second violations and no aircraft were banned.

OPEN DISCUSSION

A guest reported that he had tried to place a noise complaint, but got a busy signal. He tried two additional times to call and got a busy signal each time. The only plausible explanation is that there was a malfunction of the phone system, which has never been reported before. Without a specific date and time, it is impossible to identify what the problem could have been. If someone encounters that situation again, please mark the date and time so it could be researched. In addition, if someone is unable to get through on the phone, complaints can also be registered online.

A guest from Teaneck asked about reporting “low and loud” in making a noise complaint and about noise violations on arrivals.

The rules for generating noise violations were originally set up for departures only as most aircraft are powering back on approach, so it is a generally a quieter operation comparatively. Most complaints on arrivals are about the frequency, not the noise. There are noise monitors on the approach routes to Rwy 19, Rwy 24 and Rwy 6. The monitors would capture the noise of those arrivals, and that would be reported in the tally of complaints.

Considering altitudes, most of the aircraft arriving on Rwy 6 or Rwy 19 are on the ILS approach, which establishes and maintains the altitude and angle of descent for aircraft landing at TEB. The instruments on the aircraft alert the pilots if they deviate too much from the prescribed altitude. The ATCT is also watching all aircraft in TEB airspace. The tower gets an alert as well if an aircraft is too low. Even if an aircraft is flying a visual approach, there are designated safe altitudes for those operations also. In addition, the NY TRACON is monitoring and recording aircraft operations in the metropolitan airspace, and can see if an aircraft is deviating too much from the ILS guidance. Teaneck residents are likely seeing arrivals to Rwy 24, which are all visual approaches and that runway has been used frequently lately due to airport construction. These aircraft may appear to be low, but generally they are at a safe altitude. Residents should still report “low and loud” flights if they are concerned.

A question was raised about why there is an increase in the number of noise violations since today’s aircraft are generally quieter than older aircraft. The majority of the noise violations are nighttime operations, and the noise thresholds for a violation are lower. The lower level may be more difficult to achieve even for the newer quieter aircraft. Operators who might be new to TEB, often get their first violation because of the lower noise levels at night, and will contact the noise office for guidance because they don’t want to get a second violation.

Mayor Dressel thanked the Noise Office staff for disseminating information on upcoming military aircraft operations at TEB. It is helpful for officials to have that information for their constituents.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **January 23, 2019** at 7:00 p.m.

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

January 23, 2019

ATTENDANCE

Renee Spann, Manager Teterboro Airport
Scott Marsh, Manager Ops & Security
Rick Vander Wende, Manager Contract Svcs
Tim Middleton, Project Manager, Part 150 Study
Juan Rojas, TEB Gov. & Community Affair Rep.
Frederick Dressel, TANAAC Co-Chair
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Zack Miller, Noise Specialist
Robert Robbins, Representative
Kathy Canestrino, Representative
Fritz Rethage, Representative
George Muller, Representative
Matthew Garofalow, Representative
Roy Luyster, 1st Alternate
Paul Griffo, Representative
Lauren Gonnelli, Representing
Leonardo Fuentes, Representing
Tristan Carty, Representing
Dave Kingma, 2nd Alternate
Constance Bovino, guest
Pierre Gaillard, guest

Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Borough of Moonachie
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Borough of Bogota
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Borough of Maywood
Township of Rochelle Park
Borough of Rutherford
US Congressman Josh Gottheimer
US Congressman Bill Pascrell
NJ Assemblyman Clinton Calabrese
Township of Rochelle Park
Condo Coop Board, Hackensack
City of Hackensack

**TANAAC
Teterboro Airport
January 23, 2019
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mr. Frederick Dressel, TANAAC Co-Chair, called the meeting to order.

Ms. Renee Spann, TANAAC Co-Chair, welcomed attendees and reported on a change in leadership at Newark Airport. Mr. Doug Stearns remains Interim General Manager, and Ms. Sarah McKeon has been named as the new Deputy General Manager. Management of Teterboro Airport falls under Newark's governance.

Ms. Spann returned the meeting to Mr. Dressel for an announcement.

Mr. Dressel announced his retirement as TANAAC Co-Chairman, and briefly spoke about his over-30-year tenure with the committee, including his appreciation for all the hard work the committee has done and all of its accomplishments. Mr. Dressel moved to nominate Mr. Paul Griffo, longtime TANAAC representative for the Borough of Rutherford, as his replacement. Mr. Fritz Rethage, TANAAC representative for the Borough of Hasbrouck Heights, seconded the motion. A general consensus confirmed the nomination.

Mr. Dressel will continue to participate on the committee as the alternate representative for the Borough of Moonachie.

Ms. Spann turned the meeting over to Mr. Gabriel Andino for Old Business.

OLD BUSINESS

Mr. Andino called on Mr. Tim Middleton to report on the Teterboro Airport Part 150 Study.

- Mr. Middleton reported that the project is still ongoing. It is anticipated that in February or March more information will be made available. There will be a TAC meeting scheduled before the public workshop takes place, but neither has been scheduled yet.
- The most current information about the study is online. The link to the website is:
http://panynipart150.com/TEB_homepage.asp

Mr. Andino reported on the results of the data collected for the portable noise monitor that has been located in Rutherford on Summit Cross during the last year. Results indicate a 55.6 DNL reading for the duration of the placement, which is fairly consistent with the readings from the Carlstadt permanent monitor. A detailed report of the findings was included in the committee's information packets.

Mr. Andino also reported on the proposed RNAV alternate approach to Runway 1-19 that avoids the Hackensack University Medical Center.

- The FAA was unable to attend tonight's meeting due to the government shut-down. The most recent information that the Noise Office had received from the FAA (late last year) was that an environmental study was underway.

- Ms. Canestrino asked whether the shut-down will impact the publish date for the proposed approach, but that could not be confirmed.

Mr. Andino advised that the proposed alternate approach to Runway 6 has been studied and deemed not to be a viable option as it did not meet all the necessary safety criteria. However, some in the airport community are advocating for the FAA to develop an approach to Runway 1, which would potentially alleviate some of the traffic over Rutherford.

Mr. Scott Marsh reported on some of the current and future construction at Teterboro Airport.

- The replacement of the airfield lighting circuits is ongoing. This work is taking place mostly during the nighttime hours, but a new scope has been added that will require daytime work later in the year.
- The project to replace Taxiway B with Taxiway V is on hold right now due to winter weather. Should commence in the spring.
- A project to mill and repave Taxiways L, G, and P will begin in the fall of this year.

NEW BUSINESS

Mr. Andino noted that some additional information is included in the committee's packets since this is the first meeting of the year. The packets included the following:

- A document covering the "Overview, Membership, Mission Statement and By-Laws" of the committee
- A report "Understanding Aircraft Sound and Its Measurement"
- An article about an "Airnoise Button" for reporting noise complaints
- A notice from the University of California at Davis regarding the "2019 Noise and Emissions Symposium Community Workshop Solicitation of Written Input and Workshop Participation".

Mr. Andino reviewed the Teterboro Airport Activity Report for 2018.

Total operations for the year were 172,101, a decrease of 1.58% over 2017. Jet movements were 144,335, which was a slight increase of 0.15%. Helicopter operations were 16.80% lower than 2017. Nighttime operations (between 11:00 pm and 6:00 am) were 8,384, which was 4.87% of the total operations.

The LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for 2018 compared to 2017 levels are as follows:

- RMS 1 in Carlstadt showed a 0.2 decibels (dB) decrease.
- RMS 2 in Hasbrouck Heights showed a decrease of 0.3 (dB).
- RMS 3 at the Hackensack University Medical Center (HUMC) showed a decrease of 0.6 (dB).
- RMS 4 in Hackensack showed a decrease of 0.6 (dB).
- RMS 5 in Bogota showed an increase of 2.3 (dB).
- RMS 6 in Moonachie had an increase of 0.1 (dB).

There were 3,480 noise complaints related to Teterboro Airport traffic received from 439 residents in 2018. This includes 1,018 complaints from a single person in Maywood who purchased an "Airnoise Button", 726 complaints from 79 residents in Rutherford, and 543 from 13 residents in South Hackensack.

A breakdown of the complaints regarding TEB traffic from 23 non-TANAAC towns for the year. These show Allendale with 299 complaints from 5 residents. Other towns noted included: Lyndhurst – 126 from 4 residents; Oradell – 70 from 4 residents; and Hillsdale – 42 from 8 residents. Most of the complaints were "too loud and too low" (1,769); the second highest category was "too early or too late" (747); and the third was "too frequent" (532).

Noise violations for 2018 were: 79 first violations, 11 second violations and 1 aircraft was banned.

With regard to noise violations, Mr. Bob Olson was present at the TANAAC meeting to make an appeal to the reinstate the aircraft that was banned. This particular aircraft received a violation in April, then a second in July, and the third in November all in 2018. Mr. Olson stated his case, citing the circumstances surrounding each violation, and the actions that were taken in response to each. Some questions and answers followed.

The TANAAC Representative for Hasbrouck Heights requested that the group discuss the issue privately. Mr. Olson exited the room. A comprehensive discussion ensued resulting in a recommendation to uphold the ban. A show of hands vote was called, and the ban was upheld by unanimous decision.

Mr. Olson called back in and was informed of the committee's decision to uphold the ban, and that a formal letter would be drafted and sent to his organization.

OPEN DISCUSSION

Mr. Andino called on Mr. Zack Miller to discuss a report distribution question. Mr. Miller noted that every month, he sends a hard copy report to the mayors of each of the TANAAC towns, which lists every noise complaint caller specific to their town. He inquired whether the reports could be sent electronically and whether the committee found the reports useful. After some discussion, the committee determined that the reports were useful, could be sent electronically to the mayors and that each TANAAC representative should be copied on the transmission.

A recommendation was brought before the group to establish a sub-committee to work on updating the TANAAC by-laws for more clarity and standardization. This proposal will be brought before the group for discussion at the April meeting.

Mayor Dressel was presented with a keepsake memento of the committee's sincere appreciation for his many years of distinguished service in TANAAC. He expressed his gratitude.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **April 24, 2019** at 7:00 p.m.

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

April 24, 2019

ATTENDANCE

Scott Marsh, TANAAC Co-Chair
Paul Griffo, TANAAC Co-Chair
Rick Vander Wende, Manager Contract Svcs
Tim Middleton, Project Manager, Part 150 Study
Ralph Tamburro, Program Mgr, Aviation Ops
Juan Rojas, TEB Gov. & Community Affair Rep.
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Zack Miller, Noise Specialist
Gary Palm, TEB ATCT Manager
David Johnson, Representative
Kathy Canestrino, Representative
Fritz Rethage, Representative
George Muller, Representative
Matthew Garofalow, Representative
Roy Luyster, 1st Alternate
Frank Cagas, Representative
Steve Riethof, Representing
Dave Kingma, 2nd Alternate
Annette Jankowski, guest
Jerry Weber, guest
Dorothy Monopoli, guest
Pierre Gaillard, guest

Port Authority of NY & NJ
Borough of Rutherford
Port Authority of NY & NJ
Port Authority of NY & NJ
Port Authority of NY & NJ
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
FAA
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Borough of Maywood
Township of Rochelle Park
Township of South Hackensack
AOPA, AHOF
Township of Rochelle Park
Condo Coop Board, Hackensack
Condo Coop Board, Hackensack
Condo Coop Board, Hackensack
City of Hackensack

**TANAAC
Teterboro Airport
April 24, 2019
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mr. Scott Marsh welcomed attendees and reported on the change in leadership at Teterboro Airport. Ms. Renee Spann has retired and he has been named Interim Airport Manager at Teterboro. As such, he is also serving as the TANAAC Co-Chair. Scott continued that Mr. Frederick Dressel, former TANAAC Co-Chair, recommended Mr. Paul Griffo as his successor, which was accepted at the January meeting. Mr. Griffo is serving as TANAAC Co-Chair at this meeting.

Mr. Marsh reported on the current construction projects at the airport. There are 3 significant airfield projects in various stages of progress at this time.

- Construction of a new taxiway V that will increase safety and improve traffic flow from Rwy 6-24 by exiting aircraft to the taxiway A holding pad. Work is taking place during nighttime hours from 10 p.m. to 7 a.m. It will involve some closures, primarily of Rwy 6-24.
- Repaving of taxiways G, L and P that will begin the first weekend in May with survey work. Then the contractor will be milling and paving only on weekends from 10:30p.m. on Fridays until noon on Sundays, weather permitting. The milling and paving will take 7 weekends to complete.
- The replacement of all the electrical circuits on the airfield damaged by Superstorm Sandy is near completion. This work has been taking place during nighttime hours. The next phase is the replacement of the homeruns, which is all of the underground electrical infrastructure. This work will need to take place during the daylight hours as it requires complete electrical shut-downs for safety reasons. Work will take place from 3 a.m. until 6 a.m. requiring both runways to be closed as there will be no lights. Then at 6 a.m., one runway will be opened and work will continue until 2 p.m. We anticipate that this project will be completed in November 2019.
- On April 26 from 10 p.m. until 10 a.m. on April 27, the airport will be closed for circuit work and maintenance work in the runway intersection. During airport closures, helicopters can still operate.
- Jet Aviation is nearing completion of their new hangar.

Mr. Marsh noted that a Full-Scale Emergency Exercise will be happening at the airport on Saturday morning, June 1. This will involve mutual aid responders as well as airport personnel. Also being utilized in this exercise will be a mobile aircraft fire trainer, which will be on site for 1-2 weeks prior to the exercise for ARFF training. It will be located at the north end of the airport.

Mr. Marsh turned the meeting over to Mr. Gabriel Andino for Old Business.

OLD BUSINESS

Mr. Andino called on Mr. Tim Middleton to report on the Teterboro Airport Part 150 Study.

- Mr. Middleton reported that work on the noise compatibility plan (NCP) is still ongoing. He hopes to have the schedule for the TAC meeting and the Public Workshop by the July TANAAC meeting.
- The most current information about the study is online. The link to the website is:
http://panynjpart150.com/TEB_homepage.asp

Mr. Andino introduced David Johnson of the FAA to report on the proposed RNAV alternate approach to Runway 1-19 that avoids the Hackensack University Medical Center.

- The FAA had made some progress on the development of this approach before the government shut-down. But during the shut-down, all progress was halted and the contractor that was lined up for the environmental assessment took another job. Once the government was reopened, they had to begin the process to find another contractor, which is anticipated to be finalized and the contract awarded in one to two weeks.
- The new publish date is now tentatively set for March 26, 2020.

Mr. Ralph Tamburro spoke about some initiatives involving Teterboro Airport. He is one of the Co-Leads for the NE Corridor Working Group, which is a group of aviation professionals who are working with the FAA on some initiatives for air space in this area to help improve traffic impacts. For Teterboro these include the following:

- Assessing the standard instrument departure for Rwy 19 RNAV for overnight operations. This would allow aircraft to fly straight out instead of circling, thus reducing the noise footprint during overnight operations. Also looking to do this on a temporary basis during the Runway 6-24 construction.
- Continue testing and development of a high-performance escape route for TEB departures during severe weather or other extraordinary circumstance. This would be on an established route to the north and would allow aircraft to climb to a higher altitude more quickly.
- Assessing the decoupling of Teterboro, LaGuardia and Newark traffic when LGA is using the ILS 13 approach. This would allow for simultaneous operations at that time and help minimize delays. Delays can cause operations to be pushed into the evening hours, this initiative would help alleviate that happening.

Mr. Andino reported on the updated draft of the TANAAC By-Laws. At January's meeting, the need for updating the By-laws was briefly discussed. In the members' packets at this meeting are copies of the By-Laws with the proposed changes. Members can review these changes and then a vote will take place at the July meeting to make the changes permanent or not.

NEW BUSINESS

Mr. Andino reviewed the Teterboro Airport Activity Report for the first quarter of 2019.

Total operations for the year were 38,104, a decrease of 3.43% over the first quarter of 2018. Jet movements were 33,279, which was a decrease of 3.60%. Helicopter operations were 4.53% lower than the first quarter of 2018. Nighttime operations (between 11:00 pm and 6:00 am) were 1,905, which was 5.00% of the total operations.

The LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for first quarter of 2019 compared to the same period in 2018 levels are as follows:

- RMS 1 in Carlstadt showed a 0.8 decibels (dB) decrease.
- RMS 2 in Hasbrouck Heights showed a decrease of 1.9 (dB).
- RMS 3 at the Hackensack University Medical Center (HUMC) showed a decrease of 6.1 (dB).
- RMS 4 in Hackensack showed a decrease of 0.9 (dB).
- RMS 5 in Bogota showed an increase of 2.2 (dB).
- RMS 6 in Moonachie had an increase of 2.0 (dB).

There were 330 noise complaints related to Teterboro Airport traffic received from 60 residents in first quarter of 2019. This includes 152 complaints from two people in South Hackensack, 50 complaints from 10 residents in Rutherford, and 26 from 4 residents in Maywood.

A breakdown of the complaints regarding TEB traffic from 23 non-TANAAC towns for the first quarter of the year showed Oradell with 14 complaints from 1 resident; 8 complaints from one resident in each Wyckoff and Glen Ridge; 5 or less complaints from the rest of the towns. Most of the complaints were "too early or too late" (199); the second highest category was "too loud and too low" (41).

Noise violations for first quarter of 2019 were: 3 first violations, 3 second violations and no aircraft was banned.

OPEN DISCUSSION

Ms. Kathy Canestrino noted the report that she had requested at the last meeting was received regarding the actual aircraft noise event levels (not day/night averages) at the Hackensack University Medical Center. By her calculations there were around 75 flights a day with noise levels between 77 and 81 (dB). She questioned how close they are flying to the noise monitors and stated that while noise is a problem, safety is their biggest concern.

Mr. Marsh noted that the Day/Night Noise Average (LDN(A)), reported at the TANAAC meeting, is the FAA National Standard for analyzing the noise impact of airport operations on the surrounding communities. While other data points can be provided to the TANAAC Committee, we cannot develop our own way of reporting noise; we have to adhere to the standard.

A discussion ensued about providing TANAAC members with the same data for all of the monitoring sites such as Ms. Canestrino received. After further discussion, it was agreed that these numbers would be provided to TANAAC members for their reference at the next meeting.

Mr. Frank Cagas requested the portable monitor be placed in South Hackensack. He will provide a formal request from the town council and determine a location for the monitor's placement. It was also decided that regular reporting of the readings from that monitor be included in the TANAAC meeting information.

Mr. Griffo asked about the information from the portable monitor that was placed in Rutherford. A copy of that report will be sent to him.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **July 24, 2019 at 6:00 p.m.** It is the BBQ meeting.

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

July 24, 2019

ATTENDANCE

Scott Marsh, TANAAC Co-Chair
Paul Griffo, TANAAC Co-Chair (on phone)
Rick Vander Wende, Manager Contract Svcs
Gabriel Andino, Manager, Noise Abatement
Michael Fiscus, Asst. Manager, Noise Abatement
Zack Miller, Noise Specialist
John Kastens, Manager, Operations
Ciba Williams, Manager, Accounting Svcs
Gary Palm, TEB ATCT Manager
Peter Kortright, Representative
Kathryn Gate-Ferris, Representative
Ron Stull, Representative
Kathy Canestrino, Representative
Fritz Rethage, Representative
George Muller, Representative
George Fosdick, Mayor
Hugo Poli, Representative
Roy Luyster, 1st Alternate
Dave Kingma, 2nd Alternate
Frank Cagas, Representative
Gina Affuso, Representative
Leonardo Fuentes, Representing
Tyler Callum, Representing
Rick Perez, Good Neighbor Award Recipient
Bob Nathan, guest
Jacquie Gadaleta, guest
Warren Feldman, guest
Dan Lazar, guest

Port Authority of NY & NJ
Borough of Rutherford
Port Authority of NY & NJ
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
Teterboro Airport/AvPORTS
FAA
Bergen County
Borough of Bogota
Borough of Carlstadt
City of Hackensack
Borough of Hasbrouck Heights
Borough of Little Ferry
Village of Ridgefield Park
Village of Ridgefield Park
Township of Rochelle Park
Township of Rochelle Park
Township of South Hackensack
Borough of Wood-Ridge
Congressman Bill Pascrell
Assemblyman Gary Schaer
Comcast
Borough of Woodcliff Lake
Borough of Woodcliff Lake
Borough of Woodcliff Lake
Borough of Woodcliff Lake

**TANAAC
Teterboro Airport
July 24, 2019
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mr. Scott Marsh welcomed attendees and noted that Mr. Paul Griffo, TANAAC Co-Chair was not able to attend the meeting, but had dialed in on the phone.

Mr. Marsh reported that all five airports in the Port Authority system, including Teterboro Airport, received a Level 3 Airport Carbon Accreditation from Airports Council International (ACI) in June. There are only 14 airports in the country that have achieved this level of Accreditation.

Mr. Marsh also reported that the airport held a successful full-scale emergency exercise on June 1st. Local mutual aid responders participated along with airport operations, Port Authority ARFF and Police.

Scott also covered the current construction projects at the airport. There are 3 significant airfield projects in various stages of progress currently as well as Jet Aviation's construction project.

- The replacement of all the electrical circuits on the airfield damaged by Superstorm Sandy is about 80% complete. This work has been taking place during nighttime hours. We expect that this project will be finished in November 2019.
- Construction is ongoing for the new taxiway V that will increase safety and improve traffic flow from Rwy 6-24 by exiting aircraft to the taxiway A holding pad. Work is taking place during nighttime hours and is about 60% complete.
- Repaving of taxiways G, L and P takes place on weekends from 10:00 p.m. on Fridays until noon on Sundays, weather permitting is about 30% complete.
- Airport closures are scheduled for August 2 & 3, and August 23 & 24 (10 p.m. Friday night to 10 a.m. Saturday morning) for necessary work to be done in the runways' intersection.
- Jet Aviation's new hangar is essentially complete. Final inspection is scheduled for July 26.

Future construction projects include a rehabilitation of Runway 6-24. This project is in design and work is expected to begin next year during nighttime hours and on weekends and will involve runway closures. The next phase of the airport drainage rehabilitation work is also scheduled to commence next year. This includes work on the swales and ditches to get them back to their original design.

The airport is hosting a golf outing on September 23. This is an annual event that raises funds for the scholarships that are given to local high school students each year. Ms. Ciba Williams was present at the meeting to provide additional information for interested parties.

Mr. Marsh turned the meeting over to Mr. Gabriel Andino for Old Business.

OLD BUSINESS

Mr. Andino reported on the Teterboro Airport Part 150 Study.

- The work on the noise compatibility plan (NCP) is still ongoing. He hopes to have the schedule for the TAC meeting and the Public Workshop soon.
- The most current information about the study is online. The link to the website is:
http://panynjpart150.com/TEB_homepage.asp

Mr. Andino called on Mr. Gary Palm to report on the proposed RNAV alternate approach to Runway 1-19 that avoids the Hackensack University Medical Center.

- Mr. Palm noted that Mr. David Johnson could not attend tonight's meeting, however, he asked Gary to announce that the environmental study contract was awarded on May 20th.
- Mr. Johnson will provide an update at the next TANAAC meeting in October.

Mr. Andino reviewed the draft of the TANAAC By-Laws that was initiated at January's meeting. The draft was included in the members' packets at this meeting for further review. A discussion ensued. A clerical error was recognized by the representative from Bogota, which was corrected. Two additional clarifications were recommended.

The representative from Bogota moved that the updated version of the By-Laws presented at this meeting be accepted including the recommendations made in tonight's discussion. The representative from Moonachie seconded the motion and it passed by unanimous vote.

The changes will be made, and the final version will be distributed to the representatives.

Mr. Andino noted that the Good Neighbor Awards are presented each year at the July TANAAC meeting and he shared some information about the Awards.

The awards are presented to companies that did not have any noise violations or operations during the voluntary curfew hours in 2018. They are presented to both based aircraft and frequent users of the airport. Non-based operators must have at least 100 flights. There were 22 award recipients and 13 Honorable Mention recipients in 2018.

Award Recipients

2J2G, LLC
AirTime, LLC
ARC Real Estate Partners
BGHN Holdings, LLC
Corning Inc. – Aviation Department
Epps Aviation
Gruss and Co. Inc.
Intercontinental Exchange, Inc.
Jackson National Life Insurance Co.
LR Enterprises Management, LLC
Massachusetts Mutual Life Insurance Co.

Meridian Air Group, Inc.
New York Yankees Limited Partnership
Paradiso Aviazione, LLC
Quonset Flight Services
R&F Wings III, LLC
Reliant Air Charter
Roche Molecular Systems
SBJ Aviation, LLC
Squadron Aviation Services, Ltd.
White Mountain Capital, Inc.
William C. Morris

Honorable Mention

Analar Corp.
Comcast Corp.
FHC Flight Services
Flightpath Charter Airways
Huron Aviation Two, LLC
Limited Brands, Inc.
Meredith Corp.

MHS Travel and Charter
Northwestern Mutual
Richmor Aviation
Seminole Tribe of Florida
Starr Equipment Corp.
Sunnyfield Aviation

Mr. Rick Perez was present to receive the recognition for Comcast Corporation.

NEW BUSINESS

Mr. Andino reviewed the Teterboro Airport Activity Report for the first half of 2019.

Total operations for the half- year were 83,391, a decrease of 1.91% over the first half of 2018. Jet movements were 70,909, which was a decrease of 2.19%. Helicopter operations were 2.96% lower than the first half of 2018. Nighttime operations (between 11:00 pm and 6:00 am) were 4,013, which was 4.81% of the total operations.

The LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for first half of 2019 compared to the same period in 2018 levels are as follows:

- RMS 101 in Carlstadt showed a 0.4 decibels (dB) decrease.
- RMS 102 in Hasbrouck Heights showed a decrease of 1.2 (dB).
- RMS 103 at the Hackensack University Medical Center (HUMC) showed a decrease of 3.1 (dB).
- RMS 104 in Hackensack showed a decrease of 0.4 (dB).
- RMS 105 in Bogota showed an increase of 0.3 (dB).
- RMS 106 in Moonachie had an increase of 1.5 (dB).

There were 6,266 noise concerns related to Teterboro Airport traffic received from 267 residents in first half of 2019. This includes 5,116 concerns from 15 people in Maywood. Additionally, included were 258 concerns from 3 callers in South Hackensack, 219 concerns from 32 residents in Rutherford, and 175 from 85 residents in Hackensack.

A breakdown of the concerns regarding TEB traffic from 23 non-TANAAC towns for the first half of the year showed Woodcliff Lake with 157 concerns from 23 residents, Allendale with 73 concerns from 1 resident, Westfield with 28 concerns from 1 resident, and Oradell with 20 concerns from 2 residents; each of the rest of the towns had less than 20 concerns. Most of the concerns were "too loud and low" (5,215); followed by "too early or too late" (413), and "too frequent" (399).

Noise violations for first half of 2019 were: 21 first violations, 3 second violations and no aircraft were banned.

OPEN DISCUSSION

Mr. Marsh reported that the TANAAC Co-Chairs had received a Town Resolution from Woodcliff Lake with a request to become a voting member of TANAAC. The Co-Chairs replied that the By-Laws stipulate that the TANAAC voting member towns be within a 5-nautical mile radius of the airport as this is based on the area that the Teterboro Airport Air Traffic Control Tower (ATCT) controls. The distance is aeronautical miles, not driving miles.

Members commented that it was important to maintain the 5-mile radius as these are the towns that are most impacted by the airport. Additionally, if one town outside that radius is accepted on the committee, then all towns outside that radius would also have to be accepted. That would change the entire dynamics of the committee.

Ms. Jacquie Gadaleta, read a statement from the town council of Woodcliff Lake outlining their reasons for wanting to become a TANAAC member town and the advantages that they would bring to the committee.

After further discussion, it was determined that Woodcliff Lake was welcome to attend and participate at TANAAC meetings, but the By-Laws would be upheld prohibiting their membership on the committee.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **October 30, 2019 at 7 p.m.** Please note this is a change from the regular schedule due to a conflict.

**TETERBORO AIRCRAFT NOISE ABATEMENT ADVISORY COMMITTEE (TANAAC)
MEETING
SUMMARY OF MINUTES**

October 30, 2019

ATTENDANCE

Maria Sheridan, TANAAC Co-Chair	Port Authority of NY & NJ
Paul Griffo, TANAAC Co-Chair	Borough of Rutherford
Scott Marsh, Manager Operations and Security	Port Authority of NY & NJ
Rick Vander Wende, Manager Contract Svcs	Port Authority of NY & NJ
Juan Rojas, Mgr Government and Community Relations	Port Authority of NY & NJ
Nick Dmytryszyn, Program Manager	Port Authority of NY & NJ
Gabriel Andino, Manager, Noise Abatement	Teterboro Airport/AvPORTS
Michael Fiscus, Asst. Manager, Noise Abatement	Teterboro Airport/AvPORTS
Zack Miller, Noise Specialist	Teterboro Airport/AvPORTS
John Kastens, Manager, Operations	Teterboro Airport/AvPORTS
Gary Palm, TEB ATCT Manager	FAA
Kevin Thompson	FAA
David Johnson (on phone)	FAA
Maria Stanco	FAA
Jim Peters	FAA
Kathleen Bergen	FAA
Lisa Burrows	FAA
Robert Robbins, Representative	Borough of Bogota
Ron Stull, Representative	Borough of Carlstadt
Kathy Canestrino, Representative	City of Hackensack
Fritz Rethage, Representative	Borough of Hasbrouck Heights
Matthew Garofalow, Representative	Borough of Maywood
Hugo Poli, Representative	Village of Ridgefield Park
Roy Luyster, 1 st Alternate	Township of Rochelle Park
Dave Kingma, 2 nd Alternate	Township of Rochelle Park
Ken Goffstein, Representative	Township of Teaneck
Lauren Gonnelli, Representing	Rep. Josh Gottheimer
Warren Feldman, guest	Borough of Woodcliff Lake

Guests who signed in from Hackensack:
Jennetter Jandowsa, Dorothy Manopoli, Diana Castino, Lorelei Kaminsky, Naomi Webber, Jerry Weber, Martin Smith, Gale Inwood, Anita Lewis

**TANAAC
Teterboro Airport
October 30, 2019
90 Moonachie Avenue, PA Conference Room
Minutes Summary**

Mr. Scott Marsh welcomed attendees and introduced Ms. Maria Sheridan, the new Teterboro Airport Manager and as such, the TANAAC Co-Chair. Ms. Sheridan addressed the group.

Mr. Marsh reported on the current construction projects at the airport. There are 3 significant airfield projects currently in progress.

- The replacement of all the electrical circuits on the airfield damaged by Superstorm Sandy is on schedule to be completed by the end of the year.
- Construction is nearing completion for the new taxiway V that will increase safety and improve traffic flow from Rwy 6-24 by exiting aircraft to the taxiway A holding pad. We expect to have the new taxiway in operation in the next few weeks.
- Repaving of taxiways G, L and P – The paving work is done and the contractor is currently reinstalling light fixtures that were removed for the paving process. This project should be completed over the winter.

Next year's construction projects include the rehabilitation of Runway 6-24. This project will take place during nighttime hours and on weekends and will involve runway closures. More information will be provided as the project progresses.

Planning has already begun for the rehabilitation of Runway 1-19 to be done in 2022.

The construction of the new Teterboro Airport Air Traffic Control Tower has been approved. The preliminary planning has begun. Actual construction is expected to begin near the end of 2020 and should take 4 to 5 years.

Mr. Marsh turned the meeting over to Mr. Gabriel Andino for New Business.

NEW BUSINESS

Mr. Andino noted that he is trying out a change in the normal agenda. He began by giving the Teterboro Airport Activity Report for the first three quarters of 2019.

Total operations for the 3 quarters of the year were 124,414, a decrease of 1.00% over the first three quarters of 2018. Jet movements were 103,342, which was a decrease of 1.31%. Helicopter operations were 4.09% lower than the first three quarters of 2018. Nighttime operations (between 11:00 pm and 6:00 am) were 5,931, which was 4.77% of the total operations.

Noise violations for first three quarters of 2019 were: 59 first violations, 4 second violations and no aircraft were banned.

The LDN(A) (day/night average aircraft noise levels) on the six permanent noise monitors for first three quarters of 2019 compared to the same period in 2018 levels are as follows:

- RMS 1 in Carlstadt showed a 0.2 decibels (dB) decrease.
- RMS 2 in Hasbrouck Heights showed a decrease of 1.3 (dB).
- RMS 3 at the Hackensack University Medical Center (HUMC) showed a decrease of 1.9 (dB).
- RMS 4 in Hackensack was static with 2018 (dB) level.
- RMS 5 in Bogota showed an increase of 0.1 (dB).
- RMS 6 in Moonachie had an increase of 1.7 (dB).

There were 13,011 noise complaints related to Teterboro Airport traffic received from 521 residents in the first three quarters of 2019. This includes 10,649 complaints from 6 people who utilized Third Party Applications. Maywood complaints were 10,244 from 25 residents. Additionally, there were 365 complaints from 250 callers in Hackensack, 358 complaints from 45 residents in Rutherford, and 325 from 7 residents in South Hackensack. The remaining TANAAC towns totaled 142 complaints from 58 residents.

A breakdown of the complaints regarding TEB traffic from 45 non-TANAAC towns for the first three quarters of the year showed Woodcliff Lake with 957 complaints from 31 residents (which included 539 from 3 residents using a Third Party Application); Allendale with 314 complaints from 2 residents; Westfield with 67 complaints, (which included 61 from 1 resident using a Third Party Application); Oradell with 33 complaints from 3 residents; and Lyndhurst had 31 complaints from 4 residents. Each the rest of the towns had less than 30 complaints. Most of the complaints were "too loud and low" (626)*; followed by "too early or too late" (611), and "too frequent" (562). *This does not include the 10,649 Third Party Application complaints, which are automatically registered as too low and loud.

OLD BUSINESS

Mr. Andino introduced Mr. Nicholas Dmytryszyn from The Port Authority Project Management who reported on the Part 150 Study.

- There was a Technical Advisory Committee (TAC) meeting at Teterboro Airport on October 25th. This was the first meeting after a two-year lapse while the details of the study recommendations were debated and coordinated within the Port Authority for all 4 airports.
- Expect the draft Noise Compatibility Plan (NCP) report to be available for Public Review during the 1st Quarter of 2020.
- A Public Workshop and Public Hearing should be scheduled in the 2nd Quarter.
- Then the Final NCP draft will be submitted to the FAA by the 3rd Quarter, which will have incorporated the public comments.
- The FAA will have 180 days to review and address comments. Then approval is expected by end of the 4th Quarter.
- There may be one more TAC meeting scheduled before the submission.
- Teterboro Airport will be the first airport to complete the study.
- The most current information about the study is online. The link to the website is: http://panynjpart150.com/TEB_homepage.asp

Mr. Andino called on Mr. Kevin Thompson to report on the proposed RNAV (GPS) Offset Approach to Runway 19 that avoids the Hackensack University Medical Center. (Mr. David Johnson could not attend tonight's meeting; however, he was on the phone.)

Mr. Thompson showed slides and reviewed the progress of this project.

- It supports the Port Authority and TANAAC request to move some Runway 19 arrivals away from the Hackensack University Medical Center and nearby high-rise buildings by creating an alternate to the primary ILS approach and having aircraft fly an offset approach roughly above State Highway 17.
- Increases flight accuracy (RNAV GPS capable aircraft) compared to the formerly proposed Visual Approach.
- Overflies a less densely populated corridor – over Route 17.
- Can be used in both instrument and visual meteorological conditions for TEB Runway 19 arrivals.
- The Environmental Assessment (EA) is underway in accordance with National Environmental Policy Act (NEPA) and FAA Order 1050.1F, Environmental Impacts: Policies and Procedures.
- Once the draft EA is completed, a 30-day public review and comment period will be provided. Comments received will be addressed in the final Environmental Assessment.
- An FAA led public workshop will be forthcoming pending a completed draft of the EA. The workshop is expected to be held in December or January.
- Project information will be posted online:
 - https://www.faa.gov/air_traffic/community_involvement/
- Comments can be emailed to:
 - 9-ATO-TEB-RWY19OFFSETComments@faa.gov
- Target procedure publication date is 3/26/2020, pending completion of the NEPA process

A question and answer period followed the presentation, which included, but was not limited to the following:

- How certain is the publish date for the new approach?
 - The FAA is very aware of the scheduled publish date and is making every effort to meet that date. However many factors are involved in the NEPA process and subsequent public review and workshop that could impact the schedule.
- Will flights still use the ILS 19 approach?
 - Yes, the ILS approach will still be the primary approach to Runway 19 and required in inclement weather. The new approach will have higher minimums but can be used in certain weather conditions that a visual approach cannot. The new approach will off-load some of the traffic from the ILS approach, providing some relief.

OPEN DISCUSSION

Discussions continued with Hackensack residents citing their sustained concerns. Concerns related to the safety of the offset approach and potential noise impacts were also discussed by members of the Committee.

With no other business to come before the committee, the meeting was adjourned.

The next regular meeting of TANAAC is **January 22, 2020 at 7 p.m.**

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Appendix E.3

Local Jurisdiction Meetings

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Meetings with Jurisdictions in the Vicinity of Teterboro Airport

Jurisdiction	Date of Meeting	Meeting Attendees ^{/a/}
Initial Meetings		
City of Hackensack	January 26, 2016	Albert Dib, Julie Barrow
Borough of Wood-Ridge	January 26, 2016	Ken Nelson, Julie Barrow
Bergen County	January 27, 2016	Peter Kortright, Dave Full, Julie Barrow
Township of South Hackensack	January 27, 2016	Bridgette Bogart, Dave Full, Julie Barrow
Borough of East Rutherford	January 28, 2016	Mark Everett, Dave Full, Julie Barrow
Borough of Carlstadt	January 28, 2016	Mark Everett, Dave Full, Julie Barrow
Borough of Hasbrouck Heights	January 28, 2016	Mark Everett, Dave Full, Julie Barrow
Borough of Teterboro	March 2, 2016	Nick Saros, Dave Full, Julie Barrow
New Jersey Sports and Exposition Authority	March 3, 2016	Dom Elefante, Ron Seelogy, Dave Full, Julie Barrow
Borough of Little Ferry	No Meeting	
Borough of Moonachie	No Meeting	
Follow-Up Meetings		
New Jersey Sports and Exposition Authority	January 23, 2017	Ron Seelogy, Mike Stepowyj, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
City of Hackensack	January 24, 2017	Albert Dib, Fran Reiner, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of East Rutherford	January 24, 2017	Mark Everett, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Hasbrouck Heights	January 24, 2017	Mark Everett, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Little Ferry	January 24, 2017	Paula Cozzarelli, Council Member Miller, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Bergen County	January 25, 2017	Peter Kortright, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Wood-Ridge	February 15, 2017	Ken Nelson, Tim Middleton, Ted Baldwin, Julie Barrow
Borough of Moonachie	February 16, 2017	Borough of Moonachie Planning Board, Tim Middleton, Ted Baldwin, Julie Barrow
Township of South Hackensack	March 30, 2017	Anthony Kurus, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Teterboro	March 30, 2017	Nick Saros, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full
Borough of Carlstadt	June 29, 2017	Jane Fontana, Tim Middleton, Gene Reindel, Ted Baldwin, Dave Full

Notes: /a/ - Port Authority of NYNJ includes Tim Middleton; HMMH Team includes Gene Reindel, Ted Baldwin, Dave Full and Julie Barrow.

Initial Meetings

Eleven municipalities, including the New Jersey Sports and Exposition Authority, within the Land Use Data Collection Area¹ were consulted to provide an introduction of a Part 150 Study (Study) and how the Study could potentially affect each municipality. Additionally, the initial project meeting was used to obtain existing, planned, and future land use data including, but not limited to, jurisdictional boundaries, open space and environmental feature plans, historic properties, current master plan or general plan, zoning maps, redevelopment plans, and previously soundproofed facilities. See **Attachment A** for an example of the initial outreach letter sent to each municipality within the Land Use Data Collection Area and that was also used to facilitate the discussion during each initial project meeting.

Each meeting resulted in an open discussion of the Part 150 process and many of the representatives from the various jurisdictions asked questions about the process and how the results of the study could affect the jurisdiction. Each jurisdiction requested to stay informed throughout the Study.

Follow-Up Meetings

The follow-up meeting with each jurisdiction provided information on the Noise Exposure Maps (NEMs), a discussion of potential Noise Compatibility Measures (NCPs), and an overview of continued opportunities for their involvement. See **Attachment B** for the handout each jurisdiction received and that was used to facilitate the discussion during each meeting. The discussion of NCPs provided information as to which measures could be implemented by the Port Authority of New York and New Jersey (PANYNJ), which would require coordination between the PANYNJ and various jurisdictions, and which measures could be implemented by the jurisdiction. Each meeting emphasized that neither the Federal Aviation Administration (FAA) nor the PANYNJ have land use controls and that it is acknowledged that this police power rests with the jurisdictions. Below is a summary of the outcome from each follow-up meeting that has occurred.

- *New Jersey Sports and Exposition Authority*

The New Jersey Sports and Exposition Authority (NJSEA) is a jurisdiction that is in the 65 DNL contour for both Newark Liberty International and Teterboro Airports. As a result, this meeting was structured to address the Part 150 Studies for both airports. During the meeting, it was acknowledged that a portion of the land under the authority of the NJSEA is within the 2021 65 DNL contour for Teterboro Airport. The portion of

¹ The Land Use Data Collection Area was developed to allow for a detailed review and collection of land use data. The Land Use Data Collection Area included jurisdictions with the potential to be located within EWR's 2016 Existing DNL 65 or higher dB noise contours and/or EWR's 2021 Future DNL 65 dB or higher noise contours as dictated by Part 150 regulations.

the NJSEA land within the 65 DNL contour includes some noncompatible land uses (primarily single-family residential, multi-family residential, a portion of a mobile home park, and a day care center). This includes portions of the Borough of Moonachie, the Borough of Hasbrouck Heights, the Borough of Wood-Ridge, and the Borough of Carlstadt. The meeting included a discussion of potential development that could occur and methods of coordinating with the PANYNJ regarding the potential development. A much larger area of the NJSEA is within the 60 DNL and 55 DNL contours. Although the 55 DNL contour is not considered eligible for noise abatement measures under the Part 150 Study, the NJSEA is interested in an overlay zone. In addition, the NJSEA was interested in the community planners' forums as a means of communicating between the PANYNJ, the NJSEA, and other jurisdictions that are within the land area of the NJSEA.

- *City of Hackensack*

A portion of the City of Hackensack is within the 65 DNL contour. The land uses in this area of Hackensack are considered compatible. The City has more interest in the 60 DNL and 55 DNL contours and using an overlay zone to encourage compatible land uses. The City is working on redevelopment plans for the downtown portion of Hackensack and was concerned about how an overlay zone may restrict the types of land uses that could be developed. In addition, the portion of Hackensack on "the hill" includes multi-family residential structures and residents in this portion of Hackensack do complain about noise from aircraft approaching Teterboro Airport. The City would be interested in participating in a community planners' forum.

- *Borough of East Rutherford*

The meeting with the Borough of East Rutherford occurred at the same time as the meeting with the Borough of Hasbrouck Heights as these two jurisdictions contract with the same planner. It was acknowledged that no portion of East Rutherford is in the 65 DNL contour, but that portions of East Rutherford are within the 60 DNL and 55 DNL contours. There was interest in understanding how a zoning overlay would work and providing examples of a zoning overlay that could be adopted by the borough. In addition, the borough acknowledged that the portion of East Rutherford generally east of Route 17 is within the jurisdiction of the NJSEA. There was a discussion of potential mixed-use development that could occur within this portion of East Rutherford. The borough also would be interested in participating in a community planners' forum with other jurisdictions in the vicinity of Teterboro Airport.

- *Borough of Hasbrouck Heights*

The meeting with the Borough of Hasbrouck Heights occurred at the same time as the meeting with the Borough of East Rutherford as these two jurisdictions contract with the same planner. It was acknowledged that a small portion of Hasbrouck Heights is in the 65 DNL contour, but that the land uses in the 65 DNL contour are considered to be compatible. Of greater concern to the borough are the portions of Hasbrouck Heights that are within the 60 DNL and 55 DNL contours. There was interest in understanding how a zoning overlay would work and providing examples of a zoning overlay that could be adopted by the borough. The borough also would be interested in participating in a community planners' forum with other jurisdictions in the vicinity of Teterboro Airport.

- *Borough of Little Ferry*

A very small portion of the Borough of Little Ferry is within the 65 DNL contour. The land uses in this area of Little Ferry are residential and are considered to be noncompatible. Of greater concern to the borough is that a portion of the borough is within the 60 DNL and 55 DNL contours. As a result, the borough was interested in how to prevent future noncompatible land uses from being developed in this area and was interested in how a zoning overlay would be implemented. As a result, the borough requested examples of zoning overlays that they could review.

- *Bergen County*

The portion of Bergen County within the 65 DNL contour is within the City of Hackensack, the Township of South Hackensack, and the Boroughs of Little Ferry, Wood-Ridge, Moonachie, Carlstadt, Teterboro, Hasbrouck Heights, and Carlstadt. The County acknowledged that local land use authority exists within these jurisdictions and with the NJSEA. However, the County was interested in understanding how they could assist in implementing an overlay zone within those communities. The County asked to be continued to be informed as to next steps in the process.

- *Borough of Wood-Ridge*

The Borough of Wood-Ridge informed the PANYNJ and the HMMH Team that there are plans for high density housing within the Borough, along the rail line (Wood-Ridge Station) adjacent to Route 17.

The Borough cautioned the PANYNJ and the HMMH Team to ensure the municipalities each had a chance to review all of the noise abatement measures considered to reassure continued coordination. The Borough requested information on the Part 150 Study, particularly the handout used in this meeting, to post to their Borough website.

- *Borough of Moonachie*

The PANYNJ and the HMMH Team attended the Borough's Planning Board Meeting. The handout for TEB was discussed with the Board. The Board was interested in what would happen to the Mobile Home Park south of the Airport on the south side of Moonachie Avenue. The Board would like the PANYNJ to purchase these homes as one of the NCP measures.

- *Township of South Hackensack*

A portion of the Township of South Hackensack is within the 65 DNL contour. However, most of the land uses within the 65 DNL are considered to be compatible. The only noncompatible land use is an overnight lodging facility. No residential land uses are within the 65 DNL contour. The Township was interested in the concept of an overlay zone and requested more information on how an overlay zone would work. In addition, the Township asked about height limits and whether the NCP measures or an overlay zone would include height restrictions. In addition, the Township was interested in being part of a community planners forum.

- *Borough of Teterboro*

A large portion of the Borough of Teterboro is within the 65 DNL contour. However, most of the land uses within the 65 DNL are considered to be compatible. The only noncompatible land uses are schools, one of which has already been soundproofed. The Borough of Teterboro has limited residential development, and both areas of residential development are not within the 65 DNL contour. The Borough was interested in the concept of an overlay zone and noted that if such an overlay zone were to be implemented, it would cover the entire Borough. The Borough's offices are on the north side of Route 46 immediately north of Teterboro Airport. As a result, the offices have a direct sight line to the airfield and the Borough has indicated that noise from taxiing aircraft can be very loud within their offices. The Borough questioned whether soundproofing of municipal offices could be included as a potential NCP measure.

- *Borough of Carlstadt*

A portion of the Borough of Carlstadt is within the 65 DNL contour. However, all of the land uses within the 65 DNL are considered to be compatible with existing and forecast aircraft operations. No residential land uses are within the 65 DNL contour. The Borough was not interested in the concept of an overlay zone. The Borough expressed frustration with the Port Authority and indicated that past concerns have not been addressed. In addition, the Borough expressed no interest in being part of a community planners forum.



369 Pine Street, Suite 610
San Francisco, California 94104
415.986.1702

4 January 2016

Mr. Chris Assenhiemer
501 Madison Street
Carlstadt, New Jersey 07072

**RE: Port Authority of New York and New Jersey
Teterboro Airport and Newark Liberty International Airport
FAR Part 150 Land Use Compatibility Planning**

Dear Mr. Assenhiemer:

The Port Authority of New York & New Jersey (PANYNJ) is conducting a comprehensive noise compatibility planning study for Newark Liberty International Airport (EWR) and Teterboro Airport (TEB) under the Federal Aviation Administration's voluntary "Part 150 Airport Noise Compatibility Planning" program. The PANYNJ has contracted with HMMH Inc., RS&H Inc., and Planning Technologies Inc., to assist in preparing the Part 150 Study. This letter is to follow up to the letter dated 30 July 2015 from Edward C. Knoesel of the PANYNJ (referenced as the *Request for Land Use Information for Use in Airport Noise Studies*) that identified the types of information that would be useful to receive from Carlstadt Borough. As a reminder, the following types of information would assist in expediting the Part 150 process:

- Existing land use data including but not limited to:
 - Jurisdictional boundaries mapping for Carlstadt Borough
 - Existing land use data files and existing land use mapping that includes Special District or Sector Plans
 - Open space and environmental features plans
 - Historic properties mapping and lists
 - Maps or lists of showing existing facilities that have been soundproofed
 - Historic building permit mapping/records
- Future land use data files and future land use mapping that includes Special District or Sector Plans
- Land use controls including, but not limited to:
 - Most current approved Comprehensive Community Plans and/or General Plans
 - Policy plans establishing community vision, goals, objectives and implementation steps that relate to land use compatibility
 - Zoning ordinances
 - Zoning maps/overlay district mapping
 - Subdivision regulations
 - Environmental protection ordinances

Mr. Chris Assenhiemer
~~4 January 2016~~
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- Existing noise ordinances
- Discretionary project review procedures and criteria
- Building codes
- Potential known future development including, but not limited to:
 - Land redevelopment efforts underway within Carlstadt Borough
 - Major reuse trends involving conversion from compatible to non-compatible uses (such as industrial uses being converted to residential development – e.g., loft conversions)
 - Major development projects approved or in the pipeline involving non-compatible uses
- Other land use data, policies, plans, or other information that may be relevant

As part of the FAR Part 150 process, RS&H will be conducting community land use surveys within Carlstadt Borough to confirm land use, zoning, population densities, and other community characteristics. The intent of this survey is to confirm data sources, identify any variations in data received during the initial coordination process as well as characterize any undocumented land use. In addition to the community land use surveys, in-person meetings with each municipality are being conducted.

These meetings with local municipalities is a critical component of the overall FAR Part 150 process. Therefore, RS&H is interested in arranging an in-person meeting with planning representatives from Carlstadt Borough. RS&H staff will be in the area the week of 25 January 2016 and may be available to have a meeting with you or other appropriate representatives from Carlstadt Borough on Tuesday, 26 January 2016; Wednesday, 27 January 2016; or Thursday, 28 January 2016. If these dates are not convenient, future dates in February will be available. Ms. Julie Barrow from RS&H or I will call you to arrange for a mutually convenient time for the meeting.

Sincerely,

RS&H, INC.

David J. Full, AICP
Vice President - Aviation
415.986.1702
David.Full@rsandh.com



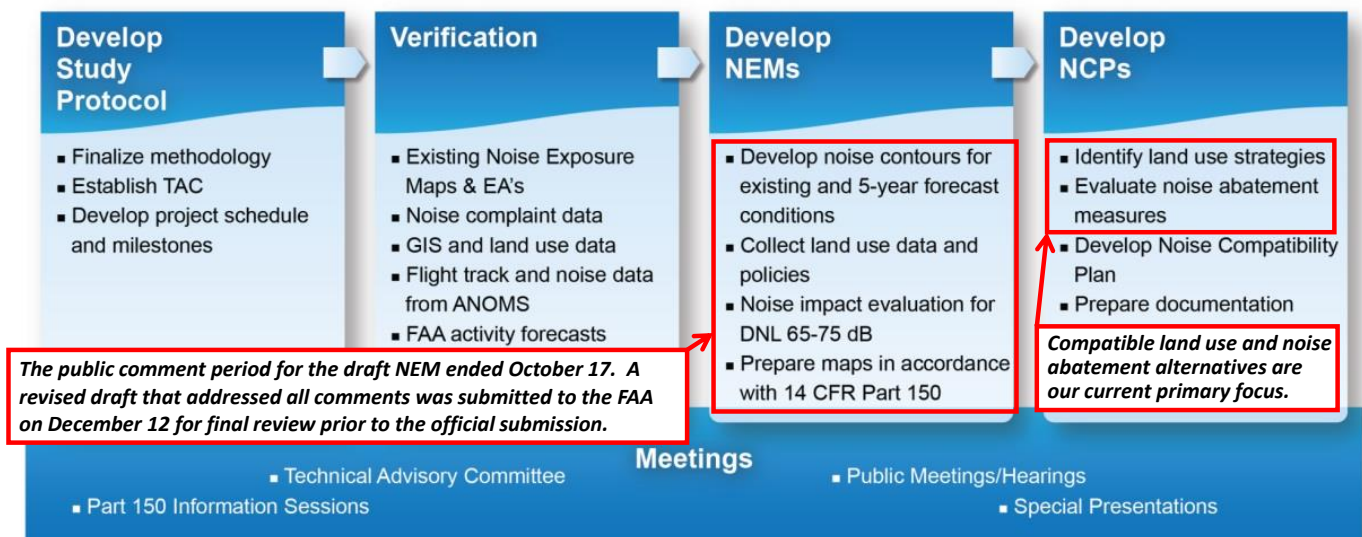


Handouts

Teterboro Airport 14 CFR Part 150 Noise Compatibility Study Meetings with Local Jurisdictions Week of February 13, 2017

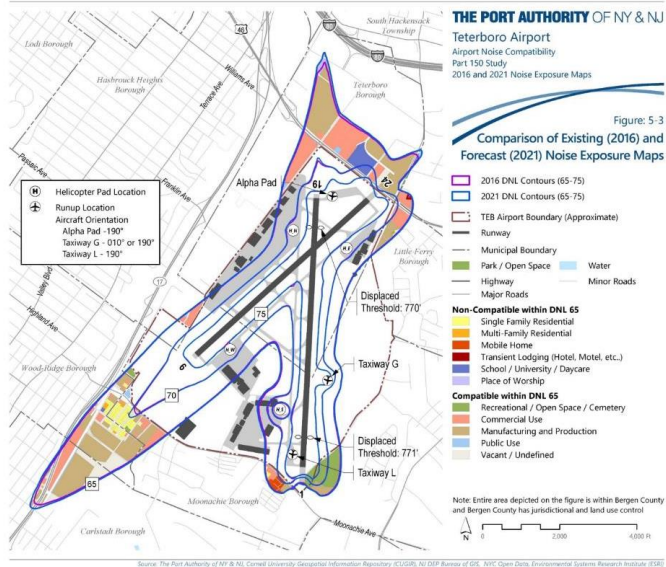
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Generalized Part 150 Study Process / Schedule



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Noise Exposure Map – 2016 and 2021 NEMs



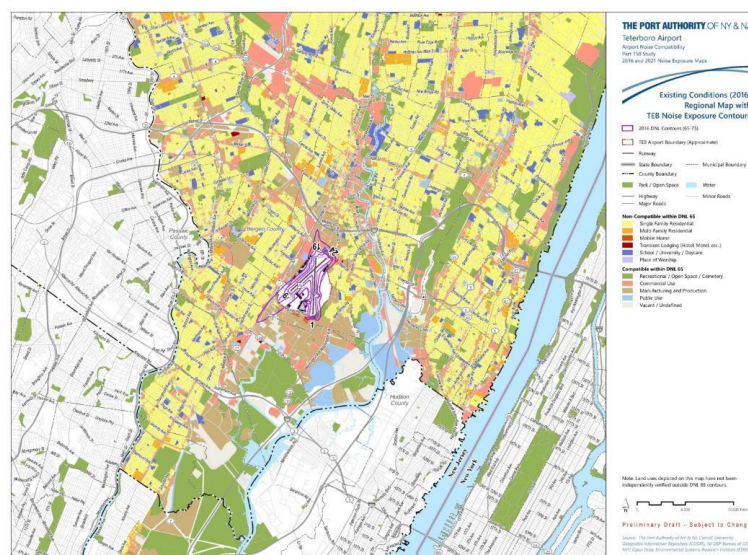
Compatible and Non-Compatible Land Area within the 2016 and 2021 65 DNL Contours

Year	Land Use within the 65 DNL	Area Outside Airport Boundary (Square Miles)
2016	Compatible	0.344
	Non-Compatible	0.035
	Total	0.379
2021	Compatible	0.365
	Non-Compatible	0.038
	Total	0.403

Source: HMMH, 2016

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2016 DNL Contours with Regional Land Use



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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers
- Runup enclosures
- Use restrictions
- Other actions proposed by stakeholders

Land Use Strategies

- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Mitigation
 - Land acquisition
 - Sound insulation
 - Avigation easements
- Other actions proposed by stakeholders

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

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Real Estate Disclosures

- Methods for informing buyers of property in airport vicinity about aircraft noise
- Requirement of sellers and/or real estate brokers to inform buyers
- Part of the sales agreement
- New Jersey Association of Realtors standard form
- Applicable to properties within a specific noise contour or within a certain distance from an airport

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Land Use Rezoning

- Enacted by local jurisdiction with land use and zoning authority
- Rezone properties within specific noise contours to be compatible with aircraft operations
- Intent of rezoning is to prevent incompatible land uses from being developed near an Airport
- Rezoning promotes compatible land uses in airport vicinity
- Rezoning allows for “grandfathering” of existing uses

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Land Use Zoning Overlays

- Enacted by local jurisdiction with land use and zoning authority
- Adoption of a separate overlay zone that works in tandem with underlying zone
- Intent is to prevent incompatible land uses from being developed near an airport
- Provides greater details regarding what is allowable in the overlay zone (e.g., height limits that may be different)

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Building Codes

- Enacted at the state level in partnership with the local jurisdiction
- Intended to raise minimum building standards in vicinity of an airport
- Intended to promote compatible land uses in airport vicinity

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Cooperative Land Use Agreements

- Enacted by airport sponsor (e.g., Port Authority) and jurisdictions with local land use authority
- Agreements are focused on land use, redevelopment, and infrastructure in airport vicinity
- Intended to prevent incompatible land uses from being developed in airport vicinity

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Community Planners Forums

- Established by airport sponsor (e.g., Port Authority) to bring together various jurisdictions in airport vicinity
- Share information pertaining to comprehensive planning, land use issues, zoning issues, and noise mitigation efforts
- Intended to provide a “level playing field” for all jurisdictions in airport vicinity

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Distribution of Noise Mitigation Information

- Enacted by the airport sponsor (e.g., the Port Authority)
- Intended to inform jurisdictions in airport vicinity about what has been implemented, what will be implemented, schedule for implementation, etc.
- Program to distribute noise mitigation information to all jurisdictions in the airport vicinity
- Information distributed on a periodic basis (e.g., monthly, bi-annually, annually, etc.)

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Implementation of Noise Mitigation Measures

Measure	Eligibility Requirements	Implementation Responsibility	Possible Funding Sources	Typical Duration of implementation	Typical Implementation Costs
Sound Insulation	<ul style="list-style-type: none"> Located within 65 DNL Interior noise level 45 dB or greater No existing code violations 	Port Authority	FAA – 90% PANYNJ – 10%	2-3 decades	<ul style="list-style-type: none"> Residential: \$50,000/unit single family, \$25,000/unit multifamily Institutional unknown, likely over \$1 million per property
Positive Ventilation	<ul style="list-style-type: none"> Located within 65 DNL Interior noise 45 dB or greater No existing code violations 	Port Authority	FAA – 90% PANYNJ – 10%	2-3 decades; generally conducted at same time as sound insulation	<ul style="list-style-type: none"> Residential: \$20,000/unit Institutional: Unknown
Land Acquisition	<ul style="list-style-type: none"> Located within 65 DNL 	Port Authority	FAA – 90% PANYNJ – 10%	Less than one decade	<ul style="list-style-type: none"> Residential: \$275,000/single family parcel, \$340,000/multi-family parcel Institutional: Unknown
Easement Acquisition	<ul style="list-style-type: none"> Located within 65 DNL 	Port Authority	FAA – 90% PANYNJ – 10%	2-3 decades; generally conducted at same time as sound insulation	<ul style="list-style-type: none"> \$7,500/parcel or 15% of fair market value
Barriers	<ul style="list-style-type: none"> Provides 5-dB reduction to properties within 65 DNL 	Port Authority	FAA – 90% PANYNJ – 10%	2-5 years	Depends on length and height of the barrier

Note: Estimated costs are based on similar projects at other airports. Estimates will be refined to reflect local conditions during the TEB NCP process.

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Sound Insulation

- Purpose –provide a compatible indoor living environment through installation of acoustical treatments, e.g., acoustical doors and windows
- Results in the parcel being considered compatible within 65 DNL contour
- Eligible buildings (where existing interior level is ≥ 45 DNL)
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (case by case)

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Positive Ventilation

- Purpose – provide the ability to keep windows closed to result in a compatible indoor living environment without sound insulating acoustical treatments
- Applies where homes are not eligible for sound insulation treatment because interior level is below 45 DNL *with windows shut*
- Results in the parcel being considered compatible within the 65 DNL contour
- Eligible buildings
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (case by case)

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Land Acquisition

- Purpose is to acquire land and make it compatible with airport operations by:
 - Redeveloping the property into non-noise sensitive use, e.g., commercial or industrial use
 - Installing sound insulation treatments and reselling the property as compatible
- Results in the parcel being considered compatible with aircraft noise
- Eligible parcels
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (case by case)

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Easement Acquisition

- Purpose is to obtain compatibility through the purchase of an easement with the property owner that goes with the deed to show acceptance of being within an area of excessive aircraft noise
- Results in the parcel being considered compatible with aircraft noise
- Eligible parcels
 - Single-family residential
 - Multi-family residential
 - Educational facilities
 - Places of worship
 - Health care facilities and other noise sensitive structures (case by case)

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Projected TAC & Public Meeting Topics, 2016-17

Date	Meeting	Major Actual / Anticipated Topics
November 17, 2016	TAC 9 - Complete	Present initial noise abatement alternative analyses
January 27, 2017	TAC 10 - Complete	Present additional noise abatement analyses Present first-round compatible land use alternatives
March 31, 2017	TAC 11	Present third-round noise abatement analyses Present second-round compatible land use alternatives
May 19, 2017	TAC 12	Recommend noise abatement and compatible land use measures
June 2017	TAC 13	Discuss NCP monitoring and implementation
July 2017	TAC 14	Finalize input to PANYNJ on NCP recommendations
Summer 2017	Workshop 3	Review NCP results and recommendations
September 2017	TAC 15	Discuss Draft NCP document and public input from Workshop
September 2017	Final Public Hearing on NCP	Present proposed NCP and revised NEMs

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Appendix E.4

Study Specific Meetings

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HMMH

77 South Bedford Street
Burlington, Massachusetts 01803
781.229.0707
www.hmmh.com

PANYNJ EWR and TEB Part 150 Team Meeting
January 9, 2017
Page 2

MEETING NOTES

Subject	PANYNJ EWR and TEB Part 150 TRACON Meeting
Participants	TEB Study Team EWR Study Team PANYNJ Study Team FAA
Date	January 27, 2017
Time	1:00 – 1:35 pm
Location	Telcon
Reference	HMMH Job No. 307260

Attendees by Organization:

Port Authority	HMMH	FAA
Adeel Yousuf	Diana Wasiuk	Andrew Brooks
Timothy Middleton	Eugene Reindel	Michael Porcello TRACON
	Robert Mentzer	David Sanchez
		Stephen McClain TRACON
		Suki Gill
		Zack DeLaune

TRACON Part 150 Meeting**Slide 1 & 2 – Cover and Agenda**

Robert: Opened the meeting and reviewed the agenda

Slide 3: TEB RWY 24 Southerly Departure Turn

Robert: Discussed that EWR arrivals are at 220 degrees and TEB departures at 240 degrees. Accounting for 15 degrees of separation, the TEB team looked at the feasibility of a 235 degree turn off Rwy 24.

Steve: He is open to suggestions and willing to take a look at the proposal, but does not want to make any promises.

Mike: Offered a general caution – it has taken FAA/N90 years to implement the simplest of procedures due to the complexity of the procedure development/implementation process; nothing we suggest here will be accomplished quickly; N90 wants to make sure that we do not apply resources and attention against proposals that aren't showing discernable benefits; there is some indication that the EWR 22L approach over 95 that the FAA is currently working on might be completed before the conclusion of the Part 150 studies.

Andrew: Acknowledged Mike's comment and restated that the goal of the Part 150 process is to identify potential solutions, but that any proposed procedure would need to go through the proper procedure development process at some future time; we understand that nothing in this process will be expedited.

Mike: Asked how the Part 150 deals with shifting noise.

Andrew: We examine where and to what extent the shifts are happening and make value judgements for the initial recommendation; eventually proposals would be subject to a proper environmental review.

Mike: Changing the headings might be problematic since there are issues with today's 240 heading and 235 will be even more difficult to de-conflict especially with increased traffic at EWR and TEB; he is concerned about the feasibility of this proposal, but does not want to say no right away.

Andrew: What is the current issue with the procedure?

Mike: The fleet-mix has all high-performance aircraft and they get off and high quickly and anything that keeps them closer to the Rwy 22 arrivals at EWR will cause safety concerns. Thought we should maybe look at if it can be done during the nighttime. It might work better with the future EWR offset arrival.

Slide 4 – TEB Runway 24 - 235 degree turn with EWR offset approach at night

Robert: Discussed the possibility of the Runway 24 235 degree turn at night if there was the offset approach to EWR in Southflow. Greater than 235 degrees would be an even greater benefit, if possible.

Mike: TRACON proposed an off-set arrival to Runway 22L for nighttime; so the off-set arrival combined with the 95 approach proposal would be a good place to look.

Tim: Night operations are where we are looking for improvements.

Mike: They will take a look at this proposal.

Andrew: We must be careful about how we describe the interaction between two airports because the Part 150s are supposed to be separate and unrelated studies, but we should not forgo looking at this opportunity.

Next 5: EWR 75% Nighttime – Offset To Approach Runway 22L

Gene: This proposal has generated interest and is important from community engagement point of view.

Mike: This is a good option and they are working on it; they hope this one is one we can 'drag across the finish line'.

Andrew: We received feedback during the TAC from user community about wanting to stabilize on the centerline early; just to let Mike know that there is some pushback from the user community.

Mike: Aware but proceeding.

Mike: No pushback from the Tower or TRACON.

Tim: We need to formalize a version of a preferential use program for night ops.

Slide 6: NBAA High-Density at TEB

Mike: Can't offer a comment because he isn't familiar with the details of this proposal.

PANYNJ EWR and TEB Part 150 Team Meeting
January 9, 2017
Page 3

Bob: Described the procedure and explained the reliance on reducing power at 800' to then reapply at 1500'.

Steve: All the time or night only?

Bob: All the time if possible, however we only included use of this option for flights not being held down below 3000'.

Steve: Already have a procedure that's considered overly complicated by users resulting in high cockpit workload.

Steve: There are other places where this happens and sometimes it can cause loss of separation.

Bob: Aware of possible issues, this is why we only looked at procedures where the pilot is cleared to climb to 3000' or above.

Tim: We will share our slides on the NBAA procedures and maybe the TRACON can include this in the work they are doing already to reduce workload and power deviation issues.

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Additional Discussion Not Related To Slides:

Gene: TAC asked for RNAV departures from RWYs 4/22 to follow the turnpike and avoid dispersion.

Tim: Can we make departures of RWY 22 less dispersed.

Mike: The aircraft have to turn east most of the time which is why we see the dispersion; if community is looking at an RNAV that would concentrate the tracks then he is not sure that it would yield a benefit because it takes the automation some time to engage before it can allow a turn. Conventional procedures turn easier since they don't require the flight bag to engage. TRACON is working to see if they can fix the TENNIS procedure to help out with the noise issues at LGA.

Gene: We will communicate to the TAC examples from Boston that will show that RNAV will not give us the benefit due to the automation engaging later than needed to make the 190 turn.

Andrew: Can TRACON help with reviewing responses to public comments as we proceed? Both Mike and Steve said they are willing to help.

Future meetings w/Air Traffic

Discussion of whether or not HMMH has more to show to Air Traffic for the call. Andrew will check with tower managers to see if he can get them to join the call. HMMH will prepare slides for the next meeting.

HMMH

77 South Bedford Street
Burlington, Massachusetts 01803
781.229.0707
www.hmmh.com

PANYNJ EWR and TEB Part 150 Team Meeting
May 24, 2017
Page 2

MEETING NOTES

Subject PANYNJ, HMMH Meeting with NY TRACON

Participants

Port Authority	HMMH Team	FAA
Tim Middleton	Mary Ellen Eagan	Lindsay Butler
Adeel Yousuf	Gene Reindel	Suki Gill
Ralph Tamburro	Diana Wasiuk	Stephen McClain
	Rhea Gundry	
	Bob Mentzer	
	Jessica Cohen	
	Dominic Scarano	

Date May 24, 2017
Time 2:30 – 3:30 pm
Location Telcon
Reference HMMH Job No. 307260

EWR

- Runway 22L Offset Approach
 - HMMH opened the meeting by acknowledging the responses TRACON provided to the list of questions sent to them on April 3, 2017. Specifically regarding the Runway 22L offset approach, HMMH would like to discuss with TAC airline representatives and ask how they would fly the approach. PA agrees and would like to have conversations with airlines. PA has already received feedback from FedEx stating that they will not fly any type of offset approach due to company safety protocol for their MD11s. TRACON has already gotten commitment to evaluate an offset approach from Delta, United, and UPS. The next item discussed was determining the point at which an aircraft must align with the runway centerline for the offset approach. TRACON states that this is a modeling consideration and not a TRACON issue. It is dependent on the user, aircraft performance, and pilot discretion.
- Earlier Turns Off Runway After Departure
 - Any early turns off the runway after departure is dependent on aircraft performance. HMMH suggests looking at how many aircraft turn at the 1 ½ or 2 mile marks. The TAC suggested changing the heading at which aircraft turned off Runways 22R and 22L after departure, however, aircraft are already on a 190° heading. Any turn further to the east will affect LGA operations and may result in a hold-down of EWR departures. PA is interested in evaluating a more defined RNAV path off Runways 22L and 22R. TRACON needs input as to where PA would like to see the aircraft turn. HMMH will plot dispersed headings and send to TRACON. HMMH will look at deviations from the 190°

heading in small increments, model them, and send to TRACON for review if noise reduction can be achieved.

- Changes to Arrival Profiles
 - PA would like to evaluate if noise reduction can be achieved through concentrating arrival paths. TRACON states that it may be possible to build a transition to the Runway 22L ILS through Broadway. It would be unlikely to use during the day, but it may be possible to use at night. TRACON will send a draft of the profile and how aircraft will fly it. TRACON suggests engaging with users to find out what percentage of night operations would be able to fly the transition.
- Preferential Runway Use
 - TRACON suggests engaging with the tower for any preferential runway use questions.

TEB

- Runway 24 Departure Turns
 - TRACON states that the 230° and 235° turns are the same procedure and will only be used at night and when EWR 22L offset approach is in use. TRACON stated that it will be a conventional procedure rather than an RNAV procedure. It would follow similar language as the Teterboro ONE procedure for Runway 24. "Climb heading 230° to 1500 (remain at 1500) feet then turn right heading to 280°. TRACON believes 230° would provide a larger noise benefit but either proposal would work.
 - TRACON also added that being a conventional procedure the turn would be based on aircraft performance. HMMH asked if it would be possible to include a distance (such as to a certain DME) to keep the aircraft on the 230/235 heading for a longer distance. TRACON added that would be possible. HMMH will evaluate whether a distance is needed and to what extent.
- HMMH asked if EWR is using the offset would it be possible to get additional departures off from Runway 19 since the procedure passes directly over Runway 19.
 - TRACON stated no, conflicts with EWR arrivals would remain and we would not expect an increase in Runway 19 departures.



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meeting notes

project PANYNJ EWR, TEB, JFK, and LGA 14 CFR Part 150 Studies

meeting date September 8, 2017 meeting time 10:00 A.M. EDT

present **PA:** Tim Middleton, Kelly Mitchell, Adeel Yousuf **route to** Kelly Mitchell, Adeel Yousuf, Tim Middleton
FAA: Lindsay Butler, Durre Cohen, David Johnson, Michael Lamprecht, Joey Medders
ESA: Steve Alverson, Mike Arnold, Chris Sequeira
HMMH: Rhea Gundry, Bob Mentzer, Dominic Scarano, Diana Wasiuk, Jessica Cohen
American Airlines: Wes Googe, Eric Silverman, Brian Townsend
Delta Air Lines: Rob Goldman
FedEx: Larry Hills, Phil Santos
JetBlue: Joe Bertapelle
Southwest Airlines: George Hodgson, Gary McMullin, Rich Teilborg
United Airlines: Glenn Morse, Chris Osterman, Peggy Schorsch
United Parcel Service: Jonathan Bonds

distribution date September 22, 2017

Subject Special Port Authority/FAA/Aircraft Operators Meeting on Proposed Noise Abatement Procedure Concepts for the 14 CFR Part 150 Studies at TEB, EWR, JFK, and LGA

Adeel Yousuf opened the meeting at 10:03 A.M. EDT and introduced Chris Sequeira to commence the presentation. Chris Sequeira performed a roll call of all airlines and FAA participants on the webinar, then gave a brief overview of the 14 CFR Part 150 Process. He explained that the purpose of the meeting was to solicit initial feedback on the flyability of proposed noise abatement procedure concepts. Chris then introduced HMMH to present proposed noise abatement procedure concepts for Newark Liberty International Airport (EWR) and Teterboro Airport (TEB).

EWR PROPOSED NOISE ABATEMENT PROCEDURE CONCEPT

EWR Offset Approach to Runway 22L

Rhea Gundry introduced this proposed concept, which is intended to reduce incompatible land uses within the Ironbound area of Newark, NJ. She noted that the FAA has determined that this concept may be feasible to implement. Glenn Morse (United Airlines) indicated that a procedure similar to this was proposed for EWR many years ago. He emphasized the importance of determining where aircraft must be aligned with the Runway 22L extended centerline. Tim Middleton indicated that the proposed concept is for an RNAV¹ GPS² approach, and that the point of alignment would depend on the aircraft type. Glenn replied that absent a specific design, United Airlines aircraft must be aligned with a runway extended centerline by at least two miles before touchdown.

Gary McMullin (Southwest Airlines) emphasized Glenn Morse's (United Airlines) statements and also noted that an RNAV GPS approach could not be used for the proposed concept because it would not allow for an aircraft to align with the runway extended centerline so close to touchdown. Joe Bertapelle (JetBlue) asked Gary when Southwest Airlines aircraft must be aligned with the runway. Gary replied that the requirement depends on the procedure design; he also stated that RNP³ approaches allow for turns on short final with a prescribed glide path angle, whereas RNAV GPS approaches do not. Gary indicated that a manual alignment with the runway on short final would be inappropriate. Larry Hills (FedEx) agreed, stating that an RNAV GPS approach like the proposed concept would not meet FedEx's safety criteria.

Joe Bertapelle (JetBlue) asked the other aircraft operators whether they could use RNP approaches. Glenn Morse (United Airlines) indicated his willingness to meet with the FAA and other operators to determine a flyable design. Tim Middleton noted that the Port Authority will summarize the airline responses and determine a way to meet specifically on this proposed noise abatement procedure concept.

TEB PROPOSED NOISE ABATEMENT PROCEDURE CONCEPT

TEB Runway 24 Night Departure Procedure

Bob Mentzer introduced this proposed concept, which is intended to reduce aircraft noise exposure in residential areas off the end of TEB Runway 24. The procedure would be conventional and would involve a turn to a 230 degree heading, climb to 1500 feet, and then a turn to a 280 degree heading. He indicated that the use of this concept would require the implementation of the "EWR Offset Approach to Runway 22L" concept, in order to achieve required separation between TEB and EWR operations. Gary McMullin (Southwest Airlines) raised concerns about the interaction of this proposed concept with EWR Runway 22L/22R missed approaches. Bob Mentzer responded that he does not believe there will be a negative

¹ RNAV: Area Navigation.

² GPS: Global Positioning System.

³ RNP: Required Navigation Performance.

interaction. He stated that the proposed procedure concept achieves the necessary 15 degrees of separation.

JFK PROPOSED NOISE ABATEMENT PROCEDURE CONCEPTS

1. Adopt ICAO⁴ NADP⁵ Measures

Chris Sequeira introduced this proposed concept and stated that ICAO NADP1 is also known as the “close-in” NADP. Rob Goldman (Delta Air Lines) offered his support of this concept, stating that it could be beneficial from a noise and an operational standpoint. Glenn Morse (United Airlines) emphasized that implementation would be voluntary and would not be standardized across aircraft operators and aircraft types. He recommended that New York TRACON⁶ (N90) be engaged to offer feedback on how implementation of this proposed concept would affect air traffic management. Wes Googe (American Airlines) agreed, noting that heavier aircraft in particular may have NADP1 climb profiles that present air traffic management challenges.

2. Reduce Runway 31L Intersection Departures at Night

Chris Sequeira explained that implementation of this proposed concept may increase the distance between departing aircraft and the neighborhood of Howard Beach, in Queens. He then noted that the intersection of Runway 31L and Taxiway KD was used as a starting point for Runway 31L departures in the noise modeling for JFK 14 CFR Part 150 Study. Glenn Morse (United Airlines) replied that departure procedures must support the reduction in intersection departures; if an aircraft uses the full length of Runway 31L but still overflies the same locations, noise reduction may be less than anticipated. Later in the meeting, Phil Santos (FedEx) indicated that modeling of a reduction in intersection departures must consider how aircraft would be reconfigured for using the full length of the runway. Wes Googe (American Airlines) agreed, noting that use of full runway length opens up opportunities for greater loading or lower departure thrust, which could result in the aircraft using additional runway length for its takeoff roll; potentially reducing the noise benefits of this proposed concept.

3. Increase Altitudes of Arrivals to Runways 22L and 22R at Night

Chris Sequeira explained that this proposed concept is not expected to reduce noise within the DNL 65 contour and thus could not be approved within the auspices of 14 CFR Part 150, but may be investigated outside of 14 CFR Part 150 for reduction of noise outside of the DNL 65 contour. He indicated that the proposed concept was submitted to the Port Authority by the FAA. Wes Googe (American Airlines) stated that the procedure must be evaluated to determine whether aircraft can fly the vertical profile. He also asked how the lateral track of the procedure varies from what is typically flown for nighttime arrivals to Runways 22L and 22R. Larry Hills (FedEx) agreed, stating that the flight path angle is a key piece of information. Larry noted that flight path angles greater than 3 degrees will be difficult to fly. Wes Googe stated that flight path angles may be a topic of discussion with the procedure designer. He also indicated

⁴ ICAO: International Civil Aviation Organization.

⁵ NADP: Noise Abatement Departure Procedure.

⁶ TRACON: Terminal Radar Approach Control.

that heavier aircraft may need more room to descend, and that newer aircraft with greater efficiency also can have challenges descending with specified flight path angles.

4. Turn Nighttime Runway 22L/R Departures to Heading 240

Chris Sequeira indicated that this proposed concept may allow Runway 22L and 22R departures to gain more altitude before overflying The Rockaways (in Queens) and also to overfly land use with lower population density. He indicated that this proposed concept was sent to the Port Authority by the FAA. Joe Bertapelle (JetBlue) asked how population density under the proposed flight path might change over time. Steve Alverson responded that it is possible for the population density to change in the future. Glenn Morse (United Airlines) noted that development in The Rockaways is continuing to happen. The proposed flight path overflies a school in The Rockaways, which is assumed to be inactive during nighttime hours.

5. Implement Proposed “Tighten SKORR” Departure Procedure

Chris Sequeira explained that this proposed concept is intended to increase the distance between Howard Beach (in Queens) and aircraft departing JFK Runways 31L and 31R. He noted that the draft procedure concept was sent to the Port Authority by the FAA. Larry Hills (FedEx) indicated that the procedure appears to reduce track miles, and thus the ability to meet crossing restrictions (implemented for air traffic management purposes) must be analyzed. Gary McMullin (Southwest Airlines) noted that the expected lateral track must be analyzed, because the notional flight path line shown in the presentation file does not represent a flyable track. He indicated that even an RF⁷ turn could not begin until after the aircraft passes 500 feet of altitude, and thus aircraft would not be turning left before the end of the runway. Glenn Morse noted that aircraft flying conventional departures could turn before reaching the end of the runway, and emphasized that the benefits of this proposed concept would not be realized if aircraft turn after passing the runway end. Gary McMullin responded that Southwest Airlines still employs RNAV technology with conventional departures; thus, Southwest Airlines departures do not turn before passing the runway end even when flying conventional procedures. He also pointed out the high likelihood that heavy aircraft would pass the runway end before gaining enough altitude to make a turn, regardless of procedure design. Gary McMullin also stated that any proposed procedure for Runway 31L and 31R departures must ensure separation from air traffic to the west of JFK.

LGA PROPOSED NOISE ABATEMENT PROCEDURE CONCEPTS

1. Modify NTHNS and GLDMN RNAV Departures to Reduce Impacts to Flushing (in Queens)

Chris Sequeira indicated that this proposed concept was provided to the Port Authority by the FAA and is intended to reduce overflights of Flushing by aircraft flying NTHNS and GLDMN departures. Wes

⁷ RF: Radius-to-Fix.

Googe (American Airlines) stated that Airbus A321 aircraft currently have challenges meeting departure altitude restrictions on the existing NTHNS and GLDMN procedures during the summer months, and that the proposed FAA concept would make meeting these restrictions even more difficult. He noted that aircraft that cannot fly the specified procedure would be forced to use a different procedure. Chris Osterman (United Airlines) indicated that Boeing 737-700, -800, and -900 aircraft types have the same challenge. Gary McMullin (Southwest Airlines) agreed, then noted that Southwest Airlines 737-800 aircraft also experience this issue. Rob Goldman (Delta Air Lines) indicated that it is very difficult for aircraft to meet the climb gradient even with the existing NTHNS and GLDMN procedures.

2. Do Not Use TNNIS Between 10 P.M. and 7 A.M.

Chris Sequeira explained that N90, when reviewing this proposed concept, indicated that nighttime use of TNNIS cannot be eliminated. Chris noted that for noise analysis, “nighttime” is defined as 10:00 P.M. to 6:59:59 A.M. For screening purposes, the ESA Study Team is analyzing whether a 10 percent reduction of TNNIS at night may provide noise benefits worth pursuing further. Glenn Morse (United Airlines) asked whether the FAA’s environmental review of TNNIS before implementation assumed any use of TNNIS at night. He recommended that the ESA Study Team engage N90 to characterize what motivates the nighttime use of TNNIS. Gary McMullin (Southwest Airlines) asked about the level of existing TNNIS nighttime use. Glenn Morse responded that TNNIS use in general is driven by the use of JFK ILS arrivals to Runways 22L and 22R. Rob Goldman (Delta Air Lines) agreed that TNNIS enables the use of JFK ILS Runway 22L and 22R arrivals; if those cannot be used, aircraft arriving to these runways are limited to using the VOR approaches. He asked how much demand is on JFK Runways 22L and 22R at night. Glenn Morse indicated that he doesn’t believe aircraft operators would be opposed to a reduction of TNNIS usage if the operational impacts are minimal. Rob Goldman pointed out that there is a dependency on which aircraft operators can accept an offset VOR approach to JFK.

3. Adopt ICAO NADP1 Measures

Chris Sequeira indicated that this proposed concept is similar to what is being proposed for JFK. He asked whether any participants had comments specific to a potential implementation of NADP1 at LGA. Glenn Morse (United Airlines) responded that an analysis of NADP1 departures from Runway 13 is critical, given the challenges of meeting existing crossing altitude restrictions when departing from this runway.

4. Implement Proposed RNAV Overlay of LDA-A⁸ Offset Approach to Runway 22 to Reduce Impacts to Clason Point (in The Bronx)

Chris Sequeira indicated that the LDA-A approach to Runway 22 is a conventional approach that keeps aircraft to the east of Clason Point, a neighborhood in The Bronx that is on the LGA Runway 22 extended centerline. He noted that FAA suggested an RNAV version of this approach to the Port Authority that may have different weather minimums, enabling a reduction of Clason Point overflights by arriving aircraft. Gary McMullin (Southwest Airlines) indicated that it is very difficult to fly offset approaches.

⁸ LDA: Localizer-type Directional Aid.

Glenn Morse (United Airlines) asked about the weather minimums for the existing LDA-A approach, and Gary McMullin replied that the existing procedure is considered a circling approach, with associated weather minimums (which vary by aircraft category). Glenn Morse replied that he does not believe N90 uses the approach down to these minimums; N90 likely assigns ILS approaches well before those minimums are reached. Gary McMullin stated that the LGA RNAV RNP Z approach has minimums of 380 feet. Larry Hills (FedEx) echoed Gary McMullin’s concerns about implementing offset approaches.

5. Implement Proposed RNAV Approach to LGA Runway 13

Chris Sequeira indicated that this approach was implemented on a temporary basis by the FAA in March 2017, and that the FAA is in the process of determining whether to make the procedure available on a permanent basis. Gary McMullin (Southwest Airlines) reiterated the challenges of offset RNAV GPS approaches. Glenn Morse (United Airlines) indicated that he was unsure whether this particular proposed concept was coordinated with aircraft operators before being implemented by the FAA. He noted that the airline industry is willing to collaborate toward the implementation of procedures that are safer, more flyable, and more environmentally friendly. Gary McMullin agreed.

6. Increase Use of Heading 055 for LGA Runway 4 Departures

Chris Sequeira indicated that this proposed concept is to increase the use of the existing 055 heading in the LaGuardia Five conventional departure procedure chart, which avoids overflying Clason Point (in The Bronx). Chris pointed out that three primary headings were observed in radar data of LGA Runway 4 departures. Steve Alverson noted that Clason Point is exposed to noise levels of DNL 65 and higher, and that implementing procedures to avoid Clason Point may reduce the number of residences that are exposed to these noise levels. Gary McMullin (Southwest Airlines) recommended that the Port Authority have a discussion with LGA Airport Traffic Control Tower (ATCT) to understand what drives the choice of headings. He stated that LGA ATCT may be using the three headings observed in radar data to enable a higher frequency of departures from Runway 4. Steve Alverson indicated that the centerline and westbound headings would not be eliminated in this proposed concept; instead, the percent use would be more heavily weighted toward the 055 heading. Gary McMullin emphasized that this is ultimately a LGA ATCT decision. Rob Goldman (Delta Air Lines) indicated that the 055 heading was used more often in the past; the reduction in use today may be related to air traffic separation needs. Rob stated that Delta Air Lines aircraft would be able to accept a heading of 055. Phil Santos (FedEx) encouraged the exploration of whether the selection of headings was driven by the use of different airspace departure gates by aircraft with different destinations.

NEXT STEPS

The Port Authority thanked all participants for their feedback. Tim Middleton indicated that notes on the EWR proposed offset arrival concept will be assembled and distributed; he also noted that he will try to assemble a future meeting as well as further discussions with N90 and EWR ATCT on the proposed concepts. Kelly stated that all feedback will be summarized and distributed to the participants on the conference call. She indicated that under the auspices of 14 CFR Part 150, the Port Authority may wish to recommend noise abatement procedures as part of the Noise Compatibility Program (NCP) for a given airport. If the FAA approves a recommended noise abatement procedure, the procedure would go through

additional FAA processes for development. These FAA processes would include aircraft operator engagement. Steve Alverson agreed, and also invited the aircraft operators to attend the Technical Advisory Committee (TAC) meetings for the Studies, where several operators already participate. Phil Santos (FedEx) expressed his concern about how communities will respond to the proposed concepts if they are not portrayed realistically; not all proposed concepts presented today are flyable. Kelly Mitchell responded that the proposed concepts seen today have been communicated to the TAC and are on the project website, but the Port Authority repeatedly communicates that the concepts are only proposed drafts.

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ADJOURN

The meeting was adjourned at 11:28 A.M. EDT.



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meeting notes

project PANYNJ EWR, TEB, JFK, and LGA 14 CFR Part 150 Studies

meeting date November 3, 2017 meeting time 11:00 A.M. EDT

present **PA:** Tim Middleton, Kelly Mitchell, Ralph Tamburro, Adeel Yousuf
FAA: Maria Aviles, Andrew Brooks, Lindsay Butler, John DePhillips, Suki Gill, Angela Guzman, Steve Kapsalis, Steve McClain, Joey Medders, Gary Nielsen, Mike Porcello, David Sanchez, David Swanson
ESA: Steve Alverson, Chris Sequeira
HMMH: Rhea Gundry, Gene Reindel, Dominic Scarano
American Airlines: Wes Googe, Brian Townsend
Delta Air Lines: Chip Beall
FedEx: Larry Hills
JetBlue: Joe Bertapelle, Joe DeVito
Southwest Airlines: George Hodgson, Gary McMullin, Rich Teilborg
United Airlines: Glenn Morse, Ron Renk, William Patterson
United Parcel Service: Jonathan Bonds

route to Kelly Mitchell, Adeel Yousuf, Tim Middleton

distribution date November 20, 2017

Subject Special Port Authority/FAA/Aircraft Operators Meeting on Specific Proposed Noise Abatement Procedure Concepts for the 14 CFR Part 150 Studies at TEB, EWR, JFK, and LGA

Andrew Brooks (FAA) opened the teleconference at 11:03 A.M. EDT and thanked participants for joining. He indicated that the purpose of the teleconference is to discuss additional technical details of several specific noise abatement procedures that were initially presented to aircraft operators on September 8, 2017 for the Teterboro (TEB), Newark Liberty International Airport (EWR), John F. Kennedy International Airport (JFK), and LaGuardia Airport (LGA) 14 CFR Part 150 Studies. He then invited all participants to introduce themselves.

EWR PROPOSED NOISE ABATEMENT PROCEDURE CONCEPT

EWR Offset Approach to Runway 22L

Tim Middleton (Port Authority) briefly introduced HMMH as the prime consultant for the TEB and EWR 14 CFR Part 150 Studies. Rhea Gundry (HMMH) explained that the proposed EWR offset approach to Runway 22L is intended to direct nighttime¹ arrivals from the north to the east of, rather than over, the Ironbound community in Newark, NJ. She explained that all details of the procedure do not have to be resolved by the close of the EWR Noise Compatibility Program (NCP) development process, however, the Port Authority and HMMH are interested in continuing the conversation about what procedure design concepts may be feasible. Rhea summarized operator feedback from the September 8th conference call. Specifically, that most operators recommended an RNAV² (RNP³) approach, and that a visual approach would require aircraft to be aligned with the runway before reaching the Ironbound community. She stated that the offset approach must intercept the Runway 22L approach course within one nautical mile of the runway end in order to provide a noise benefit to the community. Rhea added that the Port Authority would still be interested in the offset approach even if the offset must be farther away from the runway end, because an offset approach to EWR Runway 22L will enable the possibility of a noise abatement departure from TEB Runway 24.

Tim Middleton (Port Authority) stated that the Port Authority and the HMMH Study Team will be looking at modeling different offset distances from the runway end. The goal is to propose a procedure with the offset located between 0.5 and 4.26 nautical miles from the runway end. He added that the draft concept given to the Port Authority was provided by Kevin Thompson at the FAA and intended to be a “first rough cut” draft. Gary McMullin (Southwest Airlines) asked how many degrees were in the offset. Rhea Gundry (HMMH) responded that the offset is 12 degrees from the runway centerline. Ron Renk (United Airlines) indicated that United Airlines would like to see a procedure with lateral and vertical guidance, since the procedure will be used at night at the end of long flights and long pilot working hours. The other aircraft operators on the call agreed with United Airlines’ recommendation.

Mike Porcello (FAA) indicated that there are other approaches and departures in the National Airspace System that look similar to the noise abatement concepts that the Port Authority is considering for the 14 CFR Part 150 Studies. He added that the intention of the process is to determine notional designs and involve operators in order to develop flyable procedures. He recommended that the group look at noise abatement procedures in other regions to see how they are utilized, with the understanding that many of those procedures are visual procedures. Glenn Morse (United Airlines) asked when FAA Flight Standards (AFS) expects pilots to align with the runway when flying an instrument approach in visual conditions. He added that there is no requirement to fly an offset approach to the runway threshold if the pilot identifies the runway end at a farther distance. Gary McMullin (Southwest Airlines) agreed, adding that most pilots will break from the instrument approach and align with the runway once it is in sight. In that situation, there is no longer any vertical or lateral guidance provided. Tim Middleton (Port Authority) stated that an RNP approach may be a solution. Dave Swanson (FAA) stated his understanding that the

¹ Daytime: 7:00 A.M. to 9:59:59 P.M. Nighttime: 10:00 P.M. to 6:59:59 A.M.

² RNAV: Area Navigation.

³ RNP: Required Navigation Performance.

proposed EWR 22L offset approach concept is designed to TERPS⁴ criteria and thus should be flyable. He added that even if a waiver is required, AFS would ensure that a waived procedure meets an equivalent level of safety. Dave indicated that he understands that not every operator or aircraft type can fly every kind of procedure; the proposed concept is a potential solution, but is not perfect for all stakeholders, and there may be no other alternatives for abating noise to a community that is one nautical mile from the runway end.

One commenter stated that the offset approach concept is a starting point for future work, and Mike Porcello (FAA) agreed. Tim Middleton (Port Authority) expressed the group sentiment that lateral and vertical guidance must be provided until the aircraft aligns with the runway, and indicated that there may be multiple ways of doing this. He stated that there should be an effort to determine what types of procedure designs will provide such guidance, then use one of those procedure designs as a final modeling assumption. Tim also added that there is an understanding that the modeling assumption may not be the same as a final procedure design. Mike Porcello (FAA) asked Ralph Tamburro (Port Authority) if GBAS⁵ technology could provide suitable procedure concepts in the long term. Ralph replied in the affirmative. Ron Renk (United Airlines) indicated that a GLS⁶ approach with an RNP feed could provide an offset close to the airport. Tim Middleton reiterated that the current goal is to determine a procedure concept for modeling purposes, with the understanding that a finalized procedure may be different after further development work. Gene Reindel (HMMH) indicated that the question to be answered is, what can be done with an offset approach, so that the noise modeling can show the potential benefit for documentation purposes? Joey Medders (FAA) agreed with this process.

Andrew Brooks (FAA) asked if the design of the EWR Runway 22 offset approach has ramifications for the proposed TEB Runway 24 noise abatement departure concept. Tim Middleton (Port Authority) stated that the answer to that question has not been determined. Mike Porcello (FAA) suggested that protection of the TEB departure concept should be a design parameter for the EWR Runway 22L offset approach. Joey Medders (FAA) asked about the timeline for development of the EWR noise abatement concept, and Andrew Brooks replied that the timeline has not been established yet and took an action item to get an answer. Tim Middleton stated that there is a TEB Technical Advisory Committee (TAC) meeting next week, and the Port Authority may be able to provide a general timeline after the meeting. He took an action item to investigate.

JFK PROPOSED NOISE ABATEMENT PROCEDURE CONCEPTS

Kelly Mitchell (Port Authority) introduced the JFK 14 CFR Part 150 Study and stated that today's discussion builds on the discussion from September 8, 2017. She indicated that only a subset of procedures from September 8th will be discussed on today's call. Kelly thanked FAA Flight Standards and other FAA flight procedure staff for attending the call.

⁴ TERPS: Terminal Instrument Procedures.

⁵ GBAS: Ground-Based Augmentation System.

⁶ GLS: GBAS Landing System.

1. Reduce Runway 31L Intersection Departures at Night

Chris Sequeira (ESA) briefly described the proposed strategy, which is intended to increase the distance between aircraft and the Howard Beach and Hamilton Beach neighborhoods at night. He explained that in calendar year 2014, 25% of all nighttime departures at JFK departed from the intersection of Runway 31L and Taxiway KD. Brian Townsend (American Airlines) asked if the goal is to reduce noise or to eliminate noise, and if the proposed strategy has buy-in from the communities. Chris replied that the goal is to reduce noise over the neighborhoods, specifically by reducing the number of dwelling units and population within the DNL⁷ 65 contour. Kelly Mitchell (Port Authority) added that the foremost goal is to reduce the contour size, which is required by 14 CFR Part 150 for recommended noise abatement procedures, and then the benefits will accrue to the community. Steve Alverson (ESA) agreed that the objective is to reduce the size of the DNL 65 contour, which may reduce the cost of a potential sound insulation program. He added that the key question for the proposed strategy is how aircraft operators may respond to the additional runway length made available when aircraft are directed to use the full length of Runway 31L rather than an intersection for departures. Steve indicated that the preference is that operators do not reconfigure their aircraft, thus maximizing potential noise benefit, but also added that airline economics may motivate operators to use different departure configurations under the scenario of the proposed strategy.

Joe Bertapelle (JetBlue) replied that configuration changes cannot easily be determined in advance because a pilot's Flight Management System (FMS) dictates how the aircraft is configured. He added that a discussion would have to be held with aircraft operator engineering teams. Ron Renk (United Airlines) stated that the aircraft operators' goal is to maximize revenue, but there are agreements with engine leasing companies that dictate standards of engine care; these agreements favor the use of reduced-thrust takeoffs. Thus there is a potential that engine takeoff thrust would be lower if the proposed strategy were implemented. Larry Hills (FedEx) pointed out that the Port Authority does not currently recommend a specific Noise Abatement Departure Procedure (NADP) for aircraft operators to utilize, and added that FedEx could easily accommodate a Port Authority-recommended NADP. Chris Sequeira (ESA) stated that the ESA Study Team has analyzed the potential noise effects of the conceptual NADP1 and NADP2 profiles described in the Integrated Noise Model (INM) User Guide; the analysis results can be found on the Port Authority website.

Chris Sequeira (ESA) stated the understanding that fine details needed for determining the impacts of this proposed strategy may not be worked out during the NCP process. Kelly Mitchell (Port Authority) expressed the understanding that the details of configuration changes would need further discussion with the FAA and the airlines. Andrew Brooks (FAA) suggested the modeling assumption that aircraft departing from the full length of the runway would not reconfigure their aircraft for the additional length. He added that from a 14 CFR Part 150 perspective, this assumption would be reasonable for NCP modeling, rather than determining further details at this point. Chris replied that the ESA Study Team has

⁷ DNL: Day-Night Average Sound Level.

performed preliminary modeling using this assumption, but the modeling result appears to be an upper bound (i.e., may overstate the noise reduction benefits), based on the discussion that aircraft operators are likely to reconfigure their aircraft for the additional runway length. Mike Porcello (FAA) recommended that a live test be held for several months, coordinated with JFK Airport Traffic Control Tower (ATCT). Andrew Brooks replied that the NCP schedule must be considered during any efforts to obtain further technical details. Steve Alverson (ESA) stated that the Port Authority would be very hesitant to include an overly-optimistic assumption in an NCP as it could reduce the number of potentially eligible dwelling units, if the Port Authority were to pursue sound insulation. Andrew Brooks suggested that there are factors that should likely be discussed in a smaller group, and also stated that the Port Authority has discretion to pursue this strategy or not pursue it, either during this NCP or in a future NCP update.

2. Implement Proposed “Tighten SKORR” Departure Procedure

Chris Sequeira (ESA) presented the proposed concept, which involves moving the “SKORR” waypoint so that aircraft may gain increased distance from the Howard Beach and Hamilton Beach communities. He explained that the vast majority of Runway 31L departures today are RNAV departures, and that there is a wide variation in locations where aircraft turn left after departing Runway 31L. Mike Porcello (FAA) recommended that an operator evaluate the concept using flight simulation. Gary McMullin (Southwest Airlines) asked if the proposed procedure passed TARGETS⁸ RNAV criteria checks, to which Mike replied no. Mike added that there is a conventional procedure design that may work, but that the FAA would be reluctant to design and implement new conventional procedures. Gary observed that the proposed procedure may not be flyable and recommended a face-to-face discussion to refine the design. He added that flights currently turning early may turn later with the proposed procedure, increasing noise levels rather than decreasing them. A commenter stated that a “VA⁹ → DF¹⁰” RNAV coding might work; Gary McMullin added that a “VI¹¹ → CF¹²” coding would increase noise levels rather than decreasing them.

Steve McClain (FAA) asked if reducing intersection departures and using the existing SKORR procedure would lead to earlier turns. Gary McMullin (Southwest Airlines) replied that aircraft may actually turn later under this scenario, depending on how operators reconfigure their aircraft. He added that at Southwest Airlines, takeoff thrust settings are held until passing approximately 1,000 feet of altitude above ground level (AGL). Mike Porcello agreed, while indicating that nighttime departures are often performed by heavier aircraft. A commenter stated that aircraft observed on radar to turn farther away from the airport may already be using the full length of Runway 31L. Steve Alverson (ESA) expressed the understanding that earlier turns are compatible with the aircraft operators’ goal of reducing track miles for their operations. He asked if there was a procedure design other than the proposed concept that could help implement this goal. A commenter responded that there is no easy way to turn earlier, as aircraft following RNAV departures must pass through 400 feet AGL before turning. Gary McMullin added that a thrust reduction would add to the distance needed before an aircraft passes 400 feet.

Joe DeVito (JetBlue) asked how an elimination of intersection departures may affect airport throughput. Ralph Tamburro (Port Authority) stated that when JFK is using a multiple-runway configuration, intersection departures would be used. He clarified that a discussion of full-length takeoffs from Runway 31L is focused on nighttime hours, adding that JFK ATCT will often use full-length departures at night if the full runway length is available.

Joe DeVito (JetBlue) asked about the usage hours for the proposed “Tighten SKORR” concept. Chris Sequeira (ESA) replied that it would be used during daytime and nighttime hours, replacing the existing SKORR departure. Joe DeVito (JetBlue) asked about the implications for airport throughput. Ralph Tamburro (Port Authority) replied that departures would still be released from an intersection if JFK is using a multiple-runway configuration. Steve Alverson (ESA) indicated that there may be an additional benefit from combining the “Tighten SKORR” concept with a reduction of intersection departures at nighttime; this combination is not being suggested for daytime use. Joe DeVito (JetBlue) expressed his concern that departure throughput not be impacted during the summertime, especially in situations of thunderstorms. Steve Alverson agreed. Ralph Tamburro stated that if the Port Authority’s airports are backed up, noise abatement procedures typically will not be used.

Joe DeVito (JetBlue) asked if an aircraft FMS would allow the use of an intersection departure profile even if the aircraft is using the full length of Runway 31L. The response was that any parameters regarding power settings and obstacle clearance would have to be evaluated through individual aircraft operator systems. Gary McMullin (Southwest) agreed, indicating that operator performance engineering staff would have to be engaged. He added that it is difficult for the pilot to override an FMS, because all aircraft performance numbers then change. The typical choices are, either use reduced thrust based on FMS parameters, or use a full-thrust departure. Mike Porcello (NYTRAOCN) asked what pilots do if a portion of the runway is NOTAMed¹³ as unavailable. An aircraft operator responded that if the FMS were to be directed to use a shorter runway length when departing the full length of Runway 31L, operator performance engineering staff would have to enter the required data into the performance management system. Chip Beall (Delta) stated that most Delta pilots departing from JFK will load intersection departure performance requirements because they represent worst-case runway length requirements; if the pilots are then directed by JFK ATCT to use a full-length takeoff, the pilots will keep the intersection departure requirements rather than changing the FMS parameters during the aircraft taxi operation.

NEXT STEPS

Andrew Brooks (FAA) indicated that the FAA will reach out to the Port Authority to discuss next steps. Mike Porcello (FAA) indicated that the LGA noise abatement procedure concepts are still being developed, including the offset approach to LGA Runway 22. He recommended that a future group discussion focus on these concepts. Mike added that a LGA Runway 4 departure avoiding overflight of Clason Point (in The Bronx) may be implemented using conventional procedures. He also stated that the concept of increasing altitudes of JFK Runway 22L/22R arrivals at night is being advanced outside of the 14 CFR Part 150 process; the FAA will engage operators in the future about flyability.

⁸ TARGETS: Terminal Area Route Generation and Traffic Simulation software.

⁹ VA: Maintain heading until reaching a specified altitude.

¹⁰ DF: Fly directly to a specified navigational fix.

¹¹ VI: Maintain heading until intercepting a given heading to the next RNAV leg.

¹² CF: Fly a specified course to a specified fix.

¹³ NOTAM: Notice to airmen.

ACTION ITEM

Andrew Brooks took an action item to get back to Joey Medders on the timeframe for developing the EWR Runway 22L Offset Approach. Tim Middleton took an action item to investigate the potential TEB noise abatement departure development schedule after the upcoming TEB TAC meeting.

ADJOURN

The meeting was adjourned at 12:30 P.M. EDT.



Federal Aviation Administration

Eastern Service Center
Operations Support Group

Date: February 22, 2018

Meeting Minutes

Subject: Telcon on Proposed New & Amended Arrival Procedures at Teterboro Airport

Participants: Timothy Middleton, Port Authority
Adeel Yousuf, Port Authority
Gabriel Andino, Teterboro Airport
Bob Mentzer, HMMH
Mary Ellen Eagan, HMMH
Eugene Reindel, HMMH
Dominic Scarano, HMMH
Andrew Brooks, FAA, ARP, Environmental Program Manager
Lindsay Butler, FAA, ARP
Lee Kyker, FAA, OSG, Environmental Specialist
Joey Medders, FAA, OSG, North Team Lead
Durre Cowan, FAA, OSG
David Sanchez, FAA

1. LKyker (FAA) discussed the purpose of the telcon, which is to share information between AT & Port Authority as it relates to the ongoing FAA environmental study of the four proposed arrival procedures at TEB & the TEB Part 150 study. Also, to obtain input from the Port Authority Part 150 team as to the impact of the proposed TEB project on the Part 150, solicit input into development of a community outreach plan, and discuss next steps.
2. FAA's noise modeling results & noise modeling methodology associated with the four arrival procedures was discussed. HMMH discussed noise modeling they conducted for the draft development of the Port Authority TEB Part 150 Noise Compatibility Program (NCP). LKyker requested input from the Port Authority as to whether FAA's noise modeling & assumptions created any concern or raised questions/comment. The noise methodology used in FAA's noise screening associated with the proposed project (four TEB arrival procedures), based on AT's planned operational use, did not raise any issues from either Port Authority

or HMMH staff. HMMH asked and FAA confirmed that the RNAV to Runway 24 is an overlay and assumes the same usage compared to the baseline. Participants represented (Port Authority, the Port Authority's Part 150 consultant (HMMH), and FAA's Airport Division) provided their opinion that the plan to move forward with the TEB arrival procedures would not negatively impact the Part 150 study being conducted.

3. LKyker discussed AT's next steps now that noise screening has been completed. FAA representatives from various lines of business (Regional Administrator AEA-1, AT NY District, N90, TEB ATCT, NYAPIO, Airports Division, Public Affairs, Legal, AT OSG, etc) will next develop a community outreach plan which will be forwarded to FAA senior leadership. Senior leadership will review the proposed TEB project, which includes a proposed community outreach plan, and will provide direction for moving forward. LKyker discussed the fact that some community outreach has already been conducted to date and requested input/comment as to any additional outreach needed & input as to the focus of that outreach. The January 3, 2018 letter to the FAA Regional Administrator from TANAAC expressing support of the development of the RWY 19 RNAV (GPS) offset and request for quarterly FAA project updates was mentioned. LKyker requested input from meeting participants, particularly as it relates to the area beneath the RWY 19 RNAV (GPS) offset from Paramus south (because it does not receive overflights today), as to "what level, how, to whom, and upcoming opportunities" to conduct outreach. It was mentioned that some communities around Paramus are not a part of TANAAC. LKyker requested support in identifying the proper officials/representatives from this area.
4. T. Middleton to provide LKyker with recommended list of communities and elected/community officials in which to target outreach for the RWY 19 RNAV (GPS) offset. LKyker also discussed the fact that since this particular procedure was for noise purposes, FAA should not be considered the proponent of the RWY 19 RNAV (GPS) procedure. In addition, FAA funding to conduct community outreach is very limited. FAA would assist in providing information related to the noise impacts of the proponent(s) procedure for a meeting that the proponent of this procedure set up. It was mentioned that the Port Authority's TEB Airport Manager (Renee Spann) could assist here.
5. Input/recommendations were also solicited from the Port Authority regarding any additional outreach for the three other FAA proposed procedures (beyond what has already been conducted to date or listed as under consideration for future outreach elements. See page 7 of FAA project briefing memo.) T Middleton expressed concern in the messaging to ensure communities that would not be impacted by the proposed project did not perceive an impact simply due to notification of the new project. He also suggested that consideration be given to conducting outreach "by town" to target the affected communities that may not be a part of TANAAC. He requested all FAA outreach plans for TEB be coordinated in advance with the Port Authority.

6. Discussion ensued as to what was currently within the Part 150 NCP for TEB. The draft Part 150 NCP does contain a recommendation for the development of a RWY 19 offset arrival procedure for the purpose of reducing noise. No mitigation measures for this proposed RWY 19 offset arrival procedure were developed for Part 150 purposes because the proposed RWY 19 offset arrival procedure is not expected to create a noise impact within the 65 DNL contour. Other noise mitigation measures affecting other runways were briefly discussed.
7. A TANAAC meeting is scheduled for April 25th, 2018. This meeting would provide an opportunity to provide a status update on this project to TANAAC.
8. TMiddleton & Andrew Brooks provided a status update on the TEB Part 150 study. A TAC meeting is tentatively scheduled for late May, early June. At that time, an update on these TEB arrival procedures could be provided. The draft NCP is expected to be released in late summer/early Sept of this year. The final NCP is expected to be released in March 2019. A 180 day FAA review would follow with an approved NCP by early fall 2019. If for some reason the Part 150 was not approved in advance of the proposed publication date for the TEB procedures, FAA Airports indicated that the procedures could continue to move forward & this could be handled with a documented explanation. There is a publication date for three of the TEB procedures which is subject to completion of the environmental process. A publication date has not yet been established for the TEB RWY 19 RNAV (GPS) offset.

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Prepared by: Lee Kyker, Operations Support Group, Eastern Service Center, AJV-E21



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Appendix E.5

Teterboro User Group Meetings

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TUG Meeting Minutes July 19, 2017

Featured Speaker: Renee Spann – Teterboro Airport Manager

Scott Marsh – PA of NY/NJ Manager of Operations

- Renee Spann reported that airport movements year-to-date are up 4.5% which approximates about 66,000. The airport recorded a high of about 675 operations just on June 8th, with eight other days in June recording above 600 daily operations. Operations are high and expected to increase.
- Scott detailed several on-going airport construction projects as well as their effect on operations. Of note, is an airport closure scheduled for August 12th from 05:00 – 11:00 local time. As a matter of course, operators are to keep abreast of local airport Notams for the latest and most current information.

Featured Speaker: Gary Palm – KTEB Air traffic Control Manager

Larry Brady – KTEB Staff Specialist

- The Bedminster TFR continues to be very challenging overall to all NY area reliever airports such as TEB, MMU, HPN and for GA operations at EWR.
- Operators are reminded to try their best to not have operations scheduled (flight planned) within 45 minutes of the scheduled start of the TFR as there is a highly likelihood of delays to precede the TFR as well as the potential for the TFR to commence early.
- Of note for those who cannot avoid operating to and from the NY area reliever airports; the only departure gates available during the TFR are the northern gates (GAYEL, HAAYS, NEION and COATE). All west gates are shut down and not available (ZIMMZ, PARKE, LANNA and BIGGY). South and East gates are unaffected. Operators are advised that when severe weather comes into play during the TFR, there may be no getting out as remaining gates are shut down due to weather. For flights that depart during the TFR to the Southwest, expect to be kept below 22,000ft until passing central PA due to higher altitude military aircraft operations supporting the TFR.
- For arrivals (during the TFR) from the South/Southwest, expect very lengthy delays and or extensive re-routes going through western Pennsylvania (Southwest arrivals) and through New England (Southern arrivals). If the west gates are closed for departures, this airspace is also not available for GA arrivals.
- The best mitigation practice for operating during a TFR is to treat it as if SWAP (severe weather avoidance plan) is in effect for the NY area reliever airports.
- In September and lasting until December, airport construction will resume in LGA necessitating ILS approaches to runway 13. Teterboro airport operations will be impacted and operators are advised to plan for possible delays when LaGuardia is using the ILS to 13. When feasible, the RNAV to 13 at LGA will be in use which will then not impact Teterboro, but that requires higher minima (better than 600ft and ½ mile).

- Operators are advised to expect the publication of the RUUDY 6 RNAV departure coming around October. The Teterboro Users Group, will provide information on the new procedure when it becomes available.

Group Discussion: Best practices for Teterboro Circling Approaches

- The room discussion expanded on the article in the “Code7700” website titled: “Teterboro Circling Conundrum” by noted author and pilot James Albright http://code7700.com/kteb_circling_conundrum.htm.
- Key insights provided by those in attendance are that the Teterboro tower does keep an eye on crosswinds and prefers to only use this procedure when the weather provides at least a 1500ft ceiling with good visibility.
- Teterboro tower personnel have advised that operators are authorized to overfly the stadium during this procedure for operational necessity when landing at Teterboro airport and when they are in contact with Teterboro tower for this circle to land to runway 1 visual approach. Teterboro tower personnel maintain a dialogue with stadium personnel and advise them of when this may happen especially during stadium use.
- Many different operational techniques were offered for consideration, but ultimately the differences in aircraft and their avionics capability, training programs and operator profiles make one solution too impractical to derive. However, a key insight from the discussion was that operators flying the circle to runway 1 visual approach NOT delay the turn to base after TORBY. A prompt turn after passing TORBY intersection was the best remedy against getting behind the aircraft, especially when the winds are strong and gusting from the West to Northwest.
- Beyond the expeditious turn upon passing TORBY, operators should develop their training programs to derive best practices that work for their unique operation.

Featured Speaker: James Buckner – Honeywell GoDirect flight support services; senior technical manager

- James detailed Honeywell’s flight planning, communications and weather tracking enhancements to subscribers. The service formally known as GDC has grown from 60 support personnel to now over 400 staff. The service supports all satellite communication networks.
- The mobile device is now becoming very important in the last hour before departure as crews are now more focused on the customer service aspect of their operations. To this end, Honeywell has strong offerings that recognize the mobile device’s importance and this can be reviewed at: <https://aerospace.honeywell.com/en/MobileApp>
- Operators are advised that new versions of software are coming out at about a 6 month cadence, as opposed to typical 2 to 3 year cycles for older hardware.

- Honeywell hopes to launch by NBAA 2017 their “crowd source weather” capability and so operators should stay tuned for that.

Featured Speaker: Bob Ocon – NY Center Traffic Management Specialist**John Coppola – NY Center Manager Analyst for Traffic Management**

- Operators are reminded that they should file on an appropriate route when they plan to operate into and out of the NY area reliever airports. Gate and routing information can be found on the Teterboro Users Group website.
- If not filed via the appropriate routings, operators should amend their flight plans rather than just file another flight plan. Actual controllers, rather than software have to physically go through every individual flight plan and change routings that do not conform manually. Adding flight plans rather than amending them will cause operators greater delays in their departures.

Featured Speaker: Tim Middleton – PA NY/NJ Part 150 Program Manager**Mary Ellen Eagan, Bob Mentzer – TEB Part 150 study team**

- There were a handful of operators who will be receiving recognition from Senator Cory Booker’s office for their adherence to the voluntary restraints program relating to not operating during very late hours (11pm to 6am). Interestingly enough, the majority of “good neighbor” awards are going to operators whose aircraft are not based at Teterboro Airport.
- The TEB part 150 study team explained in detail the findings of their study that included noise signature outlays from each runway. Key takeaways include coming recommendations to continue to mitigate noise from runway 24 departures and arrivals. These can include a shift in the initial heading flown off of runway 24 to reduce noise signatures for departures. For arrivals, a shift towards recommendations for more runway 1 landings could be recommended.
- Each shift in operation from a specific runway has consequences for stakeholder communities on the other end as Teterboro Airport is surrounded by heavily populated areas. As an example, a recommendation to initiate more departures from taxiway Kilo on runway 1, in order to reduce noise near the mobile home park, has the potential to result in lowered flight profiles which could increase noise to the north of the airport.
- The Part 150 noise study team is expecting to submit their report to the FAA by month’s end and further discussions on noise abatement will then ensue which could see one or more recommendations being implemented. More information to follow as it develops.



Teterboro Airport Part 150 Noise/Land Use Compatibility Study

Teterboro Users Group Meeting

July 19, 2017

Teterboro Airport

1



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Agenda

- Introductions
- Part 150 Overview
- Noise Exposure Map (NEM)
- Noise Compatibility Program (NCP) Discussion
- Study Schedule

2



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Generalized Part 150 Study Process / Schedule



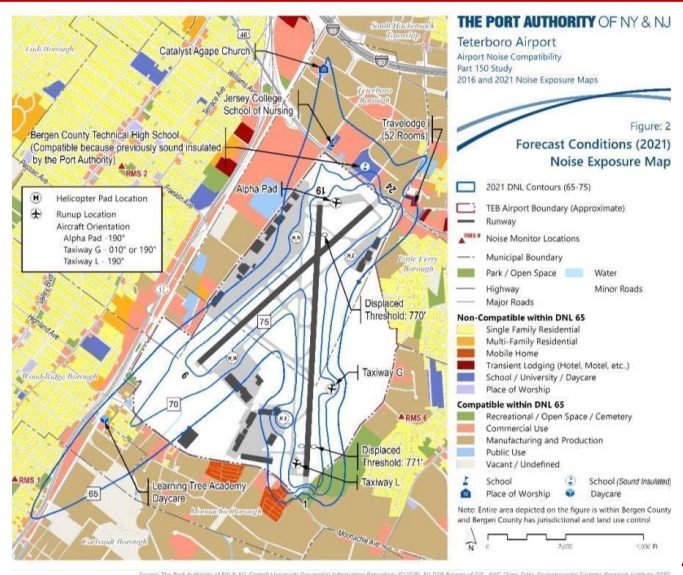
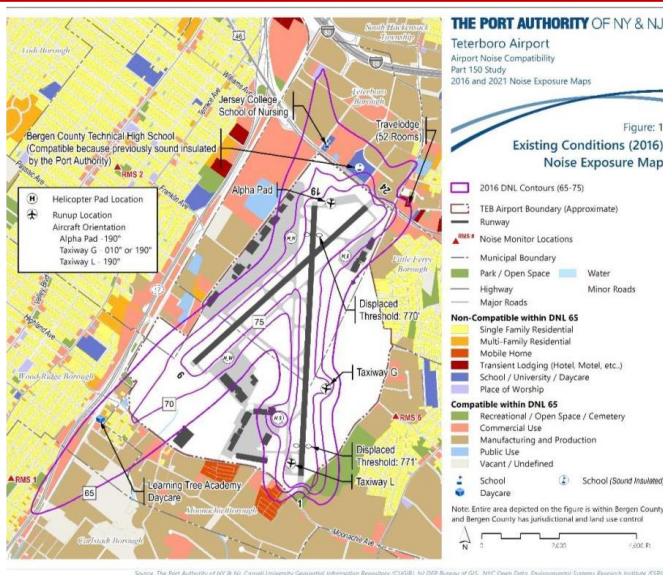
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Final TEB Noise Exposure Maps (NEMs)



4



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Final NEM Dwelling Unit and Population Counts

Year	Metric	Dwelling Units within DNL Contour Interval			Population within DNL Contour Interval		
		65-70	70-75	Total	65-70	70-75	Total
2016	Single Family	88	0	88	213	0	213
	Multi-Family	51	0	51	123	0	123
	Mobile Home	44	8	52	106	19	125
	Total	183	8	191	442	19	461
2021	Single Family	83	5	88	201	12	213
	Multi-Family	49	2	51	119	5	124
	Mobile Home ¹	48	9	57	116	22	138
	Total	180	16	196	436	39	475

Note: Population = 2.42 people times number of residential units

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Noise Compatibility Program Development Process

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

Analysis and Selection Process Applied in Steps 2 - 4

- Evaluate effectiveness of each measure in addressing objectives
- Evaluate feasibility (operational, safety, economic, etc.)
- Select preferred “package” of measures
- Identify implementation schedule, responsibilities, budget, funding sources, etc.
- If not recommended, document reasons

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Major NCP Strategy Options within Each Category

Noise Abatement Strategies

- Noise abatement flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Noise barriers (presented today)
- Runup enclosures
- Use restrictions (will be addressed at TAC 13)
- Other actions proposed by stakeholders

Land Use Strategies

- Mitigation
 - Land acquisition
 - Sound insulation
 - Avigation easements
- Prevention
 - Land use controls
 - Zoning
 - Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders

Programmatic Strategies

- Implementation tools (rules, regulations, ordinances, etc.)
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM updating
- NCP revision
- Other actions proposed by stakeholders

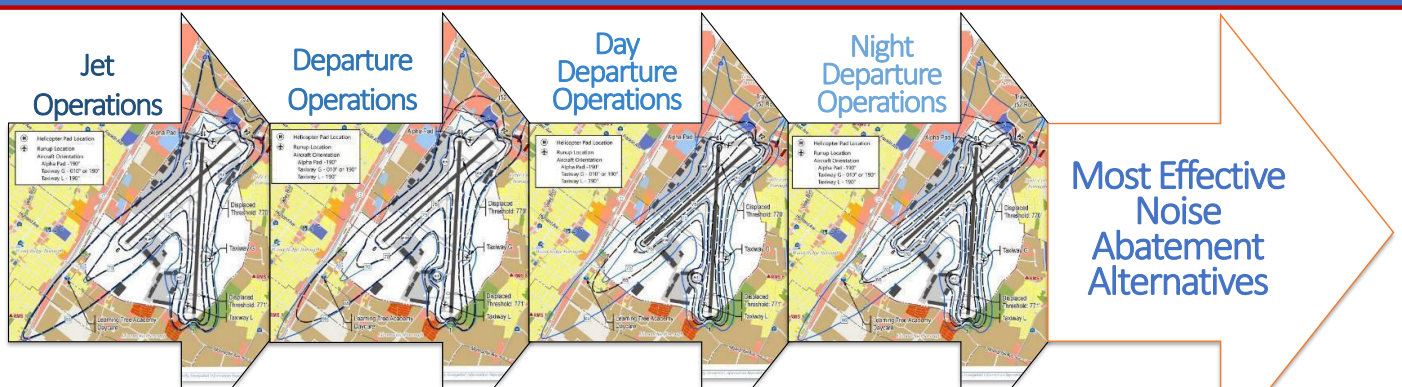
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“Partial” DNL Contributors by Operational Category



- Results:
 - Jet operations dominate total DNL
 - Departures contribute more to total DNL than arrivals
 - Daytime operations contribute slightly more than nighttime

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NCP Operational Noise Abatement Proposals

Category	Measure	Noise Benefit
Preferential runway use	Shift Runway 6 night arrivals to Runway 1 – Existing Program	Small benefit (reduction of 8 homes with a 25% shift)
	Shift Runway 24 night departures to Runway 19 – Existing Program	Small benefit for a small increase (10%), no benefit at a higher increase (25%)
	Shift Runway 1 night departures to Runway 6	No Benefit as increased dwelling units north of Runway 24
	Combination of Increased arrivals to Runway 1 and departures from Runway 19	Little benefit as increases in units in the mobile home park offset reductions of units along Route 17
Noise abatement flight paths, arrival procedures, and departure procedures	Runway 19 Quiet Visual approach	FAA discontinued procedure for use after publication due to the complexity of flying it
	Runway 24 noise abatement departure to 230 heading at night	Reduction of 15 dwelling units in total, 6 of which are within the 70 DNL contour
	Noise abatement departure procedures - NBAA high-density NADP	Reduction of 19 dwelling units if used for 88% of jet departures not held down at or below 3,000 ft.
Airport layout	Runway 1 jet departures starting at Taxiway K intersection	Reduction of 28 dwelling units in the mobile home park
	Relocation of maintenance run-ups to center of airfield along Taxiway Q	Reduction of 5 dwelling units in the mobile home park

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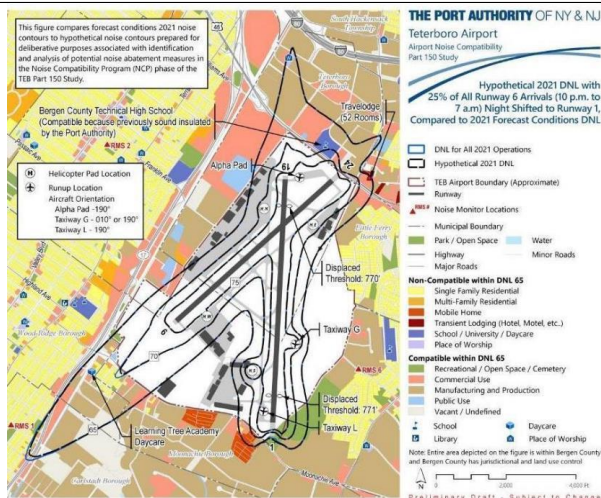


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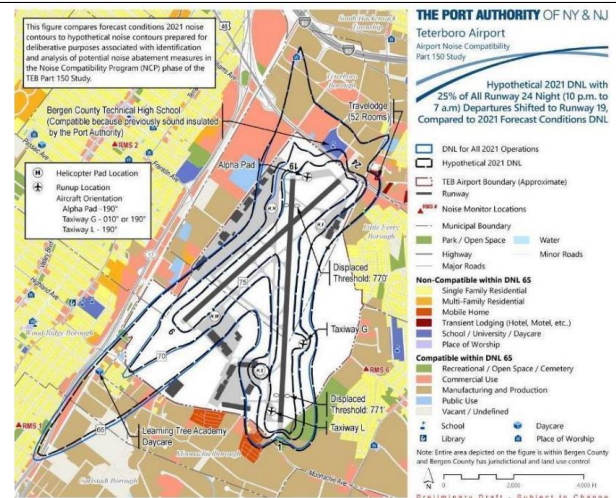
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Preferential Runway Use

Shift 25% of Rwy 6 Night Arrivals to Runway 1



Shift 25% of Rwy 24 Night Departures to Rwy 19



These figures are not official Noise Exposure Maps. They are hypothetical cases for deliberative purposes only.

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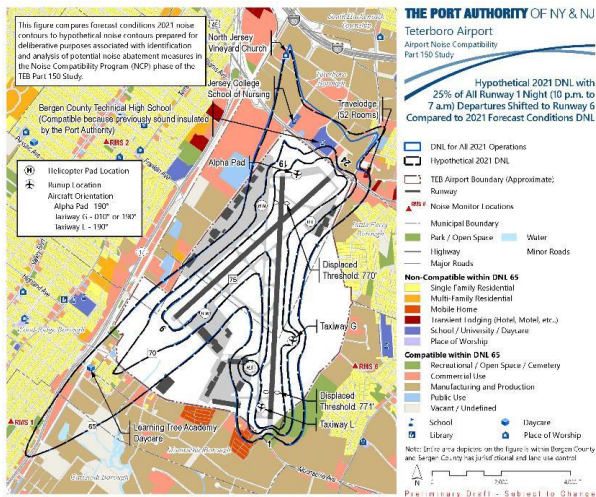
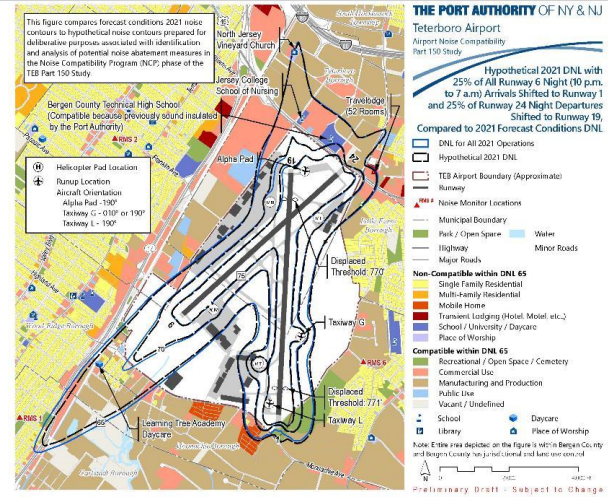
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Preferential Runway Use (cont'd)

Shift 25% of Rwy 1 Night Departures to Rwy 6

Shift 25% of Rwy 6 Night Arrivals to Rwy 1 and 25% of Rwy 24 Night Departures to Rwy 19

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Preferential Runway Use (cont'd)

- We looked at increasing use of the Preferential Runway Use at night
- TRACON does not expect the airspace situation to change to allow for more Runway 19 departures at night
- Overall the existing program has a benefit and should remain in place

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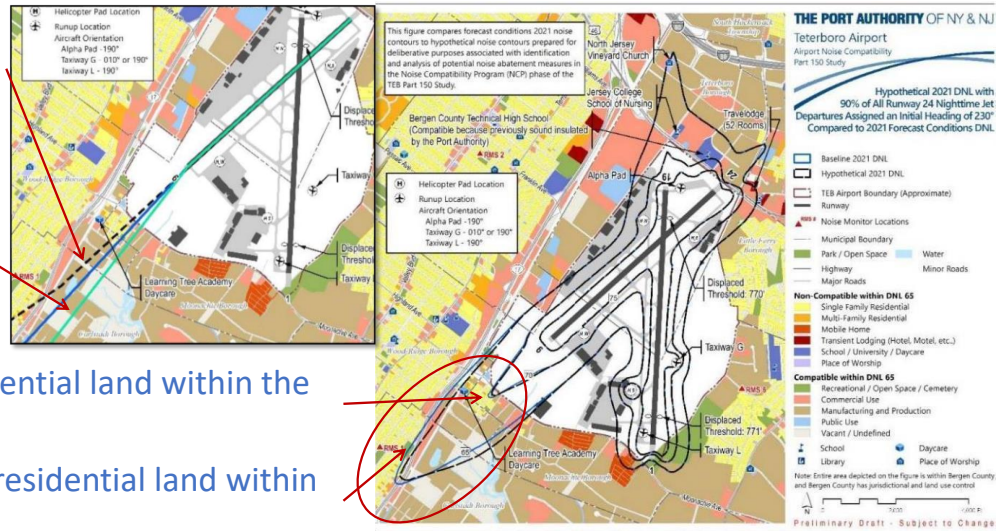
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Noise Abatement Flight Track: 90% of Night Jet Departures on Runway 24 Assigned 230° Heading

- Existing track shown is the jet backbone track with the highest usage
- The new 230° departure heading track turns after the end of the runway
- Slight reduction in residential land within the 70 DNL contour
- Moderate reduction in residential land within the 65 DNL contour



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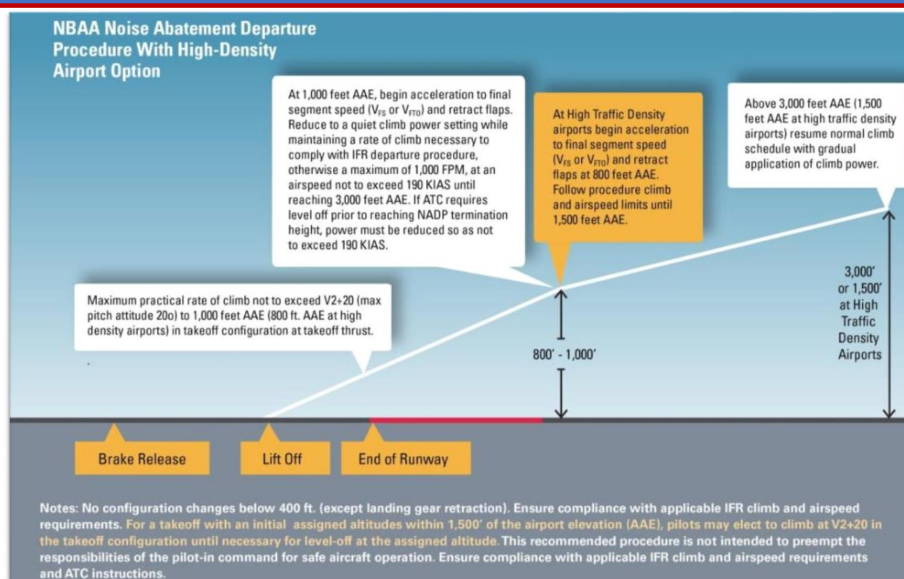
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NBAA High-Density NADP



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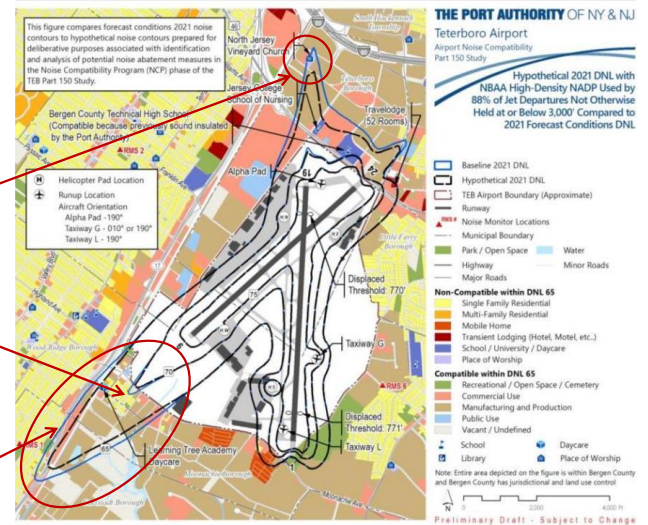
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Departure Procedure: Use of NBAA High-Density NADP to Jet Departures Not Held at or Below 3,000'

- Limiting application to departures not held at 3,000' results in approximately 52% of all jet departures using high-density NADP
- North Jersey Vineyard Church to the north of Runway 1/19 is removed from 65 DNL
- Pulls the 70 DNL contour onto airport property
- Reduces residential land within 65 DNL under Runway 24 departures



These figures are not official Noise Exposure Maps. They are hypothetical cases for deliberative purposes only.

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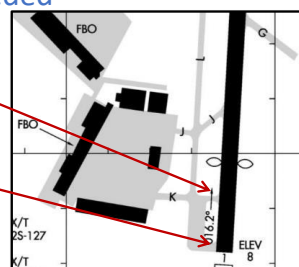
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Airport Layout: Shift the start-of-takeoff-roll point to the Taxiway K intersection for all of Runway 1 jet departures at night

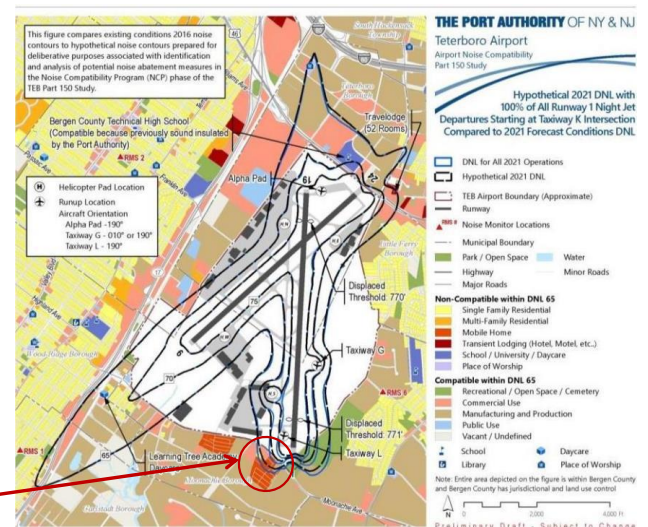
- Would lose approximately 550' of takeoff distance, but takeoff distance is still longer than Runway 6
- Voluntary procedure would permit aircraft to use full runway length if needed

Taxiway K
intersection

Normal, full-length start-of-
takeoff-roll location



- Noticeable reduction of contour extent over mobile home park – reduction of 28 dwelling units



These figures are not official Noise Exposure Maps. They are hypothetical cases for deliberative purposes only.

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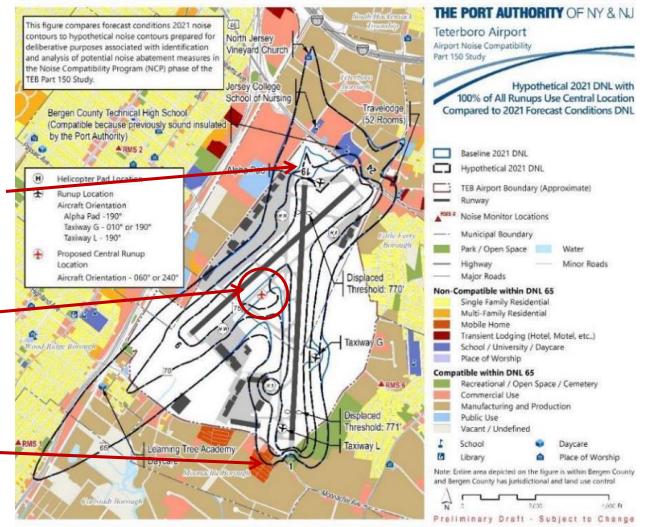
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Airport Layout: Location of All Maintenance Runups in the Center of the Airfield along Taxiway Q

Proposed runup location along Taxiway Q north of Taxiway G

- Provides reduction of the 70 DNL contour south of Route 46
- Using 60° and 240° headings – with the same split as the existing locations
- There is a slight benefit to the mobile home park (reduction of five homes)



These figures are not official Noise Exposure Maps. They are hypothetical cases for deliberative purposes only.

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Dwelling Unit and Population Analyses

Green highlight is net reduction
Red highlight is net increase

Category	Scenario	65 – 70 DNL		70+ DNL		Total		Dwelling Unit Change from Baseline			Population Change from Baseline		
		Units	Pop'n	Units	Pop'n	Units	Pop'n	65-70	70+	Total	65-70	70+	Total
Baseline	2021 Baseline Operations	180	436	16	39	196	475	-	-	-	-	-	-
Runway Use	Shift 25% of Rwy 6 Night Arr.s to Rwy 1	179	433	9	22	188	455	-1	-7	-8	-3	-17	-20
	Shift 25% of Rwy 24 Night Dep.s to Rwy 19	189	457	10	24	199	481	9	-6	3	21	-15	6
	Shift 25% of Rwy 1 Night Dep.s to Rwy 6	181	438	12	29	193	467	1	-4	-3	2	-10	-8
	Shift 25% of Rwy 6 Night Arr.s to Rwy 1 and 25% of Rwy 1 Night Dep.s to Rwy 19	183	443	10	24	193	467	3	-6	-3	7	-15	-8
Flight Tracks	90% Night Rwy 24 Jet Dep.s Turn to 230°	171	414	10	24	181	438	-9	-6	-15	-22	-15	-37
Layout	100% of RW 1 Night Departures Start at Twy K	161	390	7	17	168	407	-19	-9	-28	-46	-22	-68
	All maintenance runups use central location	179	433	12	29	191	462	-1	-4	-5	-3	-10	-13
NBAA High-Density NADP	Use by 88% of Jet Departures Not Held Down at or Below 3,000 ft.	168	407	9	22	177	429	-12	-7	-19	-29	-17	-46

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented.

18



TEB Part 150 Study | TUG Presentation – July 19, 2017

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Sensitive Receptors within 65 DNL

Blue checkmark indicates site is wholly or largely within DNL 65

Category	Scenario	Learning Tree Academy Daycare	Bergen County Technical School (Sound insulated, so compatible)	Catalyst Agape Church (formerly North Jersey Vineyard Church)	Jersey College School of Nursing (Sound insulation status unknown)
Baseline	2021 Baseline Operations	✓	✓	✓	✓
Runway Use	Shift 25% of RW 6 Night Arrivals to Runway 1	✓	✓	✓	✓
	Shift 25% RW 24 Night Departures to Runway 19	✓	✓	✓	✓
	Shift 25% of RW 1 Night Departures to Runway 6	✓	✓	✓	✓
	Shift 25% of RW 6 Night Arrivals to Runway 1 and 25% of Runway 1 Night Departures to Runway 19	✓	✓	✓	✓
	90% Night Rwy 24 Jet Dep.s Turn to 230°	✓	✓	✓	✓
Flight Tracks	100% of RW 1 Night Departures Start at Twy K	✓	✓	✓	✓
NBAA High-Density NADP	Use by 88% of Jet Departures Not Held Down at or Below 3,000 ft.	✓	✓	Removed from contours	✓

Note: Noise abatement procedures must be studied and approved by the FAA for safety and efficiency before any proposed procedure can be implemented. 19



TEB Part 150 Study | TUG Presentation – July 19, 2017

THE PORT AUTHORITY OF NY & NJ

Next Steps

- Finalize operational recommendations
- Develop land use/mitigation recommendations
- Develop programmatic recommendations
- Draft NCP will be submitted to FAA in August of 2018



Appendix E.6

Project Newsletters

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Teterboro Airport Title 14 of the Code of Federal Regulations (14 CFR Part 150) Airport Noise Compatibility and Planning Study

Winter 2017
Newsletter #4

STUDY UPDATE

The Port Authority of New York and New Jersey (PANYNJ), in cooperation with a Study Team and Technical Advisory Committee (TAC), has spent much of the last year and a half collecting and analyzing the data needed to develop a Noise Exposure Map (NEM) for Teterboro Airport (TEB). The Draft NEM was officially made available for public review and comment for 30 days starting on September 15, 2016 through October 17, 2016. All comments received during this time will be reviewed and responded to in the NEM Report. PANYNJ expects to submit the Final NEM to the Federal Aviation Administration (FAA) early next year for acceptance that it was prepared in accordance with 14 CFR Part 150 requirements.

The TEB Part 150 Study is transitioning to the development of the Noise Compatibility Program (NCP). The goal of the NCP is to reduce noise levels so that they are compatible with surrounding land uses, particularly those areas exposed to Day-Night Average Sound Levels (DNL) 65 and greater from TEB aircraft operations. The first priority will be to determine possible noise abatement strategies that have the potential to reduce noise exposure in noise-sensitive areas. Provided below are the strategies that the Part 150 regulation requires to be evaluated during the NCP phase of the project.

NOISE ABATEMENT STRATEGIES	LAND USE STRATEGIES	PROGRAMMATIC STRATEGIES
<ul style="list-style-type: none"> Noise abatement flight tracks Preferential runway use Arrival/departure procedures Airport layout modifications Noise barriers Runup enclosures Use restrictions 	<ul style="list-style-type: none"> Mitigation land use acquisition Sound insulation Avigation easements Prevention land use controls Zoning Building codes Comprehensive plans Real estate disclosures 	<ul style="list-style-type: none"> Implementation tools (rules, regulations, ordinances, etc.) Promotion, education, signage, etc. Monitoring Reporting NEM updating NCP revision

The PANYNJ expects to submit the NCP to the FAA for review and approval in 2018. TAC and public involvement will continue to be an important part of this study. Please visit the project website at http://panynjpart150.com/TEB_homepage.asp for the most recent project information.

STAY CONNECTED

For more information or to submit comments and feedback, the PANYNJ has several ways you can participate and stay informed:

- The project website (http://panynjpart150.com/TEB_homepage.asp) is updated regularly with project documents, meeting announcements, and other general information about the study. Register here to join the mailing list and receive project updates.
- To make comments, give feedback, or ask questions, please call us at (212) 435-3777 or email us at NJPart150@panynj.gov.
- To file an aircraft noise complaint, please call the noise complaint hotline at 1-800-225-1071.

PUBLIC WORKSHOP RECAP

A public workshop for the TEB Part 150 Study was held on Thursday, September 22nd in the Multi-purpose Room at the Bergen County Complex in Hackensack from 6 p.m. to 9 p.m.

The purpose of the workshops included:

- Present the NEM
- Provide the public with an opportunity to ask questions of the Study Team
- Provide the public with an opportunity to review the draft NEM document
- Request each attendee to provide comments to the PANYNJ and the Study Team on the draft NEM

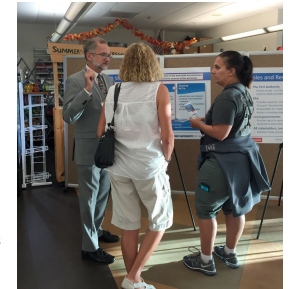
The workshop was conducted in an "open-house" format and consisted of seven stations that attendees could rotate through at their leisure. Five of the stations consisted of several presentation boards providing an overview of the Part 150 Study process; the land use data collection process and land use map; the noise modeling process and inputs; and the NEM map depicting the 65 to 75 DNL noise contours and surrounding land uses. Two of the stations also had interactive components. At one, station attendees were able to type their address on a website and see where their home was located in relation to the 65 to 75 DNL

contours. At the other, attendees could view the PANYNJ's Flight Tracking and Noise Information System (WebTrak). Members of the Study Team and PANYNJ staff were available to answer questions and listen to feedback. All materials displayed and the interactive map at the public workshop are available for review and download on the project website at http://panynjpart150.com/TEB_PIW.asp.

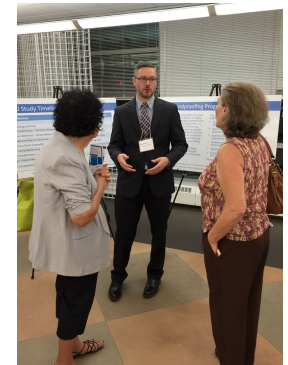
Close to 40 people attended the workshop, with attendees representing neighborhoods within the communities of

- Rutherford
- Wood Ridge
- Hackensack
- Carlstadt
- Moonachie

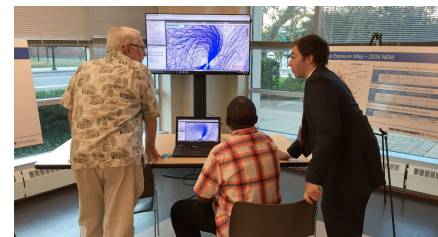
Attendees could submit feedback in writing on comment forms provided at the workshop or via email to NJPART150@panynj.gov. All comments received by the close of the official comment period on October 17th will be considered by the PANYNJ and Study Team and will be reviewed and incorporated into the NEM submitted to the FAA for acceptance. Comments and questions on the Part 150 Study process via the project email address are welcome to be submitted for the duration of the Study.



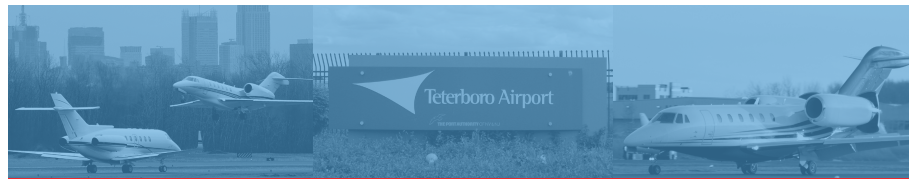
Ted Baldwin (HMMH Study Team) provides an overview of the TEB Part 150 Study to members of the public.



Tim Middleton of the PANYNJ speaks with members of the public at the workshop.



Members of the public view their homes in relation to TEB flight tracks and noise contours.



Teterboro Airport Title 14 of the Code of Federal Regulations (14 CFR Part 150) Airport Noise Compatibility and Planning Study

STUDY UPDATE

Summer 2017
Newsletter #5

The Port Authority of New York and New Jersey (the Port Authority), in cooperation with the Study Team and Technical Advisory Committee (TAC), has met a major milestone in the Teterboro Airport (TEB) 14 CFR Part 150 Study: the submission of the Final TEB Noise Exposure Map (NEM) Report to the Federal Aviation Administration (FAA) on May 25, 2017. The Final TEB NEM Report was the product of a year-and-a-half project to collect and analyze the data needed to develop NEMs and associated documentation for TEB. The Final TEB NEM Report also includes responses to all public comments received during the draft report comment period of September 15 through October 17, 2016. The FAA accepted the official TEB NEMs on June 15, 2017. Notice of the FAA's acceptance was published in the Federal Register on June 22, 2017. Public announcements of the FAA's acceptance of the TEB NEMs have been published three times in eight newspapers of general circulation as indicated in the table on the right. The official TEB NEM Report is available for review and download on the project web site at http://panynjpart150.com/TEB_FNEM.asp.

PUBLICATION	PUBLISH DATE
The Star Ledger	7/20, 7/27, 8/3
The Record	7/20, 7/27, 8/3
El Especialito	7/20, 7/27, 8/3
Korea Daily	7/20, 7/27, 8/3
Hasbrouck Heights Gazette	August issue
North Jersey/TEB area Weekly Publications including:	
• Hackensack Chronicle	7/20, 7/27, 8/3
• South Bergenite	
• Community Newspapers (Hasbrouck Heights, Wood-Ridge, Little Ferry, Bogota, Ridgewood)	

NCP DEVELOPMENT: NOISE ABATEMENT STRATEGIES

Using the official NEMs developed in Phase One, the Port Authority's TEB 14 CFR Part 150 Study is now developing a Noise Compatibility Program (NCP). The goal of the NCP phase is to evaluate potential land use, noise abatement, noise mitigation and programmatic strategies to improve land use compatibility with TEB aircraft operations, specifically those areas exposed to Day-Night Average Sound Level (DNL) 65 decibels (dB) and greater due to TEB aircraft operations.

Over the last several months, the Port Authority, along with the TAC, has been evaluating a number of proposed strategies for modifying aircraft operations at TEB to reduce aircraft noise. These strategies came from the TAC, members of the public and the FAA; they include arrival/departure procedures, noise abatement flight tracks, noise barriers, use restrictions and modifications to the TEB airport layout. The Port Authority and members of the Study Team have been coordinating with representatives of the New York Terminal Radar Approach Control (TRACON) to discuss which proposed strategies may be feasible to implement as part of the NCP. Strategies that may be feasible to implement will be refined for noise modeling in the NCP phase to determine the extent to which their implementation would change the DNL 65, 70, and 75 dB contours surrounding TEB. Noise modeling results for potential noise abatement strategies have been presented at the TAC meetings. Final draft results will be presented at the next TAC meeting in November 2017.

STAY CONNECTED

For more information or to submit comments and feedback, the Port Authority has several ways you can participate and stay informed:

- The project website (http://panynjpart150.com/TEB_homepage.asp) is updated regularly with project documents, meeting announcements, and other general information about the study. Register here to join the mailing list and receive project updates.
- To make comments, give feedback, or ask questions, please call us at (212) 435-3777 or email us at NJPart150@panynj.gov.
- To file an aircraft noise complaint, please call the noise complaint hotline at 1-800-225-1071.

NCP DEVELOPMENT, (continued): LAND USE STRATEGIES

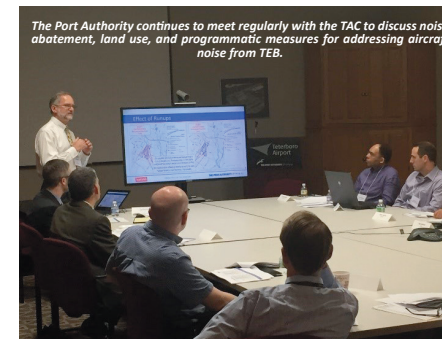
14 CFR Part 150 Study requires the analysis of land use strategies which include remedial and preventative mitigation measures, both of which are essential to obtaining and maintaining compatible land uses around TEB.

Remedial mitigation measures are intended to mitigate or reduce existing incompatible land uses. Potential measures to be considered include:

- Property acquisition
- Sound insulation
- Avigation easements

Preventative mitigation measures are intended to prevent the introduction of new incompatible land uses. Local jurisdictions would be responsible for the implementation and enforcement of these measures. Preventative land use strategies discussed with the local jurisdictions have included the following:

- Require real estate disclosures
- Modify land use zoning
- Develop land use zoning overlays
- Amend State of New Jersey building codes
- Prepare cooperative land use agreements
- Participate in community planners forums
- Distribute noise and land use mitigation information to community groups



The Port Authority continues to meet regularly with the TAC to discuss noise abatement, land use, and programmatic measures for addressing aircraft noise from TEB.

Meetings were conducted with the following jurisdictions to introduce potential land use strategies:

- Bergen County
- Carlstadt
- East Rutherford
- Hackensack
- South Hackensack
- Hasbrouck Heights
- Little Ferry
- Moonachie
- New Jersey Sports and Exposition Authority
- Teterboro
- Wood-Ridge

INTRODUCTION TO PROGRAMMATIC STRATEGIES

In late 2017, the Port Authority, along with the TAC, will begin reviewing and discussing programmatic strategies that could be implemented as part of the NCP. Programmatic measures focus on the development and implementation of programs to monitor, abate, and mitigate aircraft noise, as well as to communicate noise information to aircraft operators and communities. The Port Authority already has a number of programmatic measures in place including:

- A noise office with dedicated staff and a website (<http://www.panynj.gov/airports/aircraft-noise-information.html>);
- An Airport Noise and Operations Management System (ANOMS);
- A noise complaint management and mapping system by PlaneNoise, Inc., with reports provided to the FAA on a monthly basis (<http://www.planenoise.com/panynj/daPRABr9/>);
- WebTrak flight tracker (<http://www.panynj.gov/airports/webtrak.html>); and
- Interaction with communities, elected officials, and noise abatement organizations, including the Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC) (<https://www.panynj.gov/airports/noise-community-roundtables-tanaac.html>).

Appendix E.7

Newspaper Articles

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Residents demand respite from Teterboro aircraft noise

Rodrigo Torrejon, Staff Writer, @rod_torrejon Published 9:05 p.m. ET April 25, 2017 | Updated 3:07 p.m. ET April 27, 2017



(Photo: Anne-Marie Caruso/NorthJersey.com)

TETERBORO — Residents of high-rise apartments and city officials in Hackensack met with frustration while voicing safety concerns to federal officials regarding flights to and from Teterboro Airport.

"Fortunately we have not had an incident in Hackensack," said Deputy Mayor Kathleen Canestrino. "We don't want to have an incident in Hackensack. And that's primarily why we're here today."

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At Wednesday night's meeting of the Teterboro Aircraft Noise Abatement Advisory Committee, more than 60 people packed a conference room to speak to Federal Aviation Administration officials. Representatives from many of the towns affected by the flight path, including Hackensack, Maywood, Moonachie and Bogota, were present at the meeting. **SOURCE=BEAZsep&utm_medium=agilityzone&utm_source=bounce-exchange&utm_campaign=UWEB2017**

Residents of the area had hoped for some respite from noise and safety concerns when the FAA launched a test flight path last year that guided arriving aircraft along the Route 17 corridor, bringing planes in to land more than one mile to the west of their homes.

Many Hackensack residents and members of the Hackensack Condo/Co-Op Board, which represents the interests of owners and tenants in the city high-rises, praised the flight path for diverting flights away from Hackensack University Medical Center, city schools and densely populated areas.

Meanwhile, the route met opposition from residents along the Route 17 corridor, who feared it would increase noise over their homes. Borough officials from towns such as Mahwah, Ramsey and Waldwick saw a spike in noise complaints, even though only a handful of pilots opted to use the route.

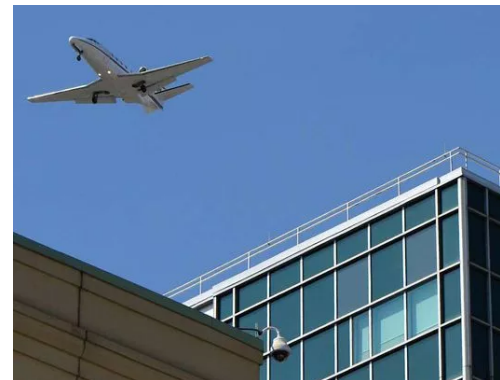
The test flight path was rarely used, and an FAA spokesman, Jim Peters, said the agency decided not to implement the flight path permanently because "there was not enough usage of the procedure to enable us to make that decision."

Having the path revert to its usual space over Hackensack led residents to voice complaints and fears regarding safety of what they view as low-flying planes traversing the city limits.

"We have some 82 high-rise buildings in the area," Hackensack Condo/Co-Op Board Vice President Gerald Weber said. "These planes are flying right alongside the buildings. We think it's a terrible and perverse approach. It's an accident waiting to happen."

At the meeting, TANAAC co-leaders Fred Dressel and Renee Span, who is also the Teterboro Airport manager, responded to residents' concerns by saying they had little sway over changes made to flight paths. They did, however, say they would help in setting up a meeting with FAA officials and representatives of affected towns.

A large part of residents' concern was their view that the flight path had not been used enough to provide qualitative data. The FAA's six-month test suffered a series of embarrassing setbacks, leaving very few days during the test period, between March and October, when pilots could use the route.



At least one Maywood resident thinks the new flight paths for teterboro Airport are a good thing. (Photo: File photo)

Adding to the frustration was that there were seemingly no FAA officials present at the meeting. For most of the meeting, residents and borough officials argued with Dressel, Span and Gary Palm, Teterboro's air traffic control tower manager. After an hour and a half, FAA District Manager Laura Stensland stood up and spoke to those in attendance.

"We were not prepared to actually go through all the information," Stensland said. "You do need to come back, and come back with more information. We've got some of your concerns. We do understand that. This is TANAAC's meeting. This is not my meeting."

Stensland told the audience that the flight path had been weighed, and that despite resident concerns, no flight path would be implemented if it is unsafe.

"There's an education and a background," Stensland said. "We do not put planes in an unsafe situation. That's not what the FAA does."

Maywood Councilman Rick DeHeer and Canestrino, along with other local officials, talked to Stensland about setting up a meeting with the FAA to discuss specific concerns from residents. A meeting date has not yet been set.

Staff writer Paul Berger contributed to this story. Email: torrejon@northjersey.com

Correction: The Hackensack Condo/Co-op Board is an advisory committee to the City Council. It represents the interests of the owners and tenants of the city's high-rise buildings. The role of the board was incorrect in an earlier version of this story.

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Hackensack residents see no air traffic relief in sight

Rodrigo Torrejon, Staff Writer, @rod_torrejon Published 7:35 a.m. ET June 15, 2017 | Updated 12:02 a.m. ET June 16, 2017



(Photo: Michael Karas/Northjersey.com)

HACKENSACK — At the meeting with Federal Aviation Administration officials for residents to ask about a scrapped test flight path to Teterboro Airport that would divert planes away from the city, there were few answers about steps to take next.

The test path routed flights arriving on runway 19 at Teterboro Airport along the Route 17 corridor, away from the Hackensack University Medical Center, high-rises and densely populated areas. Yet, after a six-month test period, FAA officials said the data was not sufficient to move forward.

At the Thursday night meeting, residents wondered why the path was not given a better test and expressed frustration that it would seemingly not be implemented again.

"You designed an experiment guaranteed to fail," said Larry Eisen.



Meeting at the Hackensack Council chambers with members of the FAA, city officials, and residents, to discuss the flight path to Teterboro Airport on Thursday, June 15, 2017. Maryann Gargano, of Hackensack, lives in the flight path and says the noise from planes flying overhead is extreme. (Photo: Michael Karas/Northjersey.com)

Residents packed the public meeting with officials from the city, the FAA, Teterboro Airport and the Teterboro Airport Noise Abatement Advisory Committee to ask about the test flight path, called the quiet visual, and why it was abandoned.

According to Teterboro Airport Air Traffic Control Manager Gary Palm, who spoke on behalf of the FAA, there were 234 flights that utilized the quiet visual path in the six-month test period. The majority of pilots opted to use an instrument guided landing to the airport.

One of the reasons given for pilots opting not to use the test flight path was waypoints. According to Palm, a charting company removed the coding for waypoints depicted as visual reference points from aircrafts' flight management system. This made it so that pilots would have to input the coding manually mid-flight, causing safety and time concerns, said Palm.

The coding was removed due to pilots flying waypoint to waypoint instead of over Route 17, Palm said.

"It wasn't, in my mind, fully successful," said Palm.

Residents asked why pilots were not compelled to use the quiet visual path, in order to accumulate useful data. FAA officials and Teterboro Airport Manager Renee Spann all said that pilots could not be forced to take the path, using their own judgment to decide the safest protocol.



Meeting at the Hackensack Council chambers with members of the FAA, city officials, and residents, to discuss the flight path to Teterboro Airport on Thursday, June 15, 2017. Hackensack Deputy Mayor Kathleen Canestrino. (Photo: Michael Karas/Northjersey.com)

Heidi Williams, a pilot for the National Business Aviation Association, spoke to the difficulties in using a visual path. The majority of the aircraft that land at Teterboro Airport are flown by pilots from the association.

"I do understand the challenges from the cockpit side of the house," Williams said. "I know from a pilot perspective, it's very difficult to factor in waypoints into a flight management system during a critical part of the flight, which is a decent into an airport."

She also said that regardless, safety remained the priority.

"Just because we don't have solutions, doesn't mean that we don't care or that safety isn't paramount," Williams said.

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exchange&utm_campaign=UWVB2017)

Eisen asked why the flight path could not just be changed as it was for the quiet visual path. As part of his presentation, Palm explained that it took nine years to implement the test flight path and that the process is difficult.

"Moving an approach path is not as simple as drawing a line on a piece of paper," Palm said.



Meeting at the Hackensack Council chambers with members of the FAA, city officials, and residents, to discuss the flight path to Teterboro Airport on Thursday, June 15, 2017. Rory Parker, of Hackensack, lives in the flight path and says the planes fly very low overhead. (Photo: Michael Karas/Northjersey.com)

FAA District Manager Laura Stensland and FAA spokesman Jim Peters said that this was the first meeting to establish a dialogue between the FAA and the community. They both said that the best recourse was to take concerns back to TANAAC. It was TANAAC that originally brought the test flight path to the FAA in 2007.

"We really did go and try to find as much of a solution," said Stensland. "Right now, I don't really have a viable solution."

But, for residents who are worried that some of the planes that fly so low over their houses may one day fly too low, a solution is way overdue.

"We need relief," said Regina DiPasqua.

Email: torrejon@northjersey.com

Read more:

Hackensack: [Residents demand respite from Teterboro aircraft noise \(/story/news/transportation/2017/04/25/residents-demand-respite-aircraft-noise/100893922/\)](#)

Mike Kelly: [After latest crash, Teterboro's neighbors struggle with fear \(/story/news/columnists/mike-kelly/2017/05/17/kelly-after-latest-crash-teterboros-neighbors-struggle-fear/324172001/\)](#)

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Hackensack deputy mayor presents updates to Teterboro flight path situation

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Rodrigo Torrejon, Staff Writer, @rod_torrejon Published 11:13 p.m. ET Sept. 12, 2017 | Updated 6:30 a.m. ET Sept. 13, 2017



(Photo: Rodrigo Torrejon/NorthJersey.com)

HACKENSACK — The FAA is considering two options that could solve the issue of planes flying low over high-rise apartment buildings and Hackensack University Medical Center, Deputy Mayor Kathleen Canestrino said Tuesday night.

Canestrino presented two forms of flight navigation guided by onboard instruments, which would allow pilots to plot a more accurate course to a runway at Teterboro Airport. Both options would eliminate the use of visual approaches and could divert planes away from densely populated areas of Hackensack.

"I think that, thanks to residents and folks that turned out and the FAA for listening, they're looking into alternatives," said Canestrino. "I'm very encouraged that we're making progress."

TETERBORO: Residents demand respite from Teterboro aircraft noise (<http://story/news/transportation/2017/04/25/residents-demand-respite-aircraft-noise/100893922/>)

POPULATION GROWTH: From sleepy to suburban, population growth around Teterboro (<http://story/news/2017/05/16/teterboro-airport-population-growth-census/325636001/>)

RESIDENTS CONCERNED: Hackensack residents see no air traffic relief in sight (<http://story/news/bergen/hackensack/2017/06/15/hackensack-host-faa-officials-questions-teterboro-flight-path/396688001/>)

Both options were originally presented by FAA official David Johnson at a July meeting of the Teterboro Airport Noise Abatement Advisory Committee, known as TANAAC. The proposed options are the latest in a more-than-year-long discussion about the path planes take to land at Runway 19 at Teterboro. Planes approaching the airport fly over densely populated areas, including the hospital and Prospect Avenue, which is lined with high-rise apartment buildings.

Last year, the FAA implemented a six-month test of a new flight path, dubbed the "quiet visual approach," that would take planes along the Route 17 corridor. The test flight path required pilots to use visual checkpoints such as Westfield Garden State Plaza and the Sports Dome Complex in Waldwick to land planes on the runway.

The path was underused by pilots, who preferred to use instruments to land their planes rather than the visual cues, Johnson said at the July meeting. Residents decried the lack of qualitative data and the airport's inability to compel pilots to use the test flight path. At several meetings, including one hosted in the City Council chambers, questions were asked about the next steps to ensure a flight path that did not go over the city.

The two options proffered by the FAA are called RNAV with RNP and RNAV with GPS. Both are based on a network of coordinates that pilots use to navigate.

The option with GPS is two-dimensional navigation, running on a vertical and horizontal plane. It is more widely used by pilots, with more than 6,500 procedures using it, according to the FAA website.



A presentation Tuesday on two options given by the FAA to solve the problem of Teterboro-bound planes flying too close to Hackensack high-rise apartments. (Photo: Rodrigo Torrejon/NorthJersey.com)

The option with RNP allows for three-dimensional navigation. It is more specialized and there are fewer pilots qualified to use it, according to Johnson's presentation. However, it may be able to mimic the test flight path, Johnson said in the presentation.

Canestrino presented the FAA's options and emphasized that the progress made was due to resident participation. The timeline for any implementation by the FAA is at least 36 months, she said.

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The FAA is set to present more information about the two options at the October meeting of TANAAC. In the interim, Canestrino called on residents to continue raising awareness of flight noise and safety issues.

"Continue to make the calls," she said. "If you see a plane flying low, take a picture with your phone."

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Pilots expected to get option to steer clear of high-rises on approach to Teterboro

Rodrigo Torrejon, Staff Writer, @rod_torrejon Published 7:00 p.m. ET Dec. 1, 2017 | Updated 7:13 p.m. ET Dec. 1, 2017



(Photo: MICHAEL KARAS / STAFF PHOTOGRAPHER)

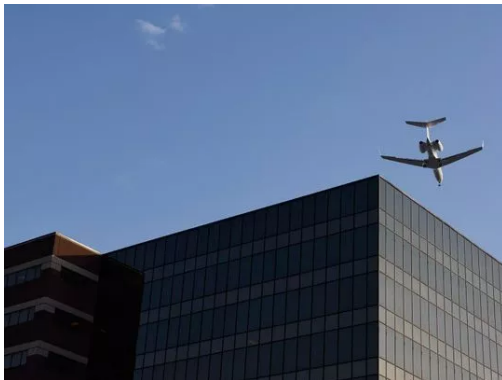
TETERBORO — A flight path to Teterboro Airport that could divert planes away from high-rise buildings and one of the largest hospitals in the country, was recommended to the FAA by a noise abatement committee, and seems more likely to be used by pilots than earlier alternatives.

The proposed flight path, called the RNAV(GPS) option, would offset incoming flights west of the current approach, so pilots could fly over Maywood and Rochelle Park as they land.

The Teterboro Airport Noise Abatement Advisory Committee, a group of airport and town officials that oversee noise abatement and recommend action to the FAA and Port Authority of New York and New Jersey, voted unanimously to direct Renee Spann, the airport manager, to send a letter to the FAA requesting they move

forward with the runway approach. The flight path would divert planes away from the Hackensack University Medical Center and high-rise apartment buildings along the Prospect Avenue corridor in Hackensack.

"Now what we OK'd the other night was that they go ahead with the testing of the procedure," said Fred Dressel, the co-chairman of the committee. "That doesn't mean we OK'd the procedure. Other than that they start their investigation into the potential of making changes."



A plane flies over 20 Prospect Ave, a building at Hackensack University Medical Center, on Tuesday, March 8, 2016. (Photo: MICHAEL KARAS / STAFF PHOTOGRAPHER)

Upon receipt of the letter, the FAA will take between 16 to 18 months to add the procedure to Teterboro Airport, said FAA spokesman Jim Peters. If the letter is received within the next few weeks, the airport could have the flight path as early as spring 2019.

The letter from the committee is arguably the first tangible step in more than a year of discussion about the path planes take to land at Runway 19 at Teterboro. In their final approach, planes fly low over densely populated areas. Many of the residents of these buildings, most often represented as members of the Hackensack Condo & Co-op Advisory Board, have been at several committee meetings to protest the flight path.

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The flight path would not replace the current approach. Instead, it would be an option that pilots could use on clear days, and when visibility is not a factor. Pilots would still have the option of using the current approach, called the instrument landing system, at any time.

Spann, who is also the co-leader of the committee, declined to comment, referring questions to the Port Authority. The Port Authority referred questions to Dressel. As of Friday, the letter had not yet been sent.

[Residents demand respite from Teterboro aircraft noise](https://www.northjersey.com/story/news/transportation/2017/04/25/residents-demand-respite-aircraft-noise/100893922/)

(<https://www.northjersey.com/story/news/transportation/2017/04/25/residents-demand-respite-aircraft-noise/100893922/>)

In response to resident concerns, last year the FAA implemented a six-month test of a new flight path that would take planes along the Route 17 corridor. The test flight path, dubbed the "quiet visual approach," required pilots to use visual checkpoints such as Westfield Garden State Plaza and the Sports Dome Complex in Waldwick to land planes on the runway.

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The path was barely used by pilots, who preferred to use instruments to land their planes rather than the visual cues, said FAA officials. The test flight path was abandoned and residents were angered at the lack of data and the FAA's inability to compel pilots to use the path.

Based on discussions the FAA had with pilots, the latest option seemed more likely to be accepted by pilots, said Dressel. This time around, the FAA is looking to make the RNAV (GPS) option a permanent procedure, said Maria Aviles, program integration officer for the FAA, at a previous noise abatement committee meeting.

"At least it'll get a good shake," said Dressel.

The approval for the flight path to begin was terrific, but a hard-fought win, said Connie Bovino, president of the Hackensack Condo & Co-op Advisory Board.

"Well, our group has been fighting it for a year. Prior to that, I don't think anyone started fighting it for a long time," said Bovino. "I know 10 years ago they were fighting it and got nowhere. This time at least the FAA listened to us, but they had two plane crashes before that."

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Teterboro Airport: Steeped in Glamour, History and Noise

By VIVIAN WANG JAN. 1, 2018

TETERBORO, N.J. — There was a time when Teterboro Airport was the crown jewel of the New York region.

Charles Lindbergh often flew into the New Jersey airport, 12 miles northwest of Midtown Manhattan, to meet with the president of Wright Aeronautical, which built the engine that powered his historic trans-Atlantic flight. Amelia Earhart flew here to prepare for her own trans-Atlantic trip. The F-32, the world's biggest passenger plane when it was built in 1930, roared to life at Teterboro, as did the **Barling Bomber**, then the largest American-made bomber.

"At that time, there was nothing but pride for having a facility like that," said Shea Oakley, executive director of the Aviation Hall of Fame of New Jersey, which is on the airport's grounds.

Today, Teterboro, the first airport in the metropolitan area when it opened in 1919, is more likely to conjure grimaces than pride. "Growing like a monster," some neighbors say of the airport, which sits on 827 acres and handles general aviation, industrv-speak for noncommercial flights. "Horrific" is a word used by others. The

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more than 2,300 noise complaints about the airport in 2016 — an average of about one every four hours.

In a November report, the Regional Plan Association, an influential urban policy group, recommended phasing out the airport, which it said would be flooded by rising sea levels by the end of the century. It suggested diverting Teterboro's flights to the region's three major airports — Kennedy, La Guardia and Newark Liberty — instead.

The idea has fans.

"Speaking from the residents of Hackensack, I believe that they would be thrilled to not have to be part of the impact of the airport," said Kathy Canestrino, the deputy mayor of Hackensack, which is three miles from Teterboro.

But for Teterboro's loyalists, including many employees who have worked there for decades, shutting it down is unfathomable. The airport is an economic engine for the area, supporting more than 170,000 takeoffs and landings and 14,900 jobs each year, according to the Port Authority. It drives more than \$2 billion in annual sales activity.

And despite the Regional Plan Association's recommendation, the Port Authority is expanding the airport. Plans are underway to develop 15 acres, including the construction of three hangars.

"There have been various efforts over the years to close Teterboro, but it's not possible," Mr. Oakley said, citing the volume of flights the airport accommodates.

"It's an absolutely essential facility," he added.

In a statement, the Port Authority called the Regional Plan Association's forecast "overly pessimistic" and said the agency had already improved the airport's drainage and sewage systems.

The gulf between those who would see Teterboro closed and those who cannot imagine such a thing is fitting for an airport seemingly made of contradictions. It is a



1/2/2018

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centerpiece of aviation history that is virtually unknown outside select circles, a gateway for the rich and famous that is surrounded by wetlands.

"People think it's just tumbleweeds: 'Oh, it's just a noisy thing, we don't need this,'" said Ed Furst, president of the Teterboro chapter of the Professional Aviation Maintenance Association. "But there's a whole lot of business that's behind this airport. There is a lot of history behind it."

The airport is dominated by four companies that handle private planes, providing services from fuel to repair to storage, said Kirk Stephen, director of marketing for Meridian, which owns a terminal and three hangars at Teterboro.

On a recent afternoon, men in crisp suits and families dragging suitcases filed through Meridian's lobby, which, with its illuminated Christmas tree, placards advertising free internet, and somewhat sterile air, was reminiscent of a first-class lounge at Kennedy or Newark.

"We cater to a very discerning clientele," Mr. Stephen said.

The airport fiercely guards the privacy of its customers. Discretion is one of the reasons many choose Teterboro, Mr. Stephen said. Celebrities and business executives can slip undisturbed from the plane to the private terminal to a black car bound for the city.

Mr. Furst said airport workers were trained to give passengers a wide berth. Most are so accustomed to seeing famous faces that they hardly blink. (Mr. Furst conceded that he had once said hello to Bill Gates.)

Many of the restaurants that provide passenger meals are not even told who they are for, said Susanna Bazzarelli, co-manager of the nearby Italian restaurant Bazzarelli. Still, clues slip through.

An order once arrived for a "high-profile" customer who asked for several servings of kid-friendly foods such as pizza and pasta. Ms. Bazzarelli recalled thinking: "Oh, my God, like, it's got to be Angelina Jolie." (She later found out she was right.)

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Teterboro is also an important gateway for organ transplants and other medical services, said Michael Klein, chief executive of OpenAir, a charter company that operates out of Teterboro. Airlifting a kidney or a heart needs to be done on short notice — a difficult task at commercial hubs, where takeoffs and landings must be scheduled days in advance, Mr. Klein said.

"We'll get a call in the middle of the night," he said. "Typically within an hour we'll be in the air. Someone needs a liver, someone else dies and wants to donate a liver — that all comes together very quickly."

But neighbors worry that the low-flying, ever-larger corporate jets that frequent the airport are not only noisy but dangerous. In May, a jet bound for Teterboro crashed in the nearby town of Carlstadt, killing two on board. In 2009, a pilot died after his plane crashed as it approached Teterboro; the accident came just two weeks after a plane that had departed from the airport collided with a sightseeing helicopter over the Hudson River, killing all nine people aboard both aircraft.

The current flight path into Teterboro brings planes directly over Hackensack's high-rise condominiums, said Connie Bovino, chairwoman of the town's Condo and Co-op Advisory Board.

Ms. Bovino said that when she lived on the 20th floor of a high-rise, she would often make eye contact with pilots passing by.

Murray Runin, the previous chairman of the board, acknowledged that the airport might provide some economic benefit.

"But is it benefiting the local economy in a safe manner?" he said. "At a certain point, when do you say it's too much?"

The Federal Aviation Administration recently agreed to evaluate an alternate flight path beginning in 2019 that goes over a highway instead of the high-rises.

Ms. Canestrino, Hackensack's deputy mayor, said she was optimistic that the new flight path would reduce tensions. It would not, however, address a root of the dissatisfaction with Teterboro: a feeling that towns like Hackensack absorb all the drawbacks of the airport without reaping any of the benefits, Ms. Canestrino said.



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"Very separate and distant," she said of the relationship between the airport and its neighbors.

Even some of Teterboro's devotees, like Mr. Klein, acknowledged the difficulty of communicating the joys of the airport to those who had not flown into it.

"To get there, it's something hard to do," Mr. Klein said.

But, he said, it is worth the difficulty.

"It's busy, it's exciting," Mr. Klein said. "Your adrenaline goes when you walk around that place. You see just everything that you can imagine, from a guy in a business suit to a military helicopter to a jet going internationally.

"You have to experience it," he added.

A version of this article appears in print on January 2, 2018, on Page A16 of the New York edition with the headline: Teterboro Airport: A Regional Gem Whose Noise Has Dulled Its Luster.

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Faith Ballantine-Armonaitis



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Port Authority to Hold Hearings as Part of Ongoing Noise Study at Teterboro Airport



The Port Authority will host a series of workshops and hearings designed to guide planning for noise compatibility for Teterboro Airport and to help minimize noise impacts on the local towns.
Katie C. Armonaitis

By FAITH ARMONAITIS

Published September 23, 2021 at 2:45 AM

TETERBORO, NJ - The Port Authority will host a series of virtual public information workshops and hearings as part of the agency's Airport Noise Compatibility Planning (Part 150 Study), designed to guide planning for noise compatibility while helping airport operators prepare to minimize noise impacts on the airports and the local communities.

The hearings follow the release of the Port Authority's Draft Noise Compatibility Program (NCP) Report, which is now available for review and comment and provides recommendations for future operational, land use, and programmatic measures to reduce aircraft noise impacts on surrounding areas. The Draft NCP Report is available for download for each airport -- ([JFK](#)), ([TEB](#)), ([LGA](#)) and ([EWR](#)).

The Federal Aviation Administration implemented [new flight pattern at Teterboro Airport this past July](#). It came after years of advocacy from the Teterboro Airport Noise Abatement Advisory Committee (TANAAC) and [Hackensack officials and residents](#).

The hearings involving Port Authority airports will be held on the following dates:

- John F Kennedy Airport ([JFK](#)): September 29
- Teterboro Airport ([TEB](#)): September 30
- LaGuardia Airport ([LGA](#)): October 5
- Newark Liberty International Airport ([EWR](#)): October 7

The NCP report is the second, more comprehensive phase in the agency's effort to mitigate noise in surrounding communities. The first phase involved the development of noise exposure maps at JFK, LaGuardia and Teterboro in 2017 and for Newark Liberty in 2019. The Port Authority established a Noise Office in 2014 to work on mitigation planning, has hosted regular community roundtables and doubled the number of noise monitors to collect flight path data at the four airports as part of that effort.

Comments may be provided now or at the virtual public hearing for each respective airport (link [here](#) for details). Responses via social media posts will not be made part of the official public record. Information and flyers are also available on each individual airport page (link [here](#)).

For those wishing to participate and who do not have internet access or require interpretation services, arrangements can be made by calling the Port Authority Noise Office at (212) 435-3880.

The Draft NCPs were posted on the agency's website on September 1, beginning a public comment period that day that ends on October 15. After October 15, the Port Authority will review written and oral comments, provide responses, and include the comments in the Final NCP submission to the FAA no later than the first quarter of 2022.

Upon receipt, the FAA begins a review period of up to 180 days. The FAA will issue a determination for each of the proposed measures identified in the Final NCP and a Record of Approvals is expected to be issued no later than the fourth quarter of 2022. The Final NCP will be posted on the Port Authority's website once the Record of Approvals has been received by the agency.



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Teterboro Airport Noise A Big Problem For Mahwah, Mayor Says

Montana Samuels · Oct 21, 2021

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Teterboro Airport Noise A Big Problem For Mahwah, Mayor Says

MAHWAH, NJ — The Port Authority of New York and New Jersey is seeking comments on recent flight pattern adjustments at the Teterboro Airport. What they'll be hearing out of Mahwah isn't positive.

Mahwah Mayor Jim Wysocki has sent a letter to the Port Authority, criticizing the decision and the impacts that it's had on the township, and the people who live there.



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"As many of you are aware, the recent changes to the flight pattern into Teterboro Airport has created an incredible amount of low flying aircraft over residential neighborhoods in Mahwah. This is completely unacceptable," he said.

Within the letter, Wysocki said the increase in jet

noise is "destroying our residents' quality of life," and that noise pollution is especially bad between 5 and 8 p.m. most days, and heightened further on Friday and Saturday.

According to the City of Hackensack, Federal Aviation Administration officials informed the city that flight patterns at the airport were [changed as of July 1](#).

The reason for the change was the same as what Mahwah residents and officials are complaining about currently: jet noise.





Hackensack, as well as the Teterboro Airport Noise Abatement Advisory Committee, had fought for years to have the flight pattern changed, but it hasn't rid all county residents of the nuisance.

According to the city, the new flight pattern directs Teterboro Airport flight traffic over Route 17, rather than over Prospect Avenue and other residential areas in Hackensack.

Mahwah officials say that's a huge portion of the problem

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
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In the letter to the Port Authority, Wysocki stated that a Final Environmental Assessment conducted by the FAA was "flawed" because it "excludes communities, like Mahwah, along the Route 17 corridor that are less than 20 miles away from the airport."

This, according to Wysocki, allowed the flight pattern adjustment to happen, affecting the more than 25,000 residents of Mahwah.

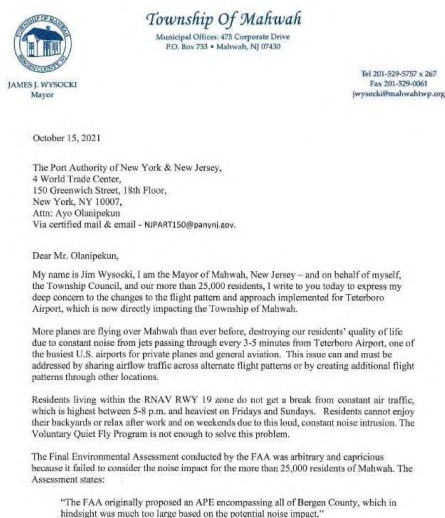
Wysocki has called for additional memberships to the Teterboro Airport Noise Abatement Advisory Committee, which would allow Mahwah and other Bergen to have a say in airport decisions that could impact local residents.

However, the letter has also pitted current members of that committee, Hackensack specifically, against the township.

"Hackensack appears to have benefited from this partnership by successfully moving waypoints to the west away from its residents," the letter reads.

"However, Hackensack's win has now become Mahwah's burden."

Read the two-page letter below:



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Teterboro Airport Noise A Big Problem For Mahwah, Mayor Says

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As a result of this mistake, the Township and its residents in the immediate flight path were never taken into consideration, even though the Assessment indicates that in the Proposed Action Alternative that an estimated 34.5% of air traffic to Teterboro is going through Mahwah at an elevation change from 3,000 to around 3,000 feet.

The Assessment methodology is flawed because it excludes communities, like Mahwah, along the Route 17 corridor that are less than 20 miles away from the airport. Courts have held that omitting aspects of an Environmental Impact Statement, and the failure to follow the National Environmental Policy Act, invalidate environmental assessments. As a result, Courts have required that the FAA reevaluate flight paths.

The same result should occur here. We believe there is a substantial dispute over the degree, extent, and/or nature of the proposed action's environmental impacts that the amended arrival routes would cause, requiring a complete noise impact study to be performed over the densely populated areas of the Township of Mahwah. NEPA requires the FAA and other federal agencies evaluate and disclose the environmental impacts of their actions. See 42 U.S.C. § 4332. The NEPA process is intended to ensure that "before an agency can act," the agency considers potential environmental impacts. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349, 353 (1989). We are very concerned that the FAA did not properly consider all relevant facts. See *Lands Council v. Powell*, 395 F.3d 1019, 1030 (9th Cir. 2005). We request the FAA toll the statutory petition-for-review deadline so the Township and the FAA can work together to address the environmental concerns.

The Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC), is comprised of locally elected officials. Pursuant to its bylaws, the Committee represents the interests of the population that is located within the airport traffic area, which has been five miles within the radius of the airport. The TANAAC membership makes recommendations that will enhance the quality of life for residents living within the airport traffic area. The membership should be expanded to include municipalities and communities along the Route 17 corridor or flight path so we can have a voice as well. TANAAC should welcome this additional membership so that the impacts of the airport to all residents of Bergen County are accounted for, not just those in the immediate surrounding areas.

The Assessment states that Teterboro Airport's operator "has a longstanding partnership with the surrounding community to proactively address noise issues." Hackensack appears to have benefited from this partnership by successfully moving waypoints to the west away from its residents. However, Hackensack's win has now become Mahwah's burden.

The Township of Mahwah would like a seat at the table and an amendment to the membership. We want to invite all communities in Bergen County to participate as members of the TANAAC. We note that the TANAAC initiated the change in flight path and works with the FAA.

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Teterboro Airport Noise A Big Problem For Mahwah, Mayor Says

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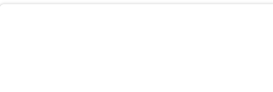
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Appendix F

Public Comments

This appendix includes a copy of public and agency comments received throughout the development of the Teterboro Airport (TEB) Title 14 Code of Federal Regulations Part 150 Noise Compatibility Program (NCP). The official comment period for the TEB Draft NCP was held from September 1, 2021, to October 15, 2021.

Public comments include written comments received by postal mail and e-mail during the comment period and oral comments received during the virtual Public Hearing held on September 30, 2021.

This appendix contains the following items:

- Appendix F.1 Summary of Public Comments
- Appendix F.2 Topic Specific Responses to Public Comments on the TEB Draft NCP
- Appendix F.3 Comments and Responses
- Appendix F.4 Written Material Submitted to Operator

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Appendix F.1

Summary of Public Comments

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As discussed in Section 5.2, this appendix presents a comment response matrix that reproduce the comments received during the public comment period and Port Authority of New York and New Jersey's (the Port Authority's) responses to those comments. Table F-1 in Appendix F.2 provides a set of Topic Specific Responses to the public comments. Topic Specific Responses were developed to cover topics that were raised in multiple comments received by the Port Authority during the public comment period on the TEB Draft Noise Compatibility Program (NCP). (e.g., FAA RNAV (GPS) X RWY 19 Offset Approach, Airport Access Restrictions). Within each of those topics, specific responses were developed based on the nature of comments received or additional questions that were raised within each of the categories.

Table F-2 in Appendix F.3 provides public comments received during the public comment period for the TEB Draft NCP and the Port Authority responses. Scanned copies of these comments and the public hearing transcript with comment identification numbers follow Table F-2 in Appendix F.4.

Public comments were received from elected officials and the general public during the comment period and during the Public Hearing.

The following items are entered into the tables for each comment:

- comment identification number (including sub-identification number for comments addressing multiple topics)
- first and last name (and title, if applicable)
- affiliation/organization, if applicable and method of comment submittal
- comment topic (general categories addressed in each comment)
- verbatim transcription of each comment, broken down into separate topics, where multiple topic categories were addressed
- Port Authority responses to each comment

All comments were entered verbatim and typographical or grammatical errors were not corrected.

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Appendix F.2

Topic Specific Responses to Public Comments on the TEB Draft NCP

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The Topic Specific Responses set forth herein cover topics that were raised in multiple comments received by the Port Authority during the public comment period on the TEB Draft Noise Compatibility Program (NCP). Background information on the general context of the TEB 14 CFR Part 150 Study (e.g., purpose of the Study; federal regulations that prescribe the content of, and methods employed in, the Study; and processes followed in the Study) is set forth in full in the TEB NCP. Additional information is provided in the Topic Specific Responses to assist the public in better understanding the Port Authority's responses to comments.

Three Topic Specific Responses were developed consisting of:

- 1) FAA RNAV (GPS) X RWY 19 Offset Approach
- 2) Airport Access Restrictions
- 3) Health Effects and Other Environmental Concerns

Each response listed above was assigned a number. For example, (1) refers to the specific response "FAA RNAV (GPS) X RWY 19 Offset Approach". The Topic Specific Response number(s) might also be provided and referenced in another response to a comment and/or question. If a comment letter contained a comment or question that was not covered under these general responses, an individual response was provided. All comments and their responses are included in Appendix F.3, *Comments and Responses*.

Table F-1: Topic Specific Responses to Public Comments

Topic Number	Topic Specific	Response
1	FAA RNAV (GPS) X RWY 19 Offset Approach	<p>The Port Authority received six comments on the FAA RNAV (GPS) X RWY 19 offset approach procedure. Comments on the FAA RNAV (GPS) X RWY 19 offset approach procedure are outside the scope of the TEB NCP. Independent of the TEB Part 150 study, the FAA developed a Runway 19 offset approach procedure called RNAV (GPS) X RWY 19 for TEB. The FAA RNAV (GPS) X RWY 19 procedure (implemented on July 1, 2021) is an offset approach procedure that uses satellite-based technology to guide a mix of aircraft along a pathway that generally follows New Jersey State Route 17 to Runway 19. The intent of RNAV (GPS) X RWY 19 is to reduce aircraft overflights and noise levels over the Hackensack University Medical Center and densely populated communities north of TEB by directing aircraft over a less densely populated corridor that follows Route 17.</p> <p>There are currently three existing approaches to Runway 19 for various aircraft capabilities that directly align with the centerline of the runway (so-called "straight in" approaches). As described in the Teterboro Airport RNAV (GPS) RWY 19 Offset Environmental Assessment, the RNAV (GPS) X RWY 19 offset approach will not replace the existing straight in approaches to Runway 19 but will provide another approach option for pilots and that the Runway 19 Instrument Landing System (ILS) straight in approach (Runway 19 ILS) will remain the primary approach for Runway 19 at TEB. The RNAV (GPS) X RWY 19 procedure is not available for use during periods of poor weather, low visibility or</p>

Topic Number	Topic Specific	Response
		<p>high traffic volume due to complexity of the airspace and air traffic controller workload. A pilot wishing to use this procedure must request permission and receive approval from FAA air traffic controllers prior to landing. The FAA has advised that the best opportunity to use the additional approach procedure is during nighttime hours when there is reduced air traffic demand and airspace complexity for the NY-NJ metropolitan area.</p> <p>https://www.panynj.gov/content/dam/airports/teterboro/runway-19-noise-abatement-approach.pdf</p> <p>RNAV (GPS) X RWY 19 is similar to NCP Noise Abatement Measure 4 (<i>Implement an Offset Approach Procedure to Runway 19</i>); however, it is GPS based (not an instrument landing system (ILS) procedure as recommended in Noise Abatement Measure 4) and follows a slightly different route to Runway 19 than the notional procedure depicted in Noise Abatement Measure 4. Because TEB Noise Abatement Measure 4 could be designed as an instrument approach, pilots could use it at night and in reduced visibility conditions. Even with a higher use rate than the FAA RNAV (GPS) X RWY 19 approach due to the ILS, TEB Noise Abatement Measure 4 does not reduce noncompatible land use within the 65 DNL contour.</p> <p>Details on the design of the FAA RNAV (GPS) X RWY 19 offset approach procedure, including its use and evaluation are documented in the FAA's Environmental Assessment (EA). More information on the FAA's EA can be found at: https://www.faa.gov/air_traffic/community_engagement/teb/</p>
2	Airport Access Restrictions	<p>The Port Authority received five comments on airport access restrictions. The existing TEB noise abatement program includes both voluntary and mandatory measures. The mandatory noise rules at Teterboro include Maximum Noise Levels allowable for aircraft departures and the ability to ban aircraft from operation at Teterboro if three violations of the noise rules occur during a two-year period. The Port Authority adopted the mandatory measures prior to the passage of the federal Airport Noise and Capacity Act of 1990 ("ANCA"), a law that subjects modification of existing or development of new mandatory measures to extensive federal review and approval. The mandatory noise rules documented in Chapter 2 of the TEB NCP are "grandfathered" by ANCA because they were in effect at the time the Act was passed.</p> <p>As a result of ANCA, the Port Authority cannot establish additional operational restrictions on certain aircraft in flight except by request</p>

Topic Number	Topic Specific	Response
		through 14 CFR Part 161 ¹ of the FAA's regulations. In addition, as a condition of obtaining federal grants from the FAA to support the operation of TEB, the Port Authority is required to always provide aircraft operators access to TEB. The Port Authority is recommending continuation of the existing mandatory and voluntary measures that pre-date ANCA as part of the TEB NCP. In order for FAA to approve additional or modified airport access restrictions, the proposed restrictions must meet the following six statutory criteria: 1) the proposed restriction is reasonable, nonarbitrary, and nondiscriminatory. 2) The proposed restriction does not create an undue burden on interstate or foreign commerce. 3) The proposed restriction maintains safe and efficient use of the navigable airspace. 4) The proposed restriction does not conflict with any existing federal statute or regulation. 5) The applicant has provided adequate opportunity for public comment on the proposed restriction. 6) The proposed restriction does not create an undue burden on the national aviation system. ² As part of the Part 150 process, airport access restrictions are to be considered as a final attempt to address noncompatible land uses when all other measures have been exhausted.
3	Health Effects and Other Environmental Concerns	The Port Authority received three comments on the health effects of noise. This Topic Specific Response supplements the Port Authority's response to comments on the health effects of noise by identifying recent and current studies on this topic. Multiple recent studies on the impacts of aircraft noise on public health have been undertaken and

¹ [eCFR :: 14 CFR Part 161 -- Notice and Approval of Airport Noise and Access Restrictions](#) sets forth definitions of several key terms that determine the scope of the regulation. Part 161 requires that airport proprietors examine the impacts of a proposed noise or access restriction within an "airport noise study area". That area must include all property that lies within the 65 dB DNL noise exposure contour. The regulations distinguish among three types of noise and access restrictions: 1) Negotiated agreements, 2) Restrictions on the operation of the older, noisier Stage 2 aircraft, and 3) Restrictions on the operation of the newer, quieter Stage 3 aircraft. The procedures for enacting each type, and the FAA's scrutiny of each, are different. For proposed restrictions affecting Stage 3 aircraft and even newer Stage 4 or 5 aircraft, the highest level of review and approval is required.

² FAA Order 5190.6(b), "Airport Compliance Manual" Chapter 13, Section 14, paragraph (a). To be approved, restrictions must meet the following six statutory criteria: 1) the proposed restriction is reasonable, nonarbitrary, and nondiscriminatory. 2) The proposed restriction does not create an undue burden on interstate or foreign commerce. 3) The proposed restriction maintains safe and efficient use of the navigable airspace. 4) The proposed restriction does not conflict with any existing federal statute or regulation. 5) The applicant has provided adequate opportunity for public comment on the proposed restriction. 6) The proposed restriction does not create an undue burden on the national aviation system.

Topic Number	Topic Specific	Response
		<p>more studies are currently underway.^{3,4,5} Research on sleep interference and human physiological responses suggests that noise can have varying levels of effects on people. From these studies, criteria have been established to protect public health and safety and prevent disruption of certain human activities. These criteria are based on the effects of noise on people, sleep interference, and physiological responses. The TEB NCP was developed pursuant to the FAA's noise criteria identified within 14 CFR Part 150 of FAA's regulations. Consistent with those regulations, the TEB Part 150 Study has a specific focus on noise exposure, noise abatement and noise mitigation, and does not analyze human health effects related to aircraft operations.</p>

³ *The State of the Art of Predicting Noise-Induced Sleep Disturbance in Field Settings*, Fidell S., Tabachnick, B., Pearsons, K., Noise and Health, Volume 12, Issue 47, p. 77-87, 2010.

⁴ *ACRP Synthesis 9, Effects of Aircraft Noise: Research Updated on Selected Topics*, Transportation Research Board of the National Academies, Airport Cooperative Research Program, 2008.

⁵ *Request for Comments; Clearance of a New Approval of Information Collection: National Sleep Study*, U.S. Department of Transportation, Federal Aviation Administration, Agency Information Collection Activities, 84 Fed. Reg. 65453, November 27, 2019.

Appendix F.3

Comments and Responses

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This section contains a list of all parties that submitted comments on the TEB Part 150 Study NCP, their comments, and the Port Authority of New York and New Jersey's (the Port Authority's) responses. For the purposes of the Final NCP report, all comment formats (i.e., form letters, letters, comment forms, e-mails, and Public Hearing verbal comments) are referred to as comment "letters." Three elected official and nine public comment letters were received on the TEB Draft NCP Report (See Table F-2). All elected officials' comments and responses are listed first in Table F-2.

The comment letters included in this Appendix and Table F-2 are presented exactly as they were received and may contain typographical errors and/or misspellings. They have not been edited in any way and are provided in this manner to show that they were quoted exactly as they were received. Additionally, it is worth noting that typed comment letters were received via the project website or by electronic mail (e.g., e-mail).

Table F-2 includes a list of public comment letters, with the name(s) of each party that provided a comment. Each comment letter was assigned a unique number code to catalog the submittal. Public comments are generally organized in the order they were received, as practicable. In several cases, a single comment letter included multiple topics of discussion that were treated as individual comments. The number (numeric identifier) identifies the specific comment in a particular letter. For example, the number code "3.2" describes the comment as being in the 3rd letter in this appendix and as being the second major topic in the letter. Therefore, each letter can include multiple comments, each with an associated response. A scanned copy of each letter that was received is shown in Appendix F.4, and each number code is tagged on the corresponding letter.

Topic Specific Responses were prepared for several comments that were received from multiple commentors and are provided in Table F-1 in Appendix F.2. Each response was assigned a number. For example, 1 is the first Topic Specific Response; it provides information on the "FAA RNAV (GPS) X RWY 19 Offset Approach". Topic Specific Response number(s) might be referenced for a response to a comment and/or question. If a letter contains a comment or question that was not covered under these general responses, an individual response was provided.

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Table F-2: Comments Received and Responses for the Teterboro Airport Draft Noise Compatibility Program

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
1.1	Jim	Wysocki	Elected Official (Letter)	FAA RNAV (GPS) X RWY 19 Offset Approach, Noise Abatement Flight Procedures, and Fly Quiet Program	<p>My name is Jim Wysocki, I am the Mayor of Mahwah, New Jersey- and on behalf of myself, the Township Council, and our more than 25,000 residents, I write to you today to express my deep concern to the changes to the flight pattern and approach implemented for Teterboro Airport, which is now directly impacting the Township of Mahwah.</p> <p>[A More planes are flying over Mahwah than ever before, destroying our residents' quality of life due to constant noise from jets passing through every 3-5 minutes from Teterboro Airport, one of the busiest U.S. airports for private planes and general aviation.] [B This issue can and must be addressed by sharing airflow traffic across alternate flight patterns or by creating additional flight patterns through other locations.]</p> <p>[B Residents living within the</p>	<p>The Port Authority understands that noise affects individuals differently and is committed to working with communities around the airport to help address their noise concerns. In addition to the 14 CFR Part 150 study, the Port Authority maintains an existing noise office, TEB has a dedicated noise office, noise monitors and a flight tracking system for evaluating flight operations.</p> <p>A- The comment regarding increased flights over Mahwah is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Aircraft flying over Mahwah at lower altitudes are likely on approach to Runway 19 at TEB, however Mahwah does have overflights from other airports besides TEB. The existing Runway 19 ILS approach directs aircraft coming from the west to move across southern areas of Mahwah and then over to the east to line up on the approach to Runway 19. The FAA's RNAV (GPS) Runway 19 offset approach routes flights slightly further north over Mahwah and then routes flights south along the Route 17 corridor towards TEB. For more information on the FAA RNAV (GPS) X RWY 19 offset approach, please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i>. Additional information on the FAA's Teterboro Airport RNAV (GPS) Runway 19 Offset Environmental Assessment can be found at: https://www.faa.gov/air_traffic/community_engagement/teb/. Comments on the FAA RNAV (GPS) X RWY 19 procedure are outside the scope of the TEB NCP. The FAA RNAV (GPS) X RWY 19 is similar to NCP Noise Abatement Measure 4 (<i>Implement an Offset Approach Procedure to Runway 19</i>); however, it is GPS</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>RNAV RWY 19 zone do not get a break from constant air traffic, which is highest between 5-8 p.m. and heaviest on Fridays and Sundays. Residents cannot enjoy their backyards or relax after work and on weekends due to this loud, constant noise intrusion.]</p> <p>[C The Voluntary Quiet Fly Program is not enough to solve this problem.]</p>	<p>based (not an instrument landing system procedure as recommended in Noise Abatement Measure 4) and follows a slightly different route to Runway 19 than the notional procedure depicted in Noise Abatement Measure 4. If the FAA approves Noise Abatement Measure 4, the Port Authority will then request that the development process be initiated, then will work with NY TRACON and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA).</p> <p>Operations at TEB have also increased since the height of the COVID-19 pandemic due to the return of some business travel and leisure travel to New York-New Jersey region. Flight schedules and general frequency of flights are largely driven by operator demand, weather, local market demographics, number of nearby airports and other factors. Neither the Port Authority nor the FAA determine flight schedules. The runway and flight path that an aircraft uses at TEB are determined primarily by wind direction, other weather conditions, origin/destination of flight, and efficiency of traffic flows.</p> <p>B- The comment regarding alternate approach paths to Runway 19 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Overall 48 percent of arrivals land on Runway 19 and approximately half of those arrivals overfly Mahwah. The Port Authority will continue to</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
						<p>work with communities to assess ways to reduce overflights and aircraft noise. The number and type of noise abatement measures that can be implemented at TEB is necessarily limited due to the congested airspace and the need to prevent conflicts in the use of the airspace. Also, the shifting or moving of noise from one populated area of noncompatible land uses to another without a net reduction in individuals exposed or non-compatible land use is inconsistent with the FAA's Part 150 regulations. The Port Authority considered various noise abatement measures in the NCP that are expected to reduce noise exposure in areas near the airport. All of the measures recommended for inclusion in the NCP are intended and expected to reduce noise exposure in the communities around TEB that are within the 65 DNL and higher contours. Specifically, the Port Authority is recommending five noise abatement flight procedures (<i>Noise Abatement Measures 1, 4, 5, 6 and 7</i>).</p> <p>C- The comment regarding the Fly Quiet Program is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The existing Quiet Flying Program at TEB incorporates the existing mandatory and voluntary noise abatement measures at TEB documented in the TEB Flight Crew Handbook, including permission to operate, maximum noise levels, voluntary restraint from operations late at night and specific procedures designed to reduce noise. The Quiet Flying Program is useful in educating pilots and air traffic controllers about the suite of existing noise</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
						abatement measures at TEB. The proposed Fly Quiet Program will be developed and implemented utilizing updated technologies, methodologies, and noise abatement recommendations. For more information on the aspects of the updated Fly Quiet Program, please refer to <i>Program Management Measure 8 (Establish and Manage a Fly Quiet Program)</i> in the TEB NCP.

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
1.2	Jim	Wysocki	Elected Official (Letter)	FAA RNAV (GPS) X RWY 19 Offset Approach	<p>The Final Environmental Assessment conducted by the FAA was arbitrary and capricious because it failed to consider the noise impact for the more than 25,000 residents of Mahwah. The Assessment states:</p> <p>"The FAA originally proposed an APE encompassing all of Bergen County, which in hindsight was much too large based on the potential noise impact."</p> <p>As a result of this mistake, the Township and its residents in the immediate flight path were never taken into consideration, even though the Assessment indicates that in the Proposed Action Alternative that an estimated 34.5% of air traffic to Teterboro is going through Mahwah at an elevation change from 3,000 to around 2,000 feet. The Assessment methodology is flawed because it excludes communities, like Mahwah, along the Route 17 corridor that are less than 20 miles away from the airport. Courts have held that omitting aspects of an Environmental Impact</p>	<p>The comment regarding the FAA's RNAV (GPS) X Runway 19 offset approach is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Please see the FAA's Teterboro Airport RNAV (GPS) Runway 19 Offset Environmental Assessment (EA) which documents the design and evaluation of the FAA's offset approach procedure. More information on the FAA's EA can be found at: https://www.faa.gov/air_traffic/community_engagement/teb/. Comments on the FAA RNAV (GPS) X RWY 19 procedure are outside the scope of the TEB NCP. The FAA RNAV (GPS) X RWY 19 is similar to NCP Noise Abatement Measure 4 (<i>Implement an Offset Approach Procedure to Runway 19</i>); however, it is GPS based (not an instrument landing system procedure as recommended in Noise Abatement Measure 4) and follows a slightly different route to Runway 19 than the notional procedure depicted in Noise Abatement Measure 4. If the FAA approves Noise Abatement Measure 4, the Port Authority will then request that the development process be initiated, then will work with NY TRACON and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA). For more information on the FAA alternate approach to Runway 19, please refer <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i>.</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>Statement, and the failure to follow the National Environmental Policy Act, invalidate environmental assessments. As a result, Courts have required that the FAA reevaluate flight paths.</p> <p>The same result should occur here. We believe there is a substantial dispute over the degree, extent, and/or nature of the proposed action's environmental impacts that the amended arrival routes would cause, requiring a complete noise impact study to be performed over the densely populated areas of the Township of Mahwah. NEPA requires the FAA and other federal agencies evaluate and disclose the environmental impacts of their actions. See 42 U.S.C. § 4332. The NEPA process is intended to ensure that "before an agency can act," the agency considers potential environmental impacts. <i>Robertson v. Methow Valley Citizens Council</i>, 490 U.S. 332, 349, 353 (1989). We are very concerned that the FAA did</p>	

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					not properly consider all relevant facts. See <i>Lands Council v. Powell</i> , 395 F.3d 1019, 1030 (9th Cir. 2005). We request the FAA toll the statutory petition-for-review deadline so the Township and the FAA can work together to address the environmental concerns.	
1.3	Jim	Wysocki	Elected Official (Letter)	Public Participation, and Noise Complaints	[A] The Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC) is comprised of locally elected officials. Pursuant to its bylaws, the Committee represents the interests of the population that is located within the airport traffic area, which has been five miles within the radius of the airport. The TANAAC membership makes recommendations that will	A- The comment regarding TANAAC is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. TANAAC (Teterboro Aircraft Noise Abatement Advisory Committee) meetings are open to the public. Other municipalities representing the Route 17 corridor are members of TANAAC including Rochelle Park, Maywood, and Hackensack. For questions regarding membership in TANAAC please contact via email at tanaac@teb.com . Further information on TANAAC can be found at https://aircraftnoise.panynj.gov/tanaac/ .

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>enhance the quality of life for residents living within the airport traffic area. The membership should be expanded to include municipalities and communities along the Route 17 corridor or flight path so we can have a voice as well. TANAAC should welcome this additional membership so that the impacts of the airport to all residents of Bergen County are accounted for, not just those in the immediate surrounding areas. The Assessment states that Teterboro Airport's operator "has a longstanding partnership with the surrounding community to proactively address noise issues." Hackensack appears to have benefited from this partnership by successfully moving waypoints to the west away from its residents. However, Hackensack's win has now become Mahwah's burden. The Township of Mahwah would like a seat at the table and an amendment to the membership. We want to invite all communities in Bergen County</p>	<p>B- The comment regarding noise complaints is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The Port Authority, through its Noise Office and the TEB noise office, continuously strives to work with the public to minimize noise effects. The Noise Office leverages its in-person outreach activities to support and maintain meaningful dialogue with communities, the FAA, and other aviation stakeholders regarding aircraft noise. The Port Authority provides a dedicated toll-free phone line (Noise Complaint Hotline – 1-800-225-1071) that can be used to submit complaints and/or concerns. In addition, the Port Authority provides an on-line form that can be used to submit noise complaints/comments to the Port Authority -- https://aircraftnoise.panynj.gov/submit-a-noise-complaint/. Complaints/comments received on the Hotline and through the on-line form provide the Noise Office with valuable information regarding aircraft noise in the community. Each noise complaint received is compiled in a database, verified for accuracy, analyzed, and mapped to report information on noise complaints by location/neighborhood.</p> <p>Local complaints and concerns should go through the Port Authority's and TEB Noise Office as they are in the best position to provide a response. The FAA's Regional Noise Ombudsman can also serve as a liaison with the public on noise issues and provide information regarding FAA laws, regulations, policies and responsibilities. Please contact the FAA Regional Noise Ombudsman at 9-aea-noise@faa.gov or</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>to participate as members of the TANAAC. We note that the TANAAC initiated the change in flight path and works with the FAA.]</p> <p>[B Mahwah residents have filed their own complaints with Teterboro Airport and the FAA. On behalf of the Township, we implore you to work with us, and the surrounding municipalities, to "proactively address" and alleviate this critical quality-of-life issue. In the spirit of continued collaboration, we ask you to work with the Township of Mahwah and residents along the new RNAV RWY 19 to decrease the frequent noise and disruption that is threatening our way of life.]</p>	<p>718-553-3365. Additional information can be found at https://www.faa.gov/noise/inquiries/.</p>
2.1	Bob	Zimmerman	Elected Official (Hearing)	Public Participation, Type of Operations at TEB, Safety, Flight Frequency and TEB Access Restrictions	<p>Good, how are you? Bob Zimmerman, mayor of Carlstadt. Hi Ayo. First off, I just want to thank you both and your colleagues for reaching out and putting this together tonight. [A I think there has to be a lot more communication between the towns that are affected and the Port Authority and the</p>	<p>A- The comment regarding community coordination is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The Port Authority participates in and supports TANAAC (Teterboro Aircraft Noise Abatement Advisory Committee). TANAAC meetings are open to the public. Other municipalities representing the Route 17 corridor are members of TANAAC including Rochelle Park, Maywood, and Hackensack. TANAAC membership is determined by its</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>administration of Teterboro Airport.] Just to give you a little background on myself, I've lived in Carlstadt my entire life. I've been here 60 years. I grew up on Seventh Street. [B I remember back in the days when they would land the Piper Cubs and the Cessnas and it was all very quaint. But then in the probably late 1990s that changed for the worse, and that was when the corporate jets started coming in.] [C My concern mostly is really for the safety of the residents. When I was listening to this -- to the workshop, I was kind of concerned because I remember hearing the gentleman from the FAA say that the FAA was -- their hands were tied because any -- okay, you might hear the jet coming over my house right now. He said their hands were tied because any jet or any plane that wanted to land in Teterboro Airport had to be allowed to.]</p> <p>Now, I know the takeoffs and landings have increased exponentially over the years.</p>	<p>executive committee. Further information on TANAAC and TANAAC's contact information can be found at https://aircraftnoise.panynj.gov/tanaac/.</p> <p>B- The comment regarding the type of activity at Teterboro Airport is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Teterboro Airport has always been open to jet aircraft operations and is open 24 hours a day. Private business travel has evolved from turboprop aircraft to jets which in turn has increased the use of jets at TEB. TEB continues to maintain a 100,000 lb. weight limit and mandatory noise limits.</p> <p>C- The comment regarding safety is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. This Study has a specific focus on noise exposure and does not analyze safety issues related to aircraft operations. Any NCP Noise Abatement flight procedures that are further considered or implemented would be analyzed for safety. The NCP program operational measures also include an emphasis on safety when being developed. The FAA's primary mission is safe operation of flights on and off the ground. The FAA has jurisdiction over control of aircraft operations and assigns the highest priority to aviation safety. However, the pilot has the ultimate responsibility for the safe operation of the aircraft. Although ATC assigns the flight track and altitude, the pilot still maintains the authority to make the final judgment due to safety. In general, it is up to the pilot to adhere</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>And four short years ago, Carlstadt experienced its own emergency. We had a plane approaching Teterboro crash in Carlstadt. I know a few years before that, a plane had crashed in Hasbrouck Heights when a plane overshot the runway taking off and went into the technical school. [D So my concern is the number of flights coming in and out. As there's more flights, there's more of a chance for a tragedy.] Where I live here in Carlstadt, the planes go directly over my home. And the size of the jets have even gotten larger. I'm almost thankful now when a small corporate jet comes over my house because the size of the planes have grown. I don't know the exact size, but they look like they seat 20 or 30 people, these are commuter jets. [C And my biggest fear is that one of these jets goes down in Carlstadt or any of the surrounding towns, they can take out an entire city block.] [E So what I would ask the FAA in my public comment, and what disturbed me what the</p>	<p>to noise abatement procedures and to ensure the safety of aircraft while in flight.</p> <p>D- The comment regarding frequency of flights is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Flight schedules and general frequency of flights are largely driven by operator demand, weather, local market demographics, number of nearby airports, and other factors. Neither the Port Authority nor the FAA determine flight schedules.</p> <p>E- The comment regarding access restrictions is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. As a result of the Airport Noise and Capacity Act of 1990 (ANCA), the Port Authority cannot establish additional operational restrictions on certain aircraft in flight except by request through 14 CFR Part 161 of the FAA's regulations. Part 161 establishes very rigorous analysis, notice, documentation, application, and approval processes. Obtaining FAA approval of a use restriction would require demonstrating that the noise-related benefits of the restriction would exceed the costs to all potentially affected parties (e.g., aircraft operators, the airport, aircraft passengers, businesses benefiting from the operations, etc.). FAA only considers the noise benefit within the 65 dB DNL contour and only after other mitigation methods have not eliminated noncompatible land use. In addition, as a condition of obtaining federal grants from the FAA to support the operation of TEB, the Port</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					gentleman from the FAA said was that any plane that needs to land at Teterboro should be allowed to do so. My idea is to cut back on the number of flights and the number of takeoffs because of safety issues. And that's one of the things that I think is very important and needs to be greatly addressed in our discussions with that.] And again thank you for reaching out to us. I appreciate that.	Authority is required to always provide aircraft operators access to TEB 24 hours a day. For more information about airport access restrictions, please see <i>Topic Specific Response #2 – Airport Access Restrictions</i> . Please also see the response to Comment 5.4 .
3.1	Jacquie	Gadaleta	Elected Official (Hearing)	Flight Frequency, Noise Abatement Measure 4, and Fly Quiet Program	Okay. My name is Councilwoman Jacquie Gadaleta, G-A-D-A-L-E-T-A. Sure. I'm a councilwoman in the town of Woodcliff Lake. Although I am not -- we are not part of Teaneck Committee, they've been gracious enough to invite us to all of the meetings because they know that our town is also being adversely affected by the barrage of flights going over into Teterboro. Okay. I am calling in to represent the residents of Woodcliff Lake. I've lived here for 29-plus years, it's a beautiful town in Bergen County.	<p>The Port Authority understands that noise affects individuals differently and is committed to working with members of the community to help address their noise concerns. In addition to the 14 CFR Part 150 study, TEB has a dedicated noise office, noise monitors and a flight tracking system for evaluating flight operations at TEB.</p> <p>A- The comment regarding frequency of flights is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Flight schedules and general frequency of flights are largely driven by operator demand, weather, local market demographics, number of nearby airports and other factors. Neither the Port Authority nor the FAA determine flight schedules. The runway and flight path that an aircraft uses at TEB are determined primarily by wind direction, other weather conditions, origin/destination of flight, and efficiency of traffic flows.</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>[A But the past two to three years, the amount of flights that have been flying above us going into Teterboro has been beyond anything we could have ever expected.] [B It seems as if that they aim right for our lake and then they veer down to Teterboro.]</p> <p>[C Now, I was very happy to hear that there is another flight path that they are trying to promote, one that uses Route 17 which would be great for all of the towns, not just Woodcliff Lake but all of the towns south of, for example, Paramus, Hackensack, Maywood and so on. And I would hope that with the efforts of Teterboro, as well as the Port Authority and everyone else that they would encourage the pilots and the different companies to use this Route 17 access versus disrupting the lives of the residents in the neighboring towns.]</p>	<p>B- The comment regarding aircraft overflights is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Arriving aircraft will align with the runway centerline as early in the flight procedure as possible unless an offset approach is available and feasible. The existing RNAV (GPS) Z and ILS approaches have aircraft approaching TEB from the west pass over the lake before lining up with the runway for final approach. This results in the concentration of arrivals along the approach path (typically straight in along the runway centerline far from the airport) as aircraft line up to stabilize their approach to safely land at the airport.</p> <p>C- The comment regarding the FAA RNAV (GPS) X offset approach is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Pilots are ultimately responsible for the safe flight of their aircraft. Use of noise abatement flight procedures is voluntary and at the FAA's and the pilot's discretion. The FAA RNAV (GPS) X RWY 19 offset approach to Runway 19 is optional and the Port Authority actively encourages its use as it will reduce use of the Runway 19 ILS approach. In addition, The Port Authority anticipates that an updated Fly Quiet Program at TEB (see <i>Program Management Measure 8 (Establish and Manage a Fly Quiet Program)</i>) will increase the usage of existing and future noise abatement procedures. Such programs have been implemented successfully at TEB and other airports in the United States.</p>

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					<p>[A It actually goes back to a quality-of-life issue. I am outside quite often especially with COVID and all of that. Our family, our friends, we value our time outside, even just walking the dog and it's very hard to have a conversation or enjoy any type of serenity with the sound, the constant sound of the planes overhead. I'm not one to complain at all. But every day I come home for lunch to walk my dog and every day at lunchtime, planes. One after the other, I would say maybe three to five minutes in between. I can almost wave to them, that's how close they seem to be. Actually, at night, the same situation. I get home at night between 6, 7:00, I walk the dog, the planes are going overhead.] I understand that it's commerce, I understand that people are maybe using these private flights more often now which is great. We need to keep the economy going.</p>	

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					<p>[C However, if there's some way to encourage the pilots to use that Route 17 access, it would really mean a lot to the residents, not only of Woodcliff Lake but all the neighboring towns.]</p> <p>As Councilwoman and somebody who has been speaking about this, I've been getting emails and phone calls from residents in River Vale, Montvale and Park Ridge. So this is something that is adversely affecting all of us. And I would really hope that something can be done. We don't expect it all to be changed, but at least to mitigate the overwhelming effect that it's having on our lives, on the quality of our lives living in Bergen County. Thank you again for your time. I really appreciate it.</p>	
4.1	Nicola	Ferguson	General Public (Email)	Flight Frequency, Aircraft Altitudes, Health Effects, and Flight Paths of Arriving Aircraft	My biggest concerns are the frequency of flights, the altitude, the noise, and the exhaust as these flights approach Teterboro Airport. [A- On weekdays flights,	<p>A- The comment regarding flight frequency is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Flight schedules and general frequency of flights at TEB are largely driven by operator demand,</p>

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					<p>flying over my local neighborhood, are as frequent as every 4 minutes, and it is loud. At times you feel under siege from all the noise.] [B- Furthermore, I can read the underbelly writing on the planes carriage as the planes are flying near the tree line over my home.] [C-These planes are so close that when they do pass over you can smell the emissions. Inhaling jet fuel is not what I signed up for, and it is very bad for your health. Has the Port Authority invited OSHA do investigate this as it is hazardous to the publics health?] [D-Again I ask why to these planes need to follow the ridge line in Rutherford to access runways in TEB?] [E Why is it that the meadowlands are not used for an approach to the airport, which is less residential?] I get that the rich people do not want to fly commercial, especially now during a pandemic. I understand that a whole industry has been built around the private aviation industry. These wealthy people must have</p>	<p>weather, local market demographics, number of nearby airports and other factors. Neither the Port Authority nor the FAA determine flight schedules. The runway and flight path that an aircraft uses at TEB are determined primarily by wind direction, other weather conditions, origin/destination of flight, and efficiency of traffic flows (i.e., if the weather dictates, the airport will have to operate in one directional flow for longer periods of time which may especially during peak periods of operations result in a steady flow of arrivals or departures over one area).</p> <p>B- The comment regarding aircraft altitudes is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The altitude at which pilots fly aircraft when arriving to TEB primarily depends on the presence of other aircraft in the immediately surrounding airspace. This airspace may be shared by operations to and from other airports in the vicinity. On a 3-degree glideslope approach, which is an industry standard for safe operations, aircraft altitudes steadily decrease as the aircraft approaches the runway. Descending from cruise altitude to a runway on this glideslope is most beneficial in terms of minimizing noise. However, continuous descent is often not feasible; the FAA may hold arriving aircraft at specific altitudes to avoid other aircraft in the immediately surrounding airspace. Aircraft on approach to Runways 1 and 6 at TEB can be viewed on the Port</p>

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					private planes to fly to their vacation homes, and access to private planes as they fly to their next big deal, but why is it that the residents of Rutherford, and Lyndhurst have to suffer in multiple ways when these people don't even reside in these areas, and will never fathom what it is like to endure their frivolous ways of living, or consider the environmental impact of their lifestyle choices.	<p>Authority's WebTrak system https://aircraftnoise.panynj.gov/webtrak/</p> <p>C- The comment regarding aircraft emissions is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. For information on health impacts associated with aircraft noise, please see <i>Topic Specific Response #3 – Health Effects and Other Environmental Concerns</i>. The Port Authority has not invited OSHA to investigate aircraft emissions or effects from jet fuel. However, the United States Environmental Protection Agency and the FAA regulate and conduct research into these topics. See, for example, https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/certification</p> <p>D- The comment regarding arrival paths is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The straight in centerline approach to TEB Runway 6 take aircraft over the ridge line in Rutherford. Aircraft on approach to TEB Runway 1 also follow this approach to avoid obstructions in the Meadowlands, and once clear of those obstructions, pilots are directed to circle over to Runway 1. Aircraft on approach to Runway 6 are lined up by air traffic controllers at safe altitudes to ensure a stabilized approach and landing on the runway.</p>

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						<p>E- The comment regarding overflights of the Meadowlands area is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. An alternate approach to Runway 6 which would shift arrivals to the east of Route 17 over compatible land use was proposed by the public during the NEM phase of the TEB Part 150 study. Evaluation of this proposal as part of the TEB Part 150 study indicates that it would be an effective way to reduce overflights of Lyndhurst and Rutherford residential areas and shift flight paths to the east of Route 17 over the Meadowlands south of TEB. Therefore, the Port Authority is recommending this measure for inclusion in the TEB NCP, see Chapter 2, <i>Noise Abatement Measure 5 (Implement an Offset Approach Procedure to Runway 6)</i> for additional details.</p> <p>An alternate nighttime departure procedure from Runway 24 which would shift departures to the east of Route 17 over compatible land use was proposed by the TAC during the NEM phase of the TEB Part 150 study. Evaluation of this proposal as part of the TEB Part 150 study indicates that it would be an effective way to reduce overflights of Lyndhurst and Rutherford residential areas and shift flight paths to the east of Route 17 over the Meadowlands south of TEB. Therefore, the Port Authority is recommending this measure for inclusion in the TEB NCP, see Chapter 2, <i>Noise Abatement Measure 1 (Implement a Runway 24 Departure Turn to 230 degrees at Night)</i> for additional details.</p>

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5.1	John	Brown	General Public (Email)	Study Area and Runway 19 Approach	<p>As a concerned citizen and resident of Maywood, New Jersey, I offer the following criticism and suggestions with regard to the draft Noise Compatibility Program (NCP) for Teterboro Airport dated October 2021, specifically Measure 4, Offset Approach to Runway 19. Furthermore, my comments are based upon:</p> <ol style="list-style-type: none"> 1. Information provided at the Virtual Public Information workshop and Public Hearing on September 30, 2021 2. Published presentations and minutes from various TANAAC meetings 3. Personal observation from my home at 41 Stelling Avenue in Maywood, New Jersey, situated 3.6 miles directly north of Runway 19. <p>Definition of Problem -</p> <p>[A Confining the area of noise abatement to the Hackensack University Medical Center (HUMC) and the immediate surrounding vicinity is flawed.]</p> <p>[B The problem of noise from</p>	<p>The Port Authority acknowledges that residents outside the 65 DNL contour can be affected by aircraft noise and the frequency of overflights. The Port Authority performed the Part 150 study for TEB to identify and evaluate a variety of measures that could abate or mitigate noise. Further information on the Part 150 process can be found in Section 1.3 of the TEB NCP. As discussed in Section 1.6 of the TEB NCP and according to FAA's Part 150 regulations, all land uses located outside the 65 DNL are compatible with aircraft noise. The Port Authority is committed to working with the communities to help address their noise concerns both within and outside of the regulatory confines of Title 14 CFR Part 150.</p> <p>The FAA developed and evaluated the RNAV (GPS) X RWY 19 offset procedure to address community concerns of aircraft overflights over the city of Hackensack. For further information on the FAA RNAV (GPS) X RWY 19 offset procedure, please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i>. Unlike the FAA RNAV offset approach Environmental Assessment, the TEB NCP has a much larger study area and considered a wide variety of measures and flight path modifications to and from each runway at TEB.</p> <p>A- The comment regarding the area of noise abatement is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The study area for the TEB Part 150 study was defined when developing the Noise Exposure Maps. The study area extends at least six miles from the airport in each direction. This includes all of Maywood and Hackensack. In addition, the study area was extended to the north and west to encompass additional areas under the Runway 19 approach. The NCP</p>

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					<p>flights using the direct straight in approach to runways 1 -19 is far more sizable.] Based upon public comments [1] and the number of communities and individuals within Bergen County registering noise complaints [2], this should be abundantly clear even to the casual observer. A broader definition is required if the problem has any chance of meeting the public's needs.</p> <p>[1] Virtual Public Meeting September 30, 2021, [2] TANAAC Jan 27, 2020 Presentation, pages 10 through12 (pre pandemic)</p>	<p>evaluation of <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> was not limited to the Hackensack University Medical Center area. Consistent with the requirement of the FAA's Part 150 regulations, the evaluation of <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> was limited to areas inside the 65 DNL contour (Maywood and Hackensack are not inside the 65 DNL contour). Each noise abatement measure in the NCP is a notional design that was developed to determine its potential to reduce aircraft noise at noncompatible parcels. Any noise abatement measures recommended for inclusion in the NCP that are approved by FAA would need to go through final procedure design by the FAA prior to implementation. Precise implementation details that may be developed by the FAA, such as flight track locations and altitudes, may differ from the notional noise abatement measure designs presented in the NCP to adequately address safety, efficiency, and aircraft performance considerations.</p> <p>To be approved by the FAA, a measure recommended for inclusion in the NCP must reduce noncompatible land uses within the 65 DNL contour, not impose a burden on interstate or foreign commerce, not degrade the safety of the local airspace, and must consider both local and national air transportation needs. Implementation of noise abatement procedures is subject to FAA approval. If a noise abatement measure is approved by FAA, the FAA would further evaluate and possibly implement the recommended flight procedures. Any new or modified procedures would be subject to</p>

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						<p>several FAA technical review and approval processes prior to approval, including environmental review under the National Environmental Policy Act.</p> <p>B- The comment regarding the straight-in Runway 19 approach is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Aircraft utilizing the Runway 19 ILS align themselves with the runway several miles from the airport to ensure a safe and stabilized approach to the runway. This places aircraft over residential areas north of TEB. Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19) is expected to shift flight paths over less densely populated areas northwest of the airport. For this measure, the Port Authority considered areas of nonresidential land use and lower population density residential areas when developing the notional design of the procedure evaluated in <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i>.</p>
5.2	John	Brown	General Public (Email)	Runway 19 Approach, Noise Abatement Measures, and Scope of the Part 150	Redefining the Problem – As stated regarding its role during a TANAAC Meeting [3] the Federal Aviation Administration (FAA) “supports the Port Authority and TANAAC request to move some Runway #19 arrivals away from the HUMC and nearby high-rise buildings by creating an alternate to the primary ILS approach and having aircraft fly	The FAA developed and evaluated the RNAV (GPS) X RWY 19 offset procedure to address community concerns of aircraft overflights over the city of Hackensack. For further information on the FAA RNAV (GPS) X RWY 19 offset procedure, please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i> . Unlike the FAA RNAV offset approach Environmental Assessment, the TEB NCP has a much larger study area and considered a wide variety of measures and flight path modifications to and from each runway at TEB.

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					<p>an offset approach roughly above State Highway 17.” [A However, this alone is not nearly enough to solve the problem as the residents on the ground below view it to be.]</p> <p>[B The problem can be clearly defined by looking at the concentrated volume of air traffic on the NCP’s Figure 2-10 (page 2-39)[4]. This highly funneled approach to the airport has led to a constant non-relenting series of flights treading on the quality of life for those below. Aligning that image with the location of noise complaints redefines the area which should be addressed as not merely the HUMC proximity.]</p> <p>[C Nowhere in the NCP is there a clearly defined quantitative goal set for this project. Merely stating that you are trying to reduce traffic over the HUMC opens up a myriad of claimed triumphs. One should expect a goal which is both measurable and consistent with the intent of the project. Whether it is to reduce flights by a certain</p>	<p>A- The comment regarding the alternate approach to Runway 19 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. A single noise abatement procedure for Runway 19 arrivals is unlikely to eliminate the concerns of all communities affected by these arrivals because the area north of TEB consists of numerous densely developed residential areas. The TEB Part 150 study examined aircraft operations and flight paths to and from all runways at TEB not just Runway 19 within the study area. Each noise abatement measure in the NCP is a notional design that was developed to determine its potential to reduce aircraft noise at noncompatible parcels. Any noise abatement measures recommended for inclusion in the NCP that are approved by FAA would need go through final procedure design by the FAA prior to implementation. Precise implementation details that may be developed by the FAA, such as flight track locations and altitudes, may differ from the notional noise abatement measure designs presented in the NCP to adequately address safety, efficiency, and aircraft performance considerations. To be approved by the FAA, a measure recommended for inclusion in the NCP must reduce noncompatible land uses within the 65 DNL contour, not impose a burden on interstate or foreign commerce, not degrade the safety of the local airspace, and must consider both local and national air transportation needs. Implementation of noise abatement procedures is subject to FAA approval. If a noise abatement measure is approved by FAA, the FAA would further evaluate and possibly implement the</p>

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					<p>percentage or the noise level by a defined decibel reading, one is left guessing.]</p> <p>[3] TANAAC Meeting Minutes Oct 13, 2019, pg. 3-4</p> <p>[4] Teterboro Airport Title 14 Code of Federal Regulations (CFR) Part 150 Draft Noise Compatibility Program September 2021</p>	<p>recommended flight procedures. Any new or modified procedures would be subject to several FAA technical review and approval processes prior to approval, including environmental review under the National Environmental Policy Act. To reduce overflights of densely populated residential areas north of TEB, the Port Authority considered ways to modify the approach to Runway 19 and other proposals such as constructing a new north south runway. The NCP evaluated the possibility of a new north-south runway and determined that this measure was not feasible due to, among other things, cost of constructing a runway, disruption to current operations during the construction process, environmental issues (e.g., a north-south runway would have to be constructed in wetlands area) and potential noise increase to noncompatible land use to the north of the airport. While aircraft using this measure would fly over compatible land use to the south, arrivals to the north could conflict with EWR operations, pilots would also have to stay clear of several obstructions (e.g., radio towers and stadiums) in that area for safety reasons, and they may also have to fly over new potential noncompatible areas to the north. Therefore, this measure was not recommended for inclusion in the NCP.</p> <p>Outside of the NCP effort, FAA developed the RNAV (GPS) X RWY 19 offset procedure which directs aircraft over Route 17. For further information on the FAA RNAV (GPS) X RWY 19 offset procedure, please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset</i></p>

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						<p><i>Approach.</i> In addition, the Port Authority is recommending <i>TEB Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> which could provide an additional option for approaches to Runway 19 for inclusion in the TEB NCP because it has the potential to reduce overflights and noise over densely populated areas north of TEB. The Port Authority is also recommending <i>Program Management Measure 8 (Establish and Manage a Fly Quiet Program)</i>, which will allow the Port Authority to continue to develop collaborative solutions for abating noise from aircraft operations at TEB.</p> <p>B- The comment regarding the concentration of aircraft on approach to Runway 19 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Arriving aircraft will align with the runway centerline as early in the flight procedure as possible unless an offset approach is available and feasible. This results in the concentration of arrivals along the approach path (typically straight in along the runway centerline far from the airport as shown in Figure 2-10) as aircraft line up to stabilize their approach to safely land at the airport. As discussed in Comment 5.1.A, the effects of <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> were evaluated across the whole NCP study area, but the focus of the evaluation during the Part 150 study was on the change in noncompatible land uses within the 65 DNL area.</p>

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						<p>C- The comment regarding NCP goals is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Although the NCP only establishes a general nonquantitative goal (the reduction of noncompatible land use), the TEB Part 150 study estimated the numbers of dwelling units and noise sensitive facilities that would become compatible as a result of each noise abatement measure, as well as the population within the 65 DNL contour that would benefit from each noise abatement procedure. See, for example, Tables 2-5 and 2-6 in the TEB NCP. See Program Management Measure 10 (Update the Noise Exposure Map) in the TEB NCP. See <i>Topic Specific Response #2 – Airport Access Restrictions</i> as neither the Port Authority nor the FAA can “reduce flights”, except as a measure of last resort if the other recommended NCP measures do not result in the elimination of noncompatible land uses.</p>
5.3	John	Brown	General Public (Email)	FAA RNAV (GPS) X RWY 19 Offset Approach, and Noise Abatement Measure 4	<p>[A Measure #4 Designed To Fail – The Offset Approach to Runway #19 in its current configuration will not succeed in abating noise at the HUMC in any appreciable manner. While conceptually, the redirecting of flights over State Highway 17 has the ability to substantially reduce both the noise and number of flights which overfly the hospital’s air space, it is the</p>	<p>The Port Authority undertook the Part 150 Study to quantify noise exposure in communities surrounding TEB and to identify measures that would reduce and/or eliminate noncompatible land uses. All measures recommended for inclusion in the NCP are intended and expected to reduce noncompatible land uses in the communities around TEB that are within the 65 DNL and higher contour or shift flight paths over nonresidential land use outside the 65 DNL.</p> <p>A- The comment regarding the FAA RNAV (GPS) X RWY 19 offset approach is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The comment</p>

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					implementation of the plan that will cause its demise. "The new procedure will not be available for use during periods of poor weather, low visibility or high traffic volume due to complexity of the airspace and air traffic controller workload. The best opportunity for the alternative approach procedure to be used is during the overnight hours when air traffic demand and complexity for the New York and New Jersey metropolitan area is reduced." [5] It had been estimated that about 34% of the flights would be using the alternative approach [6]. I highly doubt that this take rate would ever be achieved because of the following limitations: 1) this approach would predominately be used during night hours. That was restated at the question-and-answer segment of the public hearing on September 30, 2021 and quoted directly above. Only approximately 5% of total flights into Teterboro occur during the night hours.[7] 2) The offset approach would only be used during non-weather	identifies <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> in the heading, but the substance of the comment is about the FAA RNAV (GPS) X RWY 19 offset approach. The Port Authority is recommending <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> for inclusion in the TEB NCP because it has the potential to reduce overflights and noise over densely populated areas north of TEB. The notional design of <i>Noise Abatement Measure 4</i> is an offset ILS approach, and the procedure was evaluated using 50 percent of both day and night arrivals to Runway 19. At this level of use, analyses in the NCP indicated that the 65 DNL contour only shifted slightly and did not reduce noncompatible land use. However, the Port Authority recognizes this measure could reduce the frequency of use of the Runway 19 ILS and overflight noise over densely populated areas north of TEB, and, therefore, is recommending it for inclusion in the TEB NCP. The FAA's air traffic control (ATC) is charged with the safe and efficient use of the National Airspace System (NAS) and is solely responsible for determining when particular flight procedures are utilized. Although ATC assigns the flight track and altitude, the pilot maintains the authority to make the final judgment due to safety. For further information on the FAA environmental analysis for RNAV (GPS) X RWY 19 offset approach to Runway 19, please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i> .

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					restricted times, which I have interpreted as being clear visual flight landing conditions. No statistics have been shown to the public as to what percentage of flight time this occurs in Northern New Jersey. Needless to say, that would be something more than 0% and would further reduce the potential flights being capable of using this approach. 3) Finally, giving the pilots discretionary power over which approach to use is somewhat predictable. Given the choice of using the current straight in line with runway approach vs. one which requires various manipulations and angles for landing is not a hard choice especially if that pilot is used to and has been using the established approach. It is human nature to stick to the known which I predict will be adhered to.] [B Quantifying the Effect – Using the above information, in conjunction with other data provided in several TANAAC reports, I have attempted to determine the magnitude or quantity of flights	B- The comment regarding the use of the Noise Abatement Measure 4 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. The comment refers to <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> in the first sentence, but then applies the projected use of the FAA RNAV (GPS) X RWY 19 offset approach. The evaluated usage of the Noise Abatement Measure 4 procedure in the NCP is higher than the FAA RNAV (GPS) RWY 19 offset approach. The notional design of Noise Abatement Measure 4 is an offset ILS approach which would allow for more consistent use of that approach during day and nighttime periods. Therefore, since the procedure could be used day or night and during good and bad weather a 50 percent level of use was evaluated to determine if the proposed measure would reduce noncompatible land use. At this level of use, there was no reduction in noncompatible land use. The Port Authority determined a higher usage of the procedure was unlikely and a lower usage would not change the results of the NCP evaluation. The Port Authority recognizes Noise Abatement Measure 4 could reduce the frequency of use of the existing Runway 19 ILS and overflight noise over densely populated areas north of TEB, and, therefore, is recommending it for inclusion in the TEB NCP. For further information on the recently approved FAA alternate approach to Runway 19, please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i> .

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					<p>that would be moved using Measure #4. With over 80,000 aircraft arrivals during 2019 (non-pandemic) year and approximately 50% of those arrivals utilizing Runway #19, one would expect 40,000 flights as potential for offset inclusion.[8] With only 5% of those flights occurring during nighttime operations, this figure would be further reduced to 2,000 per year. Without even attempting to factor in weather related restrictions or pilot's discretionary choice, this would remove less than one flight per hour from the HUMC airspace, an effect that would hardly be noticed. This is clearly not what the officials had envisioned when first proposed.] [5] FAA Website Community Engagement — Teterboro, NJ (faa.gov) Jul 27, 2021 Update[6] TANAAC Meeting Minutes Jan 22, 2020 pg. 4 in response to a question.[7] TANAAC Meeting Presentation Jul 24, 2019 pg. 10 based upon 5 years of historical data [8] TANAAC Presentation</p>	

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					Jan 22, 2020 pg. 9 Runway Utilization – Full Year 2019	
5.4	John	Brown	General Public (Email)	TEB Access Restrictions	<p>The Missing Solution –</p> <p>A somewhat obvious solution to this problem revealed itself during the Covid 19 pandemic. If there was one silver lining during that period of time, it was that the air traffic utilizing Teterboro Airport diminished by approximately 50%. A noticeable reduction of noise correlated to this particular event as observed by the author. Restricting the traffic from using either the airport or this approach over northern Bergen County is not a solution that has been given any credence in this NCP. Realizing and understanding the economic impact that this might bring to the area and how unpopular it would be to the aviation community in general, it never the less deserves to be given careful consideration and not dismissed as simply “too difficult” to achieve. With all the effort, money, delays and</p>	<p>The comment regarding the airport restrictions is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The Part 150 regulations require that studies consider access restrictions as a potential measure as discussed in Section 2.1 of the NCP. Airport access restrictions were introduced during Technical Advisory Committee (TAC) meeting #9 and discussed in TAC meeting #13 see Appendix D, <i>Technical Advisory Committee</i> for further information. As part of the Part 150 process, airport access restrictions are to be considered as a final attempt to address noncompatible land uses when all other measures have been exhausted. The Port Authority expects to address all noncompatible land uses through the recommended NCP measures provided in the TEB NCP. TEB has existing restrictive measures in place. The existing mandatory noise rules at Teterboro include Maximum Noise Levels allowable for aircraft departures and the ability to ban aircraft from operation at Teterboro if three violations of the noise rules occur during a two-year period. The Port Authority adopted the mandatory measures prior to the passage of the federal Airport Noise and Capacity Act of 1990 (“ANCA”), a law that subjects modification of existing or development of new mandatory measures to extensive federal review and approval. The mandatory noise rules documented in Chapter 2 of the TEB NCP are “grandfathered” by ANCA as they were in effect at the time the Act was passed.</p> <p>In addition, TEB has a 100,000 lb. aircraft weight limit in place under current federal law. See Section 2.1 in the TEB NCP for additional details. For information about restrictions on the use of TEB and use of flight</p>

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					ineffectiveness that have come with Measure #4, it is time act.	procedures, please refer to <i>Topic Specific Response #2 – Airport Access Restrictions</i> .
5.5	John	Brown	General Public (Email)	Noise Measurements, Scope of the Part 150, and Health Effects	<p>[A More than Decibels – I don't believe that the individual sound level estimates are necessarily indicative of what the complainants are experiencing. Furthermore, those estimates derived from models do not provide hard quantitative evidence for this report. No effort was made to record levels along the funnel of flights heading south into Runway #19 with the exception of the reading from the few stations in close proximity to the airport. Why is it assumed that the level of noise in this area is less than what the stations measure? Might aircraft several miles out be at power levels above that which they are at when about to land (i.e. in throttle down or cruise mode)? When numerous people report not being able to have conversations in their backyards (including me), that indicates levels above 60 db. [9]]</p>	<p>A- The comment regarding the use of noise monitoring is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Regarding noise monitoring and results of noise monitoring, airport sponsors may propose use of noise monitoring equipment during noise compatibility planning efforts and include this in their noise compatibility plan, which is prepared pursuant to 14 CFR Part 150. However, there are differences between noise monitoring and noise modeling. For example, when there is a need to generate detailed noise results over large areas, noise modeling is the only practical way to accurately, and reliably determine geospatial noise effects in the surrounding community when analyzing proposals related to aviation noise. Additionally, there are several limitations with using noise monitoring to evaluate aviation noise; therefore, FAA does not consider results from noise monitors as having the same level of fidelity as noise modeling. FAA approved noise models, such as the model used in the TEB Part 150 study, generate future noise levels throughout the study area, whereas monitoring data only records historical levels at individual sites. 14 CFR 150.9 <i>Designation of Noise Systems</i> defines the use of DNL and the use of a noise model to develop the NEMs.</p> <p>The Port Authority maintains six noise monitors around TEB to measure aircraft noise events. TEB noise monitor #3 is on the roof of the Hackensack University Medical Center (1.5 nautical miles north of TEB and directly under</p>

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					<p>[B While not part of this study, but something that should not be overlooked is the impact of other flights crossing overhead, specifically flights approaching from the west and curving to their Newark Airport destination. While higher in altitude these jets are substantially larger and contribute to the noise landscape. Listening to and reading issues from Bergen County residents along with my personal encounters, it is not just the noise level but the repetitiveness which is cause of our concerns. The flow of traffic from above is so concentrated that there is hardly any ebb in that noise.</p> <p>Teterboro Airport infringes on our quality of life.]</p> <p>Summary - "The purpose of the Proposed Action is to address the concerns of the community related to air traffic control</p>	<p>the approach to Runway 19). There are two main types of noise metrics, describing (1) single noise events (single-event noise metrics) and (2) total noise experienced over longer time periods (cumulative noise metrics). Single-event metrics are indicators of the intrusiveness, loudness, or noisiness of individual aircraft noises. Cumulative metrics used to measure long-term noise are indicators of community annoyance. Aircraft noise events measured at this noise monitor may be 55 to 85 dB from a single aircraft operation with annual average DNL in 2019 measuring 61.3 dB. For details on noise metrics (single event and average values) used in this study please see Section 1.5 in the TEB NEM. DNL is the standard noise metric used by the FAA to evaluate compatible land use and is the metric that must be used in a Part 150 study. Generally, aircraft farther from the airport on approach will register lower noise levels at a noise monitor because they are at a higher altitude rather than due to lower power settings on the aircraft. The FAA, through 14 CFR Part 150 regulations, require the use of noise modeling results rather than noise measurements to evaluate and assess land use compatibility. As discussed above, noise monitoring data can be used as a check on the modeling results to identify any large differences between modeled and monitored results. However, due to the need to generate detailed noise results over large areas, noise modeling is the only practical way to accurately and reliably determine geospatial noise effects in the surrounding community when analyzing proposals related to aviation noise. Based on a comparison of noise monitoring data and</p>

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					<p>(ATC) procedures at the Teterboro Airport by developing arrival procedures that take advantage of modern technology.” [10] The action of Measure #4 in the NCP regarding the offset approach has failed in both defining and solving the issues for the community at large.[9] Public Workshop for Draft Environmental Assessment for the RNAV (GPS) RWY 19 Offset Procedure at Teterboro Airport the https://www.faa.gov/air_traffic/community_involvement/teb/ - pg. 7[10] Public Workshop for Draft Environmental Assessment for the RNAV (GPS) RWY 19 Offset Procedure at Teterboro Airport the https://www.faa.gov/air_traffic/community_involvement/teb/ pg. 5</p>	<p>modeled results, modeled noise levels were higher than noise levels measured at most of TEB’s permanent noise monitoring sites. (See Section 5.3 http://www.panynjpart150.com/TEB_FNEM.asp). While humans can readily discriminate between aircraft and non-aircraft noise, it is a very challenging task for an automated system. This is particularly true at locations where aircraft noise levels are relatively low, such as locations outside the 65 DNL contour. At such locations, aircraft noise levels tend to be close to, or even below, those of community noise sources; e.g., street traffic, children playing, dogs barking, landscaping equipment, weather sources such as wind and rain, etc. As a result, the monitoring system can have difficulty identifying all aircraft noise events, or the events may even be masked by non-aircraft events.</p> <p>B- The comment regarding the aircraft overflights is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Pursuant to the Part 150 regulations, the TEB Part 150 Study was limited to noise from TEB operations. The Port Authority has also developed an NCP for EWR and it is available for review at http://www.panynjpart150.com/EWR_DNCP.asp. To the extent that operations at TEB and EWR utilize the same airspace, the FAA has developed procedures for dividing the airspace and/or coordinating operations at the two airports to ensure the aircraft are safely separated in the air. The Port Authority understands that noise affects individuals</p>

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						differently and is committed to working with members of the community to help address their noise concerns both within and outside of the regulatory confines of Title 14 CFR Part 150. For information on this study and environmental concerns, please refer to <i>Topic Specific Response #3 – Health Effects and Other Environmental Concerns</i> .
6.1	John	Brown	General Public (Hearing)	FAA RNAV (GPS) X RWY 19 Offset Approach, TEB Access Restrictions, and Noise Abatement Measure 4	<p>My name is John brown, B-R-O-W-N. I reside at 41 Stelling Avenue in Maywood, New Jersey on the border of Paramus. If you would like to know where my house is, take a straight edge and draw a line down Runway 119, go three and a half miles north and you will bisect my house. So I obviously have an interest in this. So I have several comments. Particularly regarding Measure 4 which is on page 237 of your document. It's the implementation of the offset approach -- procedure rather to Runway 19. Excuse me.</p> <p>[A First point has to do with time. This approach or this measure was first started in 2007. That was 14 years ago. And just to put this in</p>	<p>A- The comment regarding the timeline for the FAA RNAV (GPS) X offset approach to Runway 19 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The Port Authority understands the concern that it can take several years for the design and development of a new noise abatement procedure. Once a request has been made to the FAA to design a new procedure, procedure design, feasibility and safety studies must be conducted. Typically, this is an iterative process involving many stakeholders and, in some cases, an operational test period. A design may not pass at one step in the process and may go back to the stakeholder group to determine next steps. This collaboration may result in designs taking several years before a suitable option is developed. Once a feasible procedure is developed, the procedure may have to go through an environmental study to comply with NEPA. The Port Authority will work with FAA during its evaluation of any new flight procedures to support its timely review and approval of new procedures.</p> <p>B- The comment regarding access restrictions is acknowledged and memorialized in this</p>

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					<p>perspective, 1 World Trade Center took eight years to build and the Empire State Building took a year and a half. And to call this slow moving or glacial speed would be an insult to glaciers. This is way too long and way overdue.] First point. [B Secondly, it's come to my knowledge or attention particularly in the past eighteen months, if there was one thing positive about the pandemic is that I realize that there was a dramatic change in my life in the fact that I don't have to listen to jets fly overhead every two minutes. And the obvious solution, and I don't think it's one that's been given any proper attention is that if you want to reduce noise and you don't have any other way of doing it, then you gotta consider reducing traffic. Okay. Again, reduce noise by reducing the volume of traffic. And I know this is unpopular with the aviation community. There are economic reasons that you wouldn't want to do this. But let's face it, most of the flights that are coming</p>	<p>Appendix F, <i>Public Comments</i>, of the TEB NCP. As a result of the Airport Noise and Capacity Act of 1990 (ANCA), the Port Authority cannot establish additional operational restrictions on certain aircraft in flight except by request through 14 CFR Part 161 of the FAA's regulations. Part 161 establishes very rigorous analysis, notice, documentation, application, and approval processes. Obtaining FAA approval of a use restriction would require demonstrating that the noise-related benefits of the restriction would exceed the costs to all potentially affected parties (e.g., aircraft operators, the airport, aircraft passengers, businesses benefiting from the operations, etc.). FAA only considers the noise benefit within the 65 dB DNL contour and only after other mitigation methods have not eliminated noncompatible land use. In addition, as a condition of obtaining federal grants from the FAA to support the operation of TEB, the Port Authority is required to always provide aircraft operators access to TEB 24 hours a day. For more information about airport access restrictions, please see <i>Topic Specific Response #2 – Airport Access Restrictions</i>. Please also see the response to Comment 5.4.</p> <p>C- The comment regarding concentrated arrivals to Runway 19 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. During the TEB Part 150 study, participants in the TEB Technical Advisory Committee and the public suggested development of an alternative to the straight-in ILS approach to Runway 19 to reduce the concentration of flight paths coming into</p>

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					into this airport, Teterboro, are for convenience and they're not necessary. There are commercial flights that could take these people to wherever they want to go. But the convenience of being a few miles from Manhattan is the reason why they take them.] [C My next point is that this issue, particularly the Measure 4, was really originally because Hackensack Hospital was in the flight path and it was to reduce the noise over that hospital. The concentrated volume as seen on 2-10 of Learjets and Gulfstreams flying over a very narrow funnel is a different problem and I think that's one that needs to be approached. Thank you.]	Runway 19, and thus, reduce noise levels in residential areas north of TEB and over the Hackensack University Medical Center (HUMC). While reducing noise levels to HUMC prompted consideration of a RWY 19 offset procedure, the offset is not designed solely to avoid HUMC and if the procedure is substantially utilized, it will benefit densely populated areas north of Hackensack. <i>Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i> was developed as an alternative to the straight-in Runway 19 ILS approach and is recommended for inclusion in the TEB NCP because it (a) could reduce overflights and noise levels over the Hackensack University Medical Center by shifting aircraft to an arrival path along the New Jersey State Highway 17 corridor with lower population density; and (b) has the potential to reduce overflights and noise over densely populated areas north of TEB.
7.1	Rosy	Ferrera	General Public (Hearing)	Flight Frequency, FAA RNAV (GPS) X RWY 19 Offset Approach, Fly Quiet Program, and TEB Access Restrictions	My name is Rosy Ferrera. F as in Frank, E-R-R-E-R-A. Thank you. I am a resident of Maywood as well. I live on Palmer Avenue. I would like to say that I agree completely with everything Mr. John Brown has just said. [A I've been living in the area for seven years now, and every year the noise level from these airplanes just keeps getting worse and	A- The comment regarding the frequency of flights is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. Flight schedules and general frequency of flights are largely driven by operator demand, weather, local market demographics, number of nearby airports and other factors. Neither the Port Authority nor the FAA determine flight schedules. The runway and flight path that an aircraft uses at TEB are determined primarily by wind direction, other weather conditions, origin/destination of flight, and efficiency of traffic flows (i.e., if the weather dictates, the

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					worse. And I guess the pandemic has made it a lot more noticeable or maybe the traffic has just increased a lot more because of it and I think -- feel like there is a highway living -- or just highway traffic above my home. I can't sit outside and have a conversation with anyone because of the airplane noise and it's just gotten really bad.] I feel like people with children in the neighborhood -- and I mean, it's just horrible and I am considering moving out of the neighborhood because of it. [B And I think I saw something in the proposal that said that the flight path would be -- it's optional for pilots to take Route 17 and I just don't understand how that is something that would work, if it's optional. If someone is used to taking a certain route for as long as they've been flying over this neighborhood, I don't understand why they would take another route.] [C So I agree with Mr. John Brown, if you want to reduce the noise level then you should also considering	<p>airport will operate in one direction such as south flow (arrivals to and departures from Runway 19 and Runway 24) for prolonged periods of time which may result in a steady flow of arrivals or departures over one area).</p> <p>B- The comment regarding the frequency of flights is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The FAA's air traffic control (ATC) is charged with the safe and efficient use of the National Airspace System (NAS) and is solely responsible for determining when particular flight procedures are utilized. Although ATC assigns the flight procedure and altitude, the pilot maintains the authority to make the final judgment due to safety. Because of this, use of noise abatement flight procedures is voluntary and at the FAA's and the pilot's discretion. The FAA RNAV (GPS) X offset approach to Runway 19 is optional and the Port Authority actively encourages its use as it may reduce use of the Runway 19 ILS approach. In addition, the Port Authority anticipates that an updated Fly Quiet Program at TEB (see <i>Program Management Measure 8 (Establish and Manage a Fly Quiet Program)</i>) will increase the usage of existing and future noise abatement procedures. Such programs have been implemented successfully at TEB and other airports in the United States.</p> <p>C- The comment regarding access restrictions is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. As a result of the Airport Noise and Capacity Act of 1990 (ANCA), the Port Authority cannot establish additional operational restrictions on</p>

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					reducing the amount of traffic.] Thank you.	certain aircraft in flight except by request through 14 CFR Part 161 of the FAA's regulations. Part 161 establishes very rigorous analysis, notice, documentation, application, and approval processes. Obtaining FAA approval of a use restriction would require demonstrating that the noise-related benefits of the restriction would exceed the costs to all potentially affected parties (e.g., aircraft operators, the airport, aircraft passengers, businesses benefiting from the operations, etc.). FAA only considers the noise benefit within the 65 dB DNL contour and only after other mitigation methods have not eliminated noncompatible land use. In addition, as a condition of obtaining federal grants from the FAA to support the operation of TEB, the Port Authority is required to always provide aircraft operators access to TEB 24 hours a day. For more information about airport access restrictions, please see <i>Topic Specific Response #2 – Airport Access Restrictions</i> .
8.1	Mike	Pesanello	General Public (Hearing)	FAA RNAV (GPS) X RWY 19 Offset Approach	So, it's Mike Pesanello, P-E-S-A-N-E-L-L-O. I'm just commenting on the fact that we've been here awhile. I was involved with some questions in the first session. [A But you know, as of July 1st, actually the week before, we were just curious when this new implementation from the Runway 19 approach came.]	A- The comment regarding the RNAV (GPS) X is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. The RNAV (GPS) X RWY 19 offset approach Environmental Assessment (EA) developed by FAA was available for public review and comment from December 23, 2019, through January 22, 2020. A public workshop was held on January 8, 2020. The Final EA was approved in September 2020 and the offset approach procedure was made available to pilots starting July 1, 2021.

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					[B We're just curious to why the flight path changed so much. Where -- you know again, we've been in this house a long time. Our neighbors have all noticed it, we just don't know why -- there doesn't seem to be any notice that the planes were supposed to go this way but they all seem to come over our neighborhood on arrival. So that was just a question we had, it doesn't seem like -- I asked in the first session, we couldn't get it some other way, I just wanted to put that in, so... And I'm sure no one can answer it. Because no one could before.]	B- The comment regarding FAA's RNAV (GPS) X RWY 19 offset approach is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. However, any response to this comment is outside the scope of this Part 150 process. Please refer to <i>Topic Specific Response #1 – FAA RNAV (GPS) X RWY 19 Offset Approach</i> for background on the development of this procedure.
9.1	Karen	Stichuaner	General Public (Hearing)	Flight Frequency, Aircraft Altitudes, and TEB Access Restrictions	It's Karen M. Stichuaner. Last name is S as in Sam, T as in Thomas, I-C-H-A-U, N as in Nancy, E-R. I have lived here with my family over 40 years. I had been in the chat earlier and I do appreciate all of the comments and complexities that all of this entails. However, unless you actually live in this flight path and we live on Stewart Street in Maywood, it is unbelievable. It is –	The Port Authority understands that noise affects individuals differently and is committed to working with the members of the community to help address their noise concerns both within and outside the regulatory confines of 14 CFR Part 150. A- The comment regarding flight frequency is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. Flight schedules and general frequency of flights are largely driven by operator demand, weather, local market demographics, number of nearby airports and other factors. Neither the Port Authority nor the FAA determine flight schedules. The runway and flight path that an aircraft uses at TEB are determined primarily by

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					<p>[A you cannot sleep at night when they're having one plane right after another. I understand having a plane, two planes, a jet. But this is over and above anything.]</p> <p>[B And now we're comparing, as I am hearing, Newark and Teterboro. So Teterboro was always meant to be a small airport. It has now been taking in jets and it is just -- it's -- we've had our house shake. That is how close they get to our house I can read the numbers on their jets, on their planes.]</p> <p>[C With children, with adults, how do you expect them to live a prosperous life when they can't sleep, they can't go outside and speak.] As, you know, Mr. Brown and Ms. Ferrera were speaking about. It feels as if the answer is well, if you do not like it, sell your home. But it's not that easy because in order for us to sell our home, we have to pray that that person comes on a day where planes aren't literally coming over one right after another, and you cannot</p>	<p>wind direction, other weather conditions, origin/destination of flight, and efficiency of traffic flows.</p> <p>B- The comment regarding Teterboro Airport is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Teterboro Airport has always been open to jet aircraft operations. Private business travel has evolved from turboprop aircraft to jets which in turn has increased the use of jets at TEB. TEB continues to maintain a 100,000 lb. weight limit on aircraft (which deters larger and potentially noisier aircraft from using TEB) and mandatory noise limits. The FAA's air traffic control (ATC) is charged with the safe and efficient use of the National Airspace System (NAS) and is solely responsible for determining when particular flight procedures are utilized. Although ATC assigns the flight track and altitude, the pilot maintains the authority to make the final judgment due to safety.</p> <p>The altitude at which pilots fly aircraft when departing from or arriving to TEB primarily depends on the presence of other aircraft in the immediately surrounding airspace. This airspace may be shared by operations to and from other airports in the vicinity. Unrestricted departures (continuous climb from the runway to cruise altitude) are most beneficial in terms of minimizing noise. However, this is often not feasible because of the need to avoid other aircraft. The FAA may hold departing aircraft at specific altitudes in the airspace to avoid other aircraft and flight procedures in the immediately surrounding airspace. On a 3-</p>

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					<p>hear another human being standing outside. [D So albeit, I understand the complexities of not being able to necessarily say you can't fly here and not this time, maybe it's taking certain jets out of Teterboro where you -- they have a higher noise or it is definitely lessening the amount of traffic and especially through the evenings.] And you know, that would pretty much conclude, you know, my statements about how we feel and how it difficult it is for us to live under these conditions. Thank you.</p>	<p>degree glideslope approach, which is an industry standard for safe operations, aircraft altitudes steadily decrease as the aircraft approaches the runway. Descending from cruise altitude to a runway on this glideslope is most beneficial in terms of minimizing noise. However, continuous descent is often not feasible; the FAA may hold arriving aircraft at specific altitudes to avoid other aircraft in the immediately surrounding airspace.</p> <p>C- The comment regarding health effects is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Because matters relating to the health impacts of aircraft noise are outside the scope of a Part 150 Study, the TEB NCP does not address such matters. For information on health effects of noise please refer to <i>Topic Specific Response #3 – Health Effects and Other Environmental Concerns</i>.</p> <p>D- The comment regarding access restrictions is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. As a result of the Airport Noise and Capacity Act of 1990 (ANCA), the Port Authority cannot establish additional operational restrictions on certain aircraft in flight except by request through 14 CFR Part 161 of the FAA's regulations. Part 161 establishes very rigorous analysis, notice, documentation, application, and approval processes. Obtaining FAA approval of a use restriction would require demonstrating that the noise-related benefits of the restriction would exceed the costs to all</p>

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						potentially affected parties (e.g., aircraft operators, the airport, aircraft passengers, businesses benefiting from the operations, etc.). FAA only considers the noise benefit within the 65 dB DNL contour and only after other mitigation methods have not eliminated noncompatible land use. In addition, as a condition of obtaining federal grants from the FAA to support the operation of TEB, the Port Authority is required to always provide aircraft operators access to TEB 24 hours a day. For information about restrictions on the use of TEB and use of flight procedures, please refer to <i>Topic Specific Response #2 – Airport Access Restrictions</i> .
10.1	Warren	Feldman	General Public (Hearing)	Increase in Operations, and FAA RNAV (GPS) X RWY 19 Offset Approach	Okay. I wanted to make observations about the experience that we have a bit further north, about 13 miles north in Woodcliff Lake. The -- regarding the flight path into Teterboro. I know it's outside the immediate area of the airport and I certainly understand the consequences of the flight path over Maywood and coming onto Runway 1-9 into Hackensack into that immediate area. [A I just wanted to observe that from our	A- The comment regarding the increase in air traffic at TEB is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. The increase in air traffic at TEB since 2020 is attributable to a variety of factors, including the reopening of businesses and increased in-person meetings as threats associated with the COVID-19 pandemic subside. Periodic increases in volume may also be attributable to changing weather conditions and conflicts with EWR traffic. The Port Authority anticipates that an updated Fly Quiet Program at TEB will increase the usage of existing and future noise abatement procedures such as the FAA RNAV (GPS) X RWY 19 offset approach.

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					vantage point, a bit further north we -- we're sensitive to the path that the jets are taking and the volume that -- and the pickup in volume over the last -- over the last six months or so. It seems that there are a lot of factors that effect this, but we were -- we -- what we -- I did want to simply record that again. The volume has picked up. I understand that there's factors related to Newark Airport, factors related to wind direction and most importantly, that -- that the -- that there is a higher demand with COVID and so forth. We're hoping that the -- that the reviews being undertaken will -- will enable the alternative flight path over Route 17 to be given some use to create some relief for this area.] That's about my comments at this point. Thank you.	
11.1	John	Brown	General Public (Hearing)	Runway 19 Approach, Flight Frequency, FAA RNAV (GPS) X RWY 19 Offset Approach,	Yes. John Brown, B-R-O-W-N. And I reside at 41 Stelling Avenue and that's in Maywood, New Jersey. Okay. I just have one additional comment. The	A- The comment regarding the flight concentration is acknowledged and memorialized in this Appendix F, <i>Public Comments</i> , of the TEB NCP. TEB is in a very congested airspace. For safety of operations, arrivals to TEB Runway 19 (other than those using the FAA RNAV (GPS) X RWY 19

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				and Fly Quiet Program	<p>definition of the problem and the subsequent solutions concerning noise abatement, is that -- is that which is flawed. In other words, that's the problem. In view of the public comments that you've heard tonight. [A It's really the concentrated number of flights in a very narrow funneled straight line approach to Runway 19] and [B It's the frequency of those flights, that's the issue.] [C Now, if you look at page 229 of your NCP, figure 210, it clearly gives you a visual evident -- evidence of that problem. Your offset approach solution it never had a chance of succeeding, especially with the night only, clear visibility and non-mandatory rules.] [A It's the cumulative effect of the non-relenting stream of low altitude corporate jets that is the cause of concern.] And I think you have to redefine what the problem is and seek a better solution. Thank you.</p>	<p>offset approach) need to align with the runway centerline as soon as they can, resulting in concentration of flight tracks. Also, aircraft on approach generally line up on similar routes so they can be sequenced safely by the FAA to the runway to land. When an offset approach is available and feasible, aircraft will follow the offset approach procedure until intercepting the extended centerline of the runway. The NCP considered several approach paths with the potential to reduce noncompatible land use around TEB but did not recommend any that would have shifted or moved noise from one area of noncompatible land uses to another without a net reduction of noncompatible land use. As this would be inconsistent with the requirements in FAA's Part 150 regulations to develop a Noise Compatibility Program that "reduces existing noncompatible uses and prevents or reduces the probability of the establishment of additional noncompatible uses.". Recommended Noise Abatement Measure 5 (Implement an Offset Approach Procedure to Runway 6) and Measure 6 (Implement a Published Approach Procedure to Runway 1 and Increase Usage at Night) would increase arrivals over compatible land use if approved and implemented by FAA.</p> <p>B- The comment regarding flight frequency is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. Flight schedules and general frequency of flights are largely driven by operator demand, weather, local market demographics, number of nearby airports and other factors. Neither the Port Authority nor the FAA determine flight</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
						<p>schedules. The runway and flight path that an aircraft uses at TEB are determined primarily by wind direction, other weather conditions, origin/destination of flight, and efficiency of traffic flows.</p> <p>C- The comment regarding the Noise Abatement Measure 4 is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. TEB Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19) is a proposed offset Instrument Landing System (ILS) procedure to Runway 19. Because it could be designed as an instrument approach, pilots could use it at night and in reduced visibility conditions. Aircraft utilizing this measure would approach the runway along a notional straight line that is approximately 20 degrees from the runway centerline which could shift some approaching aircraft over less densely populated areas rather than approaching the runway directly in line with the centerline. TEB Noise Abatement Measure 4 does not reduce noncompatible land use within the 65 DNL contour. The Port Authority is recommending TEB Noise Abatement Measure 4 for inclusion in the TEB NCP because it (a) could reduce overflights and noise levels over the Hackensack University Medical Center by shifting aircraft to an arrival path along the New Jersey State Highway 17 corridor with lower population density; and (b) has the potential to reduce overflights and noise over densely populated areas north of TEB. RNAV (GPS) X RWY 19 is similar to <i>NCP Noise Abatement Measure 4 (Implement an Offset Approach Procedure to Runway 19)</i>; however, it</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
						<p>is GPS based (not an instrument landing system procedure as recommended in Noise Abatement Measure 4) and follows a slightly different route to Runway 19 than the notional procedure depicted in Noise Abatement Measure 4 The Port Authority anticipates that an updated Fly Quiet Program at TEB will increase the usage of existing and future noise abatement procedures. Such programs have been implemented successfully at TEB and other airports in the United States to reduce noise effects. The Fly Quiet Program at TEB is a voluntary collaboration of the airport proprietor, aircraft operators, and air traffic controllers that encourages pilots and air traffic controllers to use noise abatement flight procedures. (see Program Management Measure 8 (Establish and Manage a Fly Quiet Program))</p>

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
12.1	Karen	Stichauner	General Public (Hearing)	Scope of the Part 150	<p>Sure. It's Karen M. Stichauner. Do you need me to spell it? It's S-T-I-C-H-A-U-N-E-R. Mr. Brown is very well spoken and very much has his finger on the pulse of what the problem is for all of us that are so close to Teterboro Airport. In addition to that, you know, just to put the thought in everyone's head is that everyone at the airport, everyone on the plane, they all get to go home. We are home. We have no place to go. We have nowhere to reside where we can have peace, we actually will have to leave our homes to find that. And I think that if you take that and you really digest that, it brings to light the severity and -- of this problem and what we as surrounding towns and as we get closer to you, meaning Teterboro Airport have to deal with and how difficult that is for us. Again, I am not someone who would ever complain, I am not -- just not that person. I also am not someone who doesn't believe in thriving business as I do. So I do want this to work for everyone, but there needs to be</p>	<p>The comment regarding the Part 150 process is acknowledged and memorialized in this Appendix F, <i>Public Comments</i>, of the TEB NCP. The Port Authority understands that noise affects individuals differently and is committed to working with the members of the community to help address their noise concerns both within and outside the regulatory confines of 14 CFR Part 150.</p> <p>The Federal Aviation Administration (FAA) regulations on Airport Noise Compatibility Planning (set forth at Title 14, Part 150 of the Code of Federal Regulations) provide airport sponsors with a process for addressing airport noise and noncompatible land uses. Land uses such as residential, schools, hospitals and places of worship are considered noncompatible with aircraft noise levels greater than 65 dB in terms of the Day-Night Average Sound Level (DNL). These land uses and compatibility determinations for other land uses can be determined by using the thresholds identified adopted in the TEB Noise Exposure Map (NEM) (Table 3-1) which references Appendix A Table 1 of 14 CFR Part 150. FAA considers all land uses exposed to aircraft noise less than DNL 65 dB to be compatible. Title 14 CFR Part 150 establishes a voluntary process to be undertaken by the airport sponsor, and is limited to the efforts required to produce the following two documents:</p> <ol style="list-style-type: none"> 1) Noise Exposure Map (NEM) – Documentation including maps that depict both aircraft noise exposure contours and the land uses around an airport and identify land uses that are noncompatible with aircraft noise exposure of 65 DNL and above. The NEMs include a baseline map displaying the modelled current conditions and a map displaying the modelled future conditions at least 5 years after the baseline

ID	First Name	Last Name	Commenter Type & Source	Topic(s)	Comment	Response
					<p>a better solution and I think that people need to see this in a way as if they are the people in these homes that cannot leave.</p> <p>Whether it's my sick parent that can't leave, if it's my child who can't get sleep because they -- the planes are going crazy that night and it just doesn't stop and we want to have our windows open and now it effects their schoolwork. Or whether it's myself and I have to be at work and I just can't focus because I haven't slept or I wanted to be outside with my family on a holiday but can't do that because there's a game at Giants Stadium and all the players may be coming in. And you know, again I get the convenience and I understand and just so everyone sees it from another point of view and maybe we can work this out together that is beneficial for everybody. And again thank you for your time.</p>	<p>map. The NEM serves as the baseline against which measures to improve land use compatibility is compared during the second phase of the Part 150 Study. The NEM documentation for TEB can be obtained here (http://www.panynjpart150.com/TEB_FNEM.asp).</p> <p>2) Noise Compatibility Program (NCP) – Port Authority-recommended measures to address noncompatible land use as documented in the NEM. These measures are summarized in the NCP and may include, for example, new or modified aircraft flight procedures and the installation of sound insulation treatment at noise sensitive structures. NCP measures must be reasonably consistent with achieving the goals of (a) reducing or mitigating the effect(s) on existing noncompatible land uses around the airport, and (b) preventing the introduction of additional noncompatible land uses. Likewise, NCP measures must not unduly burden interstate commerce, discriminate unjustly, reduce the level of aviation safety, adversely affect efficient use of the navigable airspace, or adversely affect any other powers or responsibilities of the FAA. Please also refer to the response to Comment 9.1.</p>

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Appendix F.4

Written Material Submitted to Operator

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JAMES J. WYSOCKI
Mayor

Township Of Mahwah

Municipal Offices: 475 Corporate Drive
P.O. Box 733 • Mahwah, NJ 07430

Tel 201-529-5757 x 267
Fax 201-529-0061
jwysocki@mahwahtwp.org

1

October 15, 2021

The Port Authority of New York & New Jersey,
4 World Trade Center,
150 Greenwich Street, 18th Floor,
New York, NY 10007,
Attn: Ayo Olanipekun
Via certified mail & email - NJPART150@panynj.gov.

Dear Mr. Olanipekun,

1.1

My name is Jim Wysocki, I am the Mayor of Mahwah, New Jersey – and on behalf of myself, the Township Council, and our more than 25,000 residents, I write to you today to express my deep concern to the changes to the flight pattern and approach implemented for Teterboro Airport, which is now directly impacting the Township of Mahwah.

More planes are flying over Mahwah than ever before, destroying our residents' quality of life due to constant noise from jets passing through every 3-5 minutes from Teterboro Airport, one of the busiest U.S. airports for private planes and general aviation. This issue can and must be addressed by sharing airflow traffic across alternate flight patterns or by creating additional flight patterns through other locations.

Residents living within the RNAV RWY 19 zone do not get a break from constant air traffic, which is highest between 5-8 p.m. and heaviest on Fridays and Sundays. Residents cannot enjoy their backyards or relax after work and on weekends due to this loud, constant noise intrusion. The Voluntary Quiet Fly Program is not enough to solve this problem.

1.2

The Final Environmental Assessment conducted by the FAA was arbitrary and capricious because it failed to consider the noise impact for the more than 25,000 residents of Mahwah. The Assessment states:

“The FAA originally proposed an APE encompassing all of Bergen County, which in hindsight was much too large based on the potential noise impact.”

As a result of this mistake, the Township and its residents in the immediate flight path were never taken into consideration, even though the Assessment indicates that in the Proposed Action Alternative that an estimated 34.5% of air traffic to Teterboro is going through Mahwah at an elevation change from 3,000 to around 2,000 feet.

The Assessment methodology is flawed because it excludes communities, like Mahwah, along the Route 17 corridor that are less than 20 miles away from the airport. Courts have held that omitting aspects of an Environmental Impact Statement, and the failure to follow the National Environmental Policy Act, invalidate environmental assessments. As a result, Courts have required that the FAA reevaluate flight paths.

The same result should occur here. We believe there is a substantial dispute over the degree, extent, and/or nature of the proposed action's environmental impacts that the amended arrival routes would cause, requiring a complete noise impact study to be performed over the densely populated areas of the Township of Mahwah. NEPA requires the FAA and other federal agencies evaluate and disclose the environmental impacts of their actions. See 42 U.S.C. § 4332. The NEPA process is intended to ensure that "before an agency can act," the agency considers potential environmental impacts. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349, 353 (1989). We are very concerned that the FAA did not properly consider all relevant facts. See Lands Council v. Powell, 395 F.3d 1019, 1030 (9th Cir. 2005). We request the FAA toll the statutory petition-for-review deadline so the Township and the FAA can work together to address the environmental concerns.

1.3

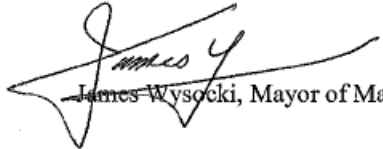
The Teterboro Aircraft Noise Abatement Advisory Committee (TANAAC), is comprised of locally elected officials. Pursuant to its bylaws, the Committee represents the interests of the population that is located within the airport traffic area, which has been five miles within the radius of the airport. The TANAAC membership makes recommendations that will enhance the quality of life for residents living within the airport traffic area. The membership should be expanded to include municipalities and communities along the Route 17 corridor or flight path so we can have a voice as well. TANAAC should welcome this additional membership so that the impacts of the airport to all residents of Bergen County are accounted for, not just those in the immediate surrounding areas.

The Assessment states that Teterboro Airport's operator "has a longstanding partnership with the surrounding community to proactively address noise issues." Hackensack appears to have benefited from this partnership by successfully moving waypoints to the west away from its residents. However, Hackensack's win has now become Mahwah's burden.

The Township of Mahwah would like a seat at the table and an amendment to the membership. We want to invite all communities in Bergen County to participate as members of the TANAAC. We note that the TANAAC initiated the change in flight path and works with the FAA.

Mahwah residents have filed their own complaints with Teterboro Airport and the FAA. On behalf of the Township, we implore you to work with us, and the surrounding municipalities, to “proactively address” and alleviate this critical quality-of-life issue. In the spirit of continued collaboration, we ask you to work with the Township of Mahwah and residents along the new RNAV RWY 19 to decrease the frequent noise and disruption that is threatening our way of life.

Respectfully,



James Wysocki, Mayor of Mahwah

**Note: Elected Officials
Comments 2 & 3 are part
of the Public Hearing
Transcript**

4

From: Nicola Ferguson <nicola.ferguson@gmail.com>
Sent: Friday, October 15, 2021 10:21:21 AM
To: NJPART150STUDIES <NJPART150STUDIES@panynj.gov>
Subject: Re: EWR & TEB Airports Part 150 Studies Program Manager

CAUTION: This email originated from outside the Port Authority. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello,

Thanks. I have listened to most of the presentation. Will finish up over the weekend, but wanted to get this email in before comments are closed.

4.1

My biggest concerns are the frequency of flights, the altitude, the noise, and the exhaust as these flights approach Teterboro Airport. On weekdays flights, flying over my local neighborhood, are as frequent as every 4 minutes, and it is loud. At times you feel under siege from all the noise. Furthermore, I can read the underbelly writing on the planes carriage as the planes are flying near the tree line over my home. These planes are so close that when they do pass over you can smell the emissions. Inhaling jetfuel is not what I signed up for, and it is very bad for your health. Has the Port Authority invited OSHA do investigate this as it is hazardous to the publics health? Again I ask why to these planes need to follow the ridge line in Rutherford to access runways in TEB? Why is it that the meadowlands are not used for an approach to the airport, which is less residential. I get that the rich people do not want to fly commercial, especially now during a pandemic. I understand that a whole industry has been built around the private aviation industry. These wealthy people must have private planes to fly to their vacation homes, and access to private planes as they fly to their next big deal, but why is it that the residents of Rutherford, and Lyndhurst have to suffer in multiple ways when these people don't even reside in these areas, and will never fathom what it is like to endure their frivolous ways of living, or consider the environmental impact of their lifestyle choices.

Many thanks

Nicola Ferguson
78 Addison Ave
Rutherford new Jersey 07070

Contact information is in the signature.

Nicola Ferguson



DISTRICT MANAGER
Independent Consultant for Arbonne International
<http://NicolaFerguson.arbonne.com>
Consultant ID: 22279507
nicola.ferguson@gmail.com
[land] 201-933-3781
[mobile] 201-456-2290

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The Port Authority of New York & New Jersey
World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007

Attention: Ayo Olanipekun

5

Below and on the attached WORD Document are my project comments regarding the Draft Noise Compatibility Program (NCP) for Teterboro Airport dated September 30, 2021. Please include these as part of the official record of public comments.

John F. Brown

41 Stelling Avenue

Maywood, New Jersey 07607

john.brown234@verizon.net

5.1

As a concerned citizen and resident of Maywood, New Jersey, I offer the following criticism and suggestions with regard to the draft Noise Compatibility Program (NCP) for Teterboro Airport dated October 2021, specifically Measure 4, Offset Approach To Runway 19. Furthermore, my comments are based upon:

1. Information provided at the Virtual Public Information workshop and Public Hearing on September 30, 2021
2. Published presentations and minutes from various TANAAC meetings
3. Personal observation from my home at 41 Stelling Avenue in Maywood, New Jersey, situated 3.6 miles directly north of Runway 19.

Definition of Problem -

Confining the area of noise abatement to the Hackensack University Medical Center (HUMC) and the immediate surrounding vicinity is flawed. The problem of noise from flights using the direct straight in approach to runways 1 -19 is far more sizable. Based upon public comments¹ and the number of communities and individuals within Bergen County registering noise complaints², this should be abundantly clear even to the casual observer. A broader definition is required if the problem has any chance of meeting the public's needs.

5.2

Redefining the Problem -

As stated regarding it's role during a TANAAC Meeting³ the Federal Aviation Administration (FAA) "supports the Port Authority and TANAAC request to move some Runway #19 arrivals away from the HUMC and nearby high-rise buildings by creating an alternate to the primary ILS approach and having aircraft fly an offset approach roughly above State Highway 17." However, this alone is not nearly enough to solve the problem as the residents on the ground below view it to be.

The problem can be clearly defined by looking at the concentrated volume of air traffic on the NCP's Figure 2-10 (page 2-39)⁴. This highly funneled approach to the airport has led to a constant non-relenting series of flights treading on the quality of life for those below. Aligning that image with the location of noise complaints redefines the area which should be addressed as not merely the HUMC proximity.

Nowhere in the NCP is there a clearly defined quantitative goal set for this project. Merely stating that you are trying to reduce traffic over the HUMC opens up a myriad of claimed triumphs. One should expect a goal which is both measurable and consistent with the intent of the project. Whether it is to reduce flights by a certain percentage or the noise level by a defined decibel reading, one is left guessing.

¹ Virtual Public Meeting September 30, 2021

² TANAAC Jan 27, 2020 Presentation, pages 10 through 12 (pre pandemic)

³ TANAAC Meeting Minutes Oct 13, 2019 pg. 3-4

⁴ Teterboro Airport Title 14 Code of Federal Regulations (CFR) Part 150 Draft Noise Compatibility Program September 2021

5.3 Measure #4 Designed To Fail –

The Offset Approach to Runway #19 in its current configuration will not succeed in abating noise at the HUMC in any appreciable manner. While conceptually, the redirecting of flights over State Highway 17 has the ability to substantially reduce both the noise and number of flights which overfly the hospital's air space, it is the implementation of the plan that will cause its demise. "The new procedure will not be available for use during periods of poor weather, low visibility or high traffic volume due to complexity of the airspace and air traffic controller workload. The best opportunity for the alternative approach procedure to be used is during the overnight hours when air traffic demand and complexity for the New York and New Jersey metropolitan area is reduced." ⁵ It had been estimated that about 34% of the flights would be using the alternative approach⁶. I highly doubt that this take rate would ever be achieved because of the following limitations; 1) this approach would predominately be used during night hours. That was restated at the question and answer segment of the public hearing on September 30, 2021 and quoted directly above. Only approximately 5% of total flights into Teterboro occur during the night hours.⁷ 2) The offset approach would only be used during non-weather restricted times, which I have interpreted as being clear visual flight landing conditions. No statistics have been shown to the public as to what percentage of flight time this occurs in Northern New Jersey. Needless to say, that would be something more than 0% and would further reduce the potential flights being capable of using this approach. 3) Finally, giving the pilots discretionary power over which approach to use is somewhat predictable. Given the choice of using the current straight in line with runway approach vs. one which requires various manipulations and angles for landing is not a hard choice especially if that pilot is use to and has been using the established approach. It is human nature to stick to the known which I predict will be adhered to.

Quantifying the Effect –

Using the above information, in conjunction with other data provided in several TANAAC reports, I have attempted to determine the magnitude or quantity of flights that would be moved using Measure #4. With over 80,000 aircraft arrivals during 2019 (non-pandemic) year and approximately 50% of those arrivals utilizing Runway #19, one would expect 40,000 flights as potential for offset inclusion.⁸ With only 5% of those flights occurring during night time operations, this figure would be further reduced to 2,000 per year. Without even attempting to factor in weather related restrictions or pilot's discretionary choice, this would remove less than one flight per hour from the HUMC airspace, an effect that would hardly be noticed. This is clearly was not what the officials had envisioned when first proposed.

5.4 The Missing Solution –

A somewhat obvious solution to this problem revealed itself during the Covid 19 pandemic. If there was one silver lining during that period of time, it was that the air traffic utilizing Teterboro Airport diminished by approximately 50%. A noticeable reduction of noise correlated to this particular event as observed by the

⁵ FAA Website [Community Engagement — Teterboro, NJ \(faa.gov\)](https://www.faa.gov/communityengagement/teterboro) Jul 27, 2021 Update

⁶ TANAAC Meeting Minutes Jan 22, 2020 pg. 4 in response to a question.

⁷ TANAAC Meeting Presentation Jul 24, 2019 pg. 10 based upon 5 years of historical data

⁸ TANAAC Presentation Jan 22, 2020 pg. 9 Runway Utilization – Full Year 2019

author. Restricting the traffic from using either the airport or this approach over northern Bergen County is not a solution that has been given any credence in this NCP. Realizing and understanding the economic impact that this might bring to the area and how unpopular it would be to the aviation community in general, it never the less deserves to be given careful consideration and not dismissed as simply “too difficult” to achieve. With all the effort, money, delays and ineffectiveness that have come with Measure #4, it is time act.

5.5

More than Decibels –

I don’t believe that the individual sound level estimates are necessarily indicative of what the complainants are experiencing. Furthermore, those estimates derived from models do not provide hard quantitative evidence for this report. No effort was made to record levels along the funnel of flights heading south into Runway #19 with the exception of the reading from the few stations in close proximity to the airport. Why is it assumed that the level of noise in this area is less than what the stations measure? Might air craft several miles out be at power levels above that which they are at when about to land (i.e. in throttle down or cruise mode)? When numerous people report not being able to have conversations in their backyards (including me), that indicates levels above 60 db.⁹

While not part of this study, but something that should not be overlooked is the impact of other flights crossing overhead, specifically flights approaching from the west and curving to their Newark Airport destination. While higher in altitude these jets are substantially larger and contribute to the noise landscape.

Listening to and reading issues from Bergen County residents along with my personal encounters, it is not just the noise level but the repetitiveness which is cause of our concerns. The flow of traffic from above is so concentrated that there is hardly any ebb in that noise. Teterboro Airport infringes on our quality of life.

Summary -

“The purpose of the Proposed Action is to address the concerns of the community related to air traffic control (ATC) procedures at the Teterboro Airport by developing arrival procedures that take advantage of modern technology.”¹⁰ The action of Measure #4 in the NCP regarding the offset approach has failed in both defining and solving the issues for the community at large.

⁹ Public Workshop for Draft Environmental Assessment for the RNAV (GPS) RWY 19 Offset Procedure at Teterboro Airport the https://www.faa.gov/air_traffic/community_involvement/teb/ - pg. 7

¹⁰ Public Workshop for Draft Environmental Assessment for the RNAV (GPS) RWY 19 Offset Procedure at Teterboro Airport the https://www.faa.gov/air_traffic/community_involvement/teb/ pg. 5

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2 **P R O C E E D I N G S**

3 MR. WALSH: Good evening. On
4 behalf of the Port Authority of New York and
5 New Jersey, welcome to the virtual public
6 hearing for the Teterboro Airport Part 150
7 Study Draft Noise Compatibility Program or NCP.

8 Today's hearing will start
9 with opening remarks followed by a comment
10 session for the public record. Oral comments
11 will be accepted during the comment session
12 from preregistered participants. You can
13 register to speak at any time until 9:00 p.m.
14 via the Q&A which can be accessed by clicking
15 the button at the bottom of your screen.

16 Today's hearing is being
17 recorded for Port Authority record keeping
18 purposes only.

19 If you are experiencing
20 technical issues, you can contact the technical
21 team via the Q & A function.

22 We have optimized webinar
23 settings to have all attendees in gallery view.
24 While you have the option to change your view
25 settings in Zoom, we recommend you do not

2 adjust it as we have set it currently for the
3 best viewing experience.

4 I will pause for a moment to
5 give anyone having technical issues a chance to
6 contact us via the Q & A.

7 Now I would like to introduce
8 Ayo Olanipekun from the Port Authority of New
9 York and New Jersey.

10 MR. OLANIPEKUN: Good
11 evening. My name is Ayo Olanipekun and I'm the
12 program manager for the Part 150 studies for
13 Teterboro and Newark Liberty International
14 Airports.

15 I would like to thank
16 everyone for taking the time to be with us
17 today for the Teterboro Airport Part 150 Study
18 Draft Noise Compatibility Program or NCP public
19 hearing.

20 The Teterboro Airport Part
21 150 study has been ongoing since 2015, reaching
22 its key milestones of the acceptance the funnel
23 noise exposure maps or NEMs in 2017. And now
24 the public release of the draft noise
25 compatibility program document, or NCP in

2 September 2021.

3 In a few moments, we will
4 begin the public hearing for Teterboro's draft
5 NCPs recommended noise abatement, land use and
6 programmatic measures. The Port Authority is
7 recommending for inclusion in the Teterboro
8 Airport final NCP for submittal to the FAA for
9 review and approval.

10 The Port Authority would like
11 to extend a special thank you to the FAA for
12 their ongoing involvement and support
13 throughout this study's process. We would also
14 like to thank all the agencies, organizations,
15 elected officials, community boards and
16 community groups for the involvement with the
17 Teterboro Airport Part 150 Study.

18 Our public comment period is
19 open until October 15th and there are a number
20 of ways you can submit comments as shown on
21 your screen. All comments must be postmarked
22 by October 15th to be included as part of the
23 official project record. All of these comments
24 will be considered equally by the Port
25 Authority and FAA, regardless of how they were

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1-844-MGR-RPTG



2 submitted.

3 I will now turn the hearing
4 over to our moderator to begin the public
5 comment portion of this hearing.

6 MS. AHLFELD: Good evening.
7 My name is Kristen Ahlfeld I will be your
8 moderator for the public comment portion of
9 this hearing. I would like to go over some
10 ground rules before we begin to hear public
11 comments.

12 Each registered speaker will
13 be allowed three minutes to provide their
14 comments. If you would like to speak but have
15 not registered please make that request by
16 9:00 p.m. through the Zoom Q & A function
17 located at the bottom of your screen. Please
18 note that we will not be responding to comments
19 or questions during this hearing, but all
20 comments submitted will become part of the
21 official project record and responses will be
22 included in the Teterboro Airport Final Noise
23 Compatibility Program.

24 I ask that you please address
25 your comments to the subject at hand, which is

2 the Teterboro Airport Part 150 Study or the
3 measures included in the draft noise
4 compatibility program.

5 Please use respectful
6 language in all communications as our technical
7 host reserves the right to mute or remove
8 participants that violate the standards of
9 conduct.

10 As previously mentioned,
11 there are several ways to make official project
12 comments. In addition to providing oral
13 comments this evening, you can also send
14 written comments to the email and mailing
15 addresses shown on the screen right now. All
16 comments will be considered equally by the Port
17 Authority and the FAA, regardless of how they
18 were submitted.

19 I will be calling the names
20 of those who have registered to speak in the
21 order of registration. Elected officials will
22 be offered the opportunity to speak first. We
23 will post the name of the next group of five
24 speakers in the chat.

25 Please turn this function on

2 so you can see when your turn is coming up.
3 You can access the chat by clicking on the chat
4 button in your Zoom toolbar.

5 You can register to speak at
6 any time until 9:00 p.m. by typing your speaker
7 request in the Q & A. When your name is
8 called, your microphone will be unmuted by the
9 meeting host. Please allow a moment for that
10 to occur and please have your microphone volume
11 up. I will then ask you to state your full
12 name, spell your last name and then state your
13 affiliation for the project record.

14 After that -- after that I
15 will begin to time your statement. As a
16 reminder, we will be limiting comments to three
17 minutes. Your remaining time will be shown on
18 the screen and I will let you know when your
19 time is up.

20 The comment portion of this
21 hearing lasts until 9:00 p.m. However, if
22 speakers are still waiting as the time
23 approaches, we will try to accommodate them as
24 needed.

25 I will now begin calling our

2 preregistered speakers.

3 There it is. Okay.

4 Okay. Our first -- our next

5 few speakers will be Councilwoman Jacquie

6 Gadaleta, next is Al Ballerini. After that

7 John Brown, Warren Feldman and Rosy Ferrera.

8 Councilwoman Gadaleta, you

9 are our next speaker and we will now unmute

10 you.

11 Councilwoman Gadaleta, are

12 you with us this evening?

13 (No response.)

14 MS. AHLFELD: Okay. We'll

15 come back to her if she does join us.

16 So our next speaker is going

17 to be Al Ballerini.

18 Mr. Ballerini, are you there?

19 (No response.)

20 MS. AHLFELD: Okay. Okay.

21 So our next speaker is John Brown.

22 MR. BROWN: I'm here.

23 MS. AHLFELD: Great. And we

24 can hear you.

25 So can you -- Mr. Brown, can

2 you please state your first and last name?

3 MR. BROWN: Will do.

4 MS. AHLFELD: Great -- sorry.

5 And then spell your last name for the record.

6 MR. BROWN: Yes.

6

7 MS. AHLFELD: Sorry.

8 MR. BROWN: My name is John

6.1

9 brown, B-R-O-W-N. I reside at 41 Stelling
10 Avenue in Maywood, New Jersey on the border of
11 Paramus.

12 If you would like to know
13 where my house is, take a straight edge and
14 draw a line down Runway 119, go three and a
15 half miles north and you will bisect my house.
16 So I obviously have an interest in this.

17 So I have several comments.
18 Particularly regarding Measure 4 which is on
19 page 237 of your document. It's the
20 implementation of the offset approach --
21 procedure rather to Runway 19. Excuse me.

22 First point has to do with
23 time. This approach or this measure was first
24 started in 2007. That was 14 years ago. And
25 just to put this in perspective, 1 World Trade

2 Center took eight years to build and the Empire
3 State Building took a year and a half. And to
4 call this slow moving or glacial speed would be
5 an insult to glaciers. This is way too long
6 and way overdue. First point.

7 Secondly, it's come to my
8 knowledge or attention particularly in the past
9 eighteen months, if there was one thing
10 positive about the pandemic is that I realize
11 that there was a dramatic change in my life in
12 the fact that I don't have to listen to jets
13 fly overhead every two minutes.

14 And the obvious solution, and
15 I don't think it's one that's been given any
16 proper attention is that if you want to reduce
17 noise and you don't have any other way of doing
18 it, then you gotta consider reducing traffic.
19 Okay.

20 Again, reduce noise by
21 reducing the volume of traffic. And I know
22 this is unpopular with the aviation community.
23 There are economic reasons that you wouldn't
24 want to do this. But let's face it, most of
25 the flights that are coming in to this airport,

2 Teterboro, are for convenience and they're not
3 necessary. There are commercial flights that
4 could take these people to wherever they want
5 to go. But the convenience of being a few
6 miles from Manhattan is the reason why they
7 take them.

8 My next point is that this
9 issue, particularly the Measure 4, was really
10 originally because Hackensack Hospital was in
11 the flight path and it was to reduce the noise
12 over that hospital.

13 MS. AHLFELD: Mr. Brown, can
14 you start wrapping up please?

15 MR. BROWN: Yes, I will.

16 The concentrated volume as
17 seen on 2-10 of Learjets and Gulfstreams flying
18 over a very narrow funnel is a different
19 problem and I think that's one that needs to be
20 approached. Thank you.

21 MS. AHLFELD: Thank you for
22 your comments.

23 Our next two speakers are
24 Warren Feldman and then Rosy Ferrera.

25 Mr. Feldman, are you here?

2 (No response.)

3 MS. AHLFELD: Okay. Doesn't
4 look like we have him either.

5 Rosy Ferrera, you're our next
6 speaker.

7 MS. FERRERA: I'm here.

8 MS. AHLFELD: Great. Okay.
9 Can you please state your first and last name
10 and then spell your last name for the record
11 please.

7

12 MS. FERRERA: Sure. My name
13 is Rosy Ferrera. F as in Frank, E-R-R-E-R-A.

7.1

14 MS. AHLFELD: Great. You can
15 now proceed with your comments.

16 MS. FERRERA: Thank you. I
17 am a resident of Maywood as well. I live on
18 Palmer Avenue. I would like to say that I
19 agree completely with everything Mr. John Brown
20 has just said.

21 I've been living in the area
22 for seven years now, and every year the noise
23 level from these airplanes just keeps getting
24 worse and worse. And I guess the pandemic has
25 made it a lot more noticeable or maybe the

2 traffic has just increased a lot more because
3 of it and I think -- feel like there is a
4 highway living -- or just highway traffic above
5 my home.

6 I can't sit outside and have
7 a conversation with anyone because of the
8 airplane noise and it's just gotten really bad.
9 I feel like people with children in the
10 neighborhood -- and I mean, it's just horrible
11 and I am considering moving out of the
12 neighborhood because of it.

13 And I think I saw something
14 in the proposal that said that the flight path
15 would be -- it's optional for pilots to take
16 Route 17 and I just don't understand how that
17 is something that would work, if it's optional.
18 If someone is used to taking a certain route
19 for as long as they've been flying over this
20 neighborhood, I don't understand why they would
21 take another route.

22 So I agree with Mr. John
23 Brown, if you want to reduce the noise level
24 then you should also considering reducing the
25 amount of traffic. Thank you.

2 MS. AHLFELD: Thank you.

3 Thank you for your comments.

4 Our next two speakers are

5 Mike Pesanello and Yolanda Monique.

6 Mr. Pesanello, do we have

7 you?

8 (No response.)

9 MS. AHLFELD: Okay. Our next
10 speaker is Yolanda Monique.

11 (No response.)

12 MS. AHLFELD: Okay. Doesn't
13 look like we have her either.

14 Okay. Let me just go back
15 and make sure that some of the other ones --
16 other speakers or preregistered speakers that
17 we had didn't -- didn't show up.

18 Do we have Councilwoman
19 Jacquie Gadaleta?

20 (No response.)

21 MS. AHLFELD: Or Al
22 Ballerini?

23 (No response.)

24 MS. AHLFELD: If you are on
25 the phone hit *9 to raise your hand on the

2 phone.

3 Okay. Well, Mr. Pesanello,
4 are you there? We've unmuted you.

5 MR. PESANELLO: Yeah. I'm
6 here.

7 MS. AHLFELD: Great.

8 MR. PESANELLO: It's Mike
9 Pesanello. You need the address?

10 MS. AHLFELD: No, I don't
11 need your address. I just need you to spell
12 your last name for the -- state your first and
13 last name and then spell your last name for the
14 record please.

8

15 MR. PESANELLO: So it's Mike
16 Pesanello, P-E-S-A-N-E-L-L-O.

8.1

17 I'm just commenting on the
18 fact that we've been here awhile. I was
19 involved with some questions in the first
20 session.

21 But you know, as of July 1st,
22 actually the week before, we were just curious
23 when this new implementation from the Runway 19
24 approach came.

25 We're just curious to why the

2 flight path changed so much. Where -- you know
3 again, we've been in this house a long time.
4 Our neighbors have all noticed it, we just
5 don't know why -- there doesn't seem to be any
6 notice that the planes were supposed to go this
7 way but they all seem to come over our
8 neighborhood on arrival.

9 So that was just a question
10 we had, it doesn't seem like -- I asked in the
11 first session, we couldn't get it some other
12 way, I just wanted to put that in, so...

13 MS. AHLFELD: Okay.

14 MR. PESANELLO: And I'm sure
15 no one can answer it. Because no one could
16 before.

17 MS. AHLFELD: This is --
18 right now we're having a listening session.

19 MR. PESANELLO: Yeah.

20 MS. AHLFELD: I would
21 encourage you to please -- if you have
22 additional questions or comments to please
23 submit them via the email or via the mailing
24 address.

25 MR. PESANELLO: Yep, that's

2 fine. Thank you.

3 MS. AHLFELD: Okay. Thank
4 you.

5 Okay. For now I don't think
6 that we have any other speakers. Although --
7 okay.

8 Somebody has just -- we have
9 an attendee going through the registration
10 process right now. So just give us a couple --
11 a second.

12 Okay. I'm going to now call
13 Karen Stichauner.

14 MS. STICHAUNER: Hello.

15 MS. AHLFELD: Hi, Karen.

16 MS. STICHAUNER: How are you?

17 MS. AHLFELD: Can you please
18 state your first and last name and then spell
19 your last name for the record please?

9

20 MS. STICHAUNER: Of course.

21 It's Karen M. Stichuaner. Last name is S as in
22 Sam, T as in Thomas, I-C-H-A-U, N as in Nancy,
23 E-R.

9.1

24 MS. AHLFELD: Great. You can
25 begin your comments when you're ready.

2 MS. STICHAUNER: I have lived
3 here with my family over 40 years. I had been
4 in the chat earlier and I do appreciate all of
5 the comments and complexities that all of this
6 entails.

7 However, unless you actually
8 live in this flight path and we live on Stewart
9 Street in Maywood, it is unbelievable. It
10 is -- you cannot sleep at night when they're
11 having one plane right after another. I
12 understand having a plane, two planes, a jet.
13 But this is over and above anything.

14 And now we're comparing, as I
15 am hearing, Newark and Teterboro. So Teterboro
16 was always meant to be a small airport. It has
17 now been taking in jets and it is just --
18 it's -- we've had our house shake. That is
19 how close they get to our house I can read the
20 numbers on their jets, on their planes.

21 With children, with adults,
22 how do you expect them to live a prosperous
23 life when they can't sleep, they can't go
24 outside and speak. As, you know, Mr. Brown and
25 Ms. Ferrera were speaking about. It feels as

2 if the answer is well, if you do not like it,
3 sell your home.

4 But it's not that easy
5 because in order for us to sell our home, we
6 have to pray that that person comes on a day
7 where planes aren't literally coming over one
8 right after another, and you cannot hear
9 another human being standing outside.

10 So albeit, I understand the
11 complexities of not being able to necessarily
12 say you can't fly here and not this time, maybe
13 it's taking certain jets out of Teterboro where
14 you -- they have a higher noise or it is
15 definitely lessening the amount of traffic and
16 especially through the evenings.

17 And you know, that would
18 pretty much conclude, you know, my statements
19 about how we feel and how it difficult it is
20 for us to live under these conditions. Thank
21 you.

22 MS. AHLFELD: Thank you.
23 Thank you for your comment.

24 It appears that Warren
25 Feldman has joined us.

2 Mr. Feldman, are you there?

3 (No response.)

4 MS. AHLFELD: Okay. Okay.

5 Mr. Feldman, can you unmute yourself?

6 Mr. Feldman, if you're making your comment we
7 can't hear you.

8 MR. FELDMAN: Hello.

9 MS. AHLFELD: Hi. Now we've
10 got you.

11 MR. FELDMAN: I came and I --
12 let me just see here.

13 MS. AHLFELD: Can -- can
14 you -- can you state your full name for the
15 record and then spell your last name please.

16 MR. FELDMAN: Can you hear me
17 now or no?

18 MS. AHLFELD: Yes, yep, we
19 can hear you.

20 MR. FELDMAN: I wasn't sure,
21 I actually -- I came on a little bit. I was a
22 little bit late coming on, I didn't expect you
23 to call upon me at this moment. I came on
24 mainly to observe the meeting.

25 I have had some involvement

2 certainly with Teaneck and so forth. I must
3 say that I got caught up and I wasn't on for
4 the beginning of the meeting so...

5 MS. AHLFELD: Okay.

6 MR. FELDMAN: Could I
7 possibly hold off for a few minutes and then
8 offer some comments at that point? Is that all
9 right?

10 MS. AHLFELD: Well, this is
11 the public comment portion of our hearing and
12 we have gone through our registered speakers
13 and we know that you had preregistered to speak
14 so we were just giving you that opportunity.

15 And if anybody else would
16 like to -- would like to speak, please make
17 that request if you had not preregistered.
18 When you registered for the hearing, please
19 make that request in the Q and A please.

20 MR. FELDMAN: Okay, with your
21 permission maybe -- hello?

22 MS. AHLFELD: Hello.

23 MR. FELDMAN: Yes.

24 MS. AHLFELD: Do you have
25 comments that you would like to make, Mr.

2 Feldman?

3 MR. FELDMAN: I just wanted
4 to be sure that this segment of the meeting
5 related to the Teterboro flight path, you know,
6 coming into Runway 1-9, Runway 2-4 and so
7 forth.

8 And again, I apologize that I
9 came on late. If that's okay, can I make a
10 minute of comments? That would be good.

11 MS. AHLFELD: Yes, you
12 actually have three minutes of comments.

13 MR. FELDMAN: Okay. Thank
14 you very much. Thank you very much. I've
15 enjoyed coming to the Teaneck meetings for the
16 last few years, I did want to speak --

17 MS. AHLFELD: Mr. Feldman,
18 can you please state your name and spell your
19 last name for the record.

10

20 MR. FELDMAN: Sure, it's
21 F-E-L-D-M-A-N.

22 MS. AHLFELD: Okay. Go ahead
23 please with your comments.

10.1

24 MR. FELDMAN: Okay. I wanted
25 to make observations about the experience that

2 we have a bit further north, about 13 miles
3 north in Woodcliff Lake. The -- regarding the
4 flight path into Teterboro.

5 I know it's outside the
6 immediate area of the airport and I certainly
7 understand the consequences of the flight path
8 over Maywood and coming onto Runway 1-9 into
9 Hackensack into that immediate area.

10 I just wanted to observe that
11 from our vantage point, a bit further north
12 we -- we're sensitive to the path that the jets
13 are taking and the volume that -- and the
14 pickup in volume over the last -- over the last
15 six months or so. It seems that there are a
16 lot of factors that effect this, but we were --
17 we -- what we -- I did want to simply record
18 that again. The volume has picked up.

19 I understand that there's
20 factors related to Newark Airport, factors
21 related to wind direction and most importantly,
22 that -- that the -- that there is a higher
23 demand with COVID and so forth.

24 We're hoping that the -- that
25 the reviews being undertaken will -- will

2 enable the alternative flight path over Route
3 17 to be given some use to create some relief
4 for this area.

5 That's about my comments at
6 this point. Thank you.

7 MS. AHLFELD: Okay. Thank
8 you, Mr. Feldman.

9 Okay. I noticed that we had
10 a couple of hands being raised.

11 Mayor Zimmerman, you had your
12 hand raised. Did you --

13 MR. ZIMMERMAN: Hi Kristen.

14 MS. AHLFELD: Hi. How are
15 you, Mayor Zimmerman?

2

16 MR. ZIMMERMAN: Good, how are
17 you? Bob Zimmerman, mayor of Carlstadt.

2.1

18 Hi Ayo.

19 First off, I just want thank
20 you both and your colleagues for reaching out
21 and putting this together tonight. I think
22 there has to be a lot more communication
23 between the towns that are effected and the
24 Port Authority and the administration of
25 Teterboro Airport.

2 Just to give you a little
3 background on myself, I've lived in Carlstadt
4 my entire life. I've been here 60 years. I
5 grew up on Seventh Street. I remember back in
6 the days when they would land the Piper Cubs
7 and the Cessnas and it was all very quaint.
8 But then in the probably late 1990s that
9 changed for the worse, and that was when the
10 corporate jets started coming in.

11 My concern mostly is really
12 for the safety of the residents. When I was
13 listening to this -- to the workshop, I was
14 kind of concerned because I remember hearing
15 the gentleman from the FAA say that the FAA
16 was -- their hands were tied because any --
17 okay, you might hear the jet coming over my
18 house right now. He said their hands were tied
19 because any jet or any plane that wanted to
20 land in Teterboro Airport had to be allowed to.

21 Now, I know the takeoffs and
22 landings have increased exponentially over the
23 years. And four short years ago, Carlstadt
24 experienced its own emergency. We had a plane
25 approaching Teterboro crash in Carlstadt. I

2 know a few years before that, a plane had
3 crashed in Hasbrouck Heights when a plane
4 overshot the runway taking off and went into
5 the technical school.

6 So my concern is the number
7 of flights coming in and out. As there's more
8 flights, there's more of a chance for a
9 tragedy. Where I live here in Carlstadt, the
10 planes go directly over my home. And the size
11 of the jets have even gotten larger. I'm
12 almost thankful now when a small corporate jet
13 comes over my house because the size of the
14 planes have grown. I don't know the exact
15 size, but they look like they seat 20 or 30
16 people, these are commuter jets. And my
17 biggest fear is that one of these jets goes
18 down in Carlstadt or any of the surrounding
19 towns, they can take out an entire city block.

20 So what I would ask the FAA
21 in my public comment, and what disturbed me
22 what the gentleman from the FAA said was that
23 any plane that needs to land at Teterboro
24 should be allowed to do so.

25 My idea is to cut back on the

2 number of flights and the number of takeoffs
3 because of safety issues. And that's one of
4 the things that I think is very important and
5 needs to be greatly addressed in our
6 discussions with that.

7 MS. AHLFELD: Thank you,
8 Mayor Zimmerman.

9 MR. ZIMMERMAN: And again
10 thank you for reaching out to us. I appreciate
11 that.

12 MS. AHLFELD: Thank you.

13 Okay. Again, if anybody that
14 has not yet provided comments would like to
15 register to speak, you can make that request
16 through -- through the Q and A function.

17 We're just going to circle
18 back around, just to make sure that we haven't
19 missed anybody that had preregistered -- that
20 had preregistered to speak. And if they have
21 not yet joined us then we may be taking just a
22 short break.

23 Councilwoman Jacquie
24 Gadaleta, has she joined?

25 (No response.)

2 MS. AHLFELD: Okay.

3 Al Ballerini?

4 (No response.)

5 MS. AHLFELD: Okay. Or how
6 about Yolanda Monique?

7 (No response.)

8 MS. AHLFELD: Okay.

9 All right. Since we don't
10 have any other registered speakers, and
11 nobody -- we don't have any additional requests
12 to speak, we are going to take an off-camera
13 break. We are all still here.

14 If we do get additional
15 speakers, we will come back online at the time.
16 Okay. And with that we will be taking our
17 off-camera break. Thank you.

18 (Silence for 8 minutes.)

19 MS. AHLFELD: Hi everyone.
20 Just a reminder that our hearing stays open
21 until 9:00 p.m. We have no registered speakers
22 at this time.

23 To register to speak please
24 make that request in the Q & A and we will
25 continue our off-camera break until we have

2 some more registered speakers. Thank you.

3 (Silence for 9 minutes.)

4 MS. AHLFELD: Okay. We've
5 been monitoring here. We've noticed that one
6 of our registered speakers has joined us.

7 Councilwoman Gadaleta, can
8 you unmute yourself?

9 MS. GADALETA: -- mute.
10 There you go.

11 MS. AHLFELD: Hi. How are
12 you?

13 MS. GADALETA: I'm doing
14 well. I'm not sure if you can see me or not,
15 but hopefully you can hear me.

16 MS. AHLFELD: No, that's
17 okay. We don't need to see you, we just need
18 to hear you.

19 So you can please state your
20 first and last name and then spell your last
21 name for the record please.

22 MS. GADALETA: Sure. You
23 don't know how to spell Gadaleta? Only joking.

24 MS. AHLFELD: No, we just
25 need it for the record. Thank you.

2 MS. GADALETA: Of course, of
3 course. Am I still on?

3

4 MS. AHLFELD: Yes.

5 MS. GADALETA: Yes. Okay.

3.1

6 My name is Councilwoman Jacquie Gadaleta,
7 G-A-D-A-L-E-T-A.

8 MS. AHLFELD: Great. You
9 can -- and can you just give us your
10 affiliation please.

11 MS. GADALETA: Sure. I'm a
12 councilwoman in the town of Woodcliff Lake.
13 Although I am not -- we are not part of Teaneck
14 Committee, they've been gracious enough to
15 invite us to all of the meetings because they
16 know that our town is also being adversely
17 affected by the barrage of flights going over
18 into Teterboro.

19 MS. AHLFELD: Okay. All
20 right. Begin your comments.

21 MS. GADALETA: Okay. I am
22 calling in to represent the residents of
23 Woodcliff Lake. I've lived here for 29-plus
24 years, it's a beautiful town in Bergen County.

25 But the past two to three

2 years, the amount of flights that have been
3 flying above us going into Teterboro has been
4 beyond anything we could have ever expected.
5 It seems as if that they aim right for our lake
6 and then they veer down to Teterboro.

7 Now, I was very happy to hear
8 that there is another flight path that they are
9 trying to promote, one that uses Route 17 which
10 would be great for all of the towns, not just
11 Woodcliff Lake but all of the towns south of,
12 for example, Paramus, Hackensack, Maywood and
13 so on.

14 And I would hope that with
15 the efforts of Teterboro, as well as the Port
16 Authority and everyone else that they would
17 encourage the pilots and the different
18 companies to use this Route 17 access versus
19 disrupting the lives of the residents in the
20 neighboring towns.

21 It actually goes back to a
22 quality of life issue. I am outside quite
23 often especially with COVID and all of that.
24 Our family, our friends, we value our time
25 outside, even just walking the dog and it's

2 very hard to have a conversation or enjoy any
3 type of serenity with the sound, the constant
4 sound of the planes overhead.

5 I'm not one to complain at
6 all. But every day I come home for lunch to
7 walk my dog and every day at lunchtime, planes.
8 One after the other, I would say maybe three to
9 five minutes in between. I can almost wave to
10 them, that's how close they seem to be.

11 Actually at night, the same
12 situation. I get home at night between 6,
13 7:00, I walk the dog, the planes are going
14 overhead. I understand that it's commerce, I
15 understand that people are maybe using these
16 private flights more often now which is great.
17 We need to keep the economy going.

18 However, if there's some way
19 to encourage the pilots to use that Route 17
20 access, it would really mean a lot to the
21 residents, not only of Woodcliff Lake but all
22 the neighboring towns.

23 As Councilwoman and somebody
24 who has been speaking about this, I've been
25 getting emails and phonecalls from residents in

2 River Vale, Montvale and Park Ridge. So this
3 is something that is adversely effecting all of
4 us.

5 And I would really hope that
6 something can be done. We don't expect it all
7 to be changed, but at least to mitigate the
8 overwhelming effect that it's having on our
9 lives, on the quality of our lives living in
10 Bergen County.

11 Thank you again for your
12 time. I really appreciate it.

13 MS. AHLFELD: Thank you.
14 Thank you for your comments.

15 Okay. And since we're all
16 here, I'm just going to run through and see --
17 we don't have any new speakers. I just want to
18 check and see if Al Ballerini has joined us.

19 (No response.)

20 MS. AHLFELD: Or Yolanda
21 Monique.

22 (No response.)

23 MS. AHLFELD: Okay. Just a
24 reminder that our hearing is open until
25 9:00 p.m. We are going to go back on -- since

2 we don't have any more new registered speakers
3 we're going to go back on our -- on our
4 off-screen break and once we get some new
5 registered speakers we will come back online.
6 Thank you.

7 (Silence for 8 minutes.)

8 MS. AHLFELD: Mr. Brown, you
9 have your hand raised.

10 Mr. Brown, can you take
11 yourself off of mute? You have your hand
12 raised.

13 MR. BROWN: I'm sorry. Yes.

14 MS. AHLFELD: It's okay.

15 MR. BROWN: I was just
16 wondering, I've already made comments.

17 MS. AHLFELD: Okay.

18 MR. BROWN: Would I be
19 allowed to make an additional comment, being
20 that you have time and you have no one else
21 speaking?

22 MS. AHLFELD: Yes, you can.

23 MR. BROWN: I'll wait until
24 you guys come back.

25 MS. AHLFELD: No, it's fine.

2 We're all here. If you're ready, let's go.

3 MR. BROWN: We'll do it.

4 MS. AHLFELD: Okay. Okay.

5 So if you can just state your full name again
6 please.

11

7 MR. BROWN: Yes. John Brown,
8 B-R-O-W-N. And I reside at 41 Stelling Avenue
9 and that's in Maywood, New Jersey.

10 MS. AHLFELD: Agreed.

11.1

11 MR. BROWN: Okay. I just
12 have one additional comment. The definition of
13 the problem and the subsequent solutions
14 concerning noise abatement, is that -- is that
15 which is flawed. In other words, that's the
16 problem. In view of the public comments that
17 you've heard tonight.

18 It's really the concentrated
19 number of flights in a very narrow funneled
20 straight line approach to Runway 19 and it's
21 the frequency of those flights, that's the
22 issue.

23 Now, if you look at page 229
24 of your NCP, figure 210, it clearly gives you a
25 visual evident -- evidence of that problem.

2 Your offset approach solution it never had a
3 chance of succeeding, especially with the night
4 only, clear visibility and non-mandatory rules.

5 It's the cumulative effect of
6 the non-relenting stream of low altitude
7 corporate jets that is the cause of concern.
8 And I think you have to redefine what the
9 problem is and seek a better solution. Thank
10 you.

11 MS. AHLFELD: Thank you, Mr.
12 Brown.

13 Okay, just a reminder that --
14 Ms. Stichauner -- Stichauner. Sorry.

15 MS. STICHAUNER: It's okay.
16 I understand. No worries, thank you. And
17 again, I -- would it be okay if I also just
18 made an additional statement?

19 MS. AHLFELD: Yes, you may.
20 And just once again please state your full name
21 for the record.

12

22 MS. STICHAUNER: Sure. It's
23 Karen M. Stichauner. Do you need me to spell
24 it?

12.1

25 MS. AHLFELD: Sure.

2 MS. STICHAUNER: It's

3 S-T-I-C-H-A-U-N-E-R.

4 MS. AHLFELD: Okay. Go
5 ahead.

6 MS. STICHAUNER: Mr. Brown is
7 very well spoken and very much has his finger
8 on the pulse of what the problem is for all of
9 us that are so close to Teterboro Airport.

10 In addition to that, you
11 know, just to put the thought in everyone's
12 head is that everyone at the airport, everyone
13 on the plane, they all get to go home. We are
14 home. We have no place to go. We have nowhere
15 to reside where we can have peace, we actually
16 will have to leave our homes to find that.

17 And I think that if you take
18 that and you really digest that, it brings to
19 light the severity and -- of this problem and
20 what we as surrounding towns and as we get
21 closer to you, meaning Teterboro Airport have
22 to deal with and how difficult that is for us.

23 Again, I am not someone who
24 would ever complain, I am not -- just not that
25 person. I also am not someone who doesn't

2 believe in thriving business as I do. So I do
3 want this to work for everyone, but there needs
4 to be a better solution and I think that people
5 need to see this in a way as if they are the
6 people in these homes that cannot leave.
7 Whether it's my sick parent that can't leave,
8 if it's my child who can't get sleep because
9 they -- the planes are going crazy that night
10 and it just doesn't stop and we want to have
11 our windows open and now it effects their
12 schoolwork.

13 Or whether it's myself and I
14 have to be at work and I just can't focus
15 because I haven't slept or I wanted to be
16 outside with my family on a holiday but can't
17 do that because there's a game at Giants
18 Stadium and all the players may be coming in.

19 And you know, again I get the
20 convenience and I understand and just so
21 everyone sees it from another point of view and
22 maybe we can work this out together that is
23 beneficial for everybody. And again thank you
24 for your time.

25 MS. AHLFELD: Thank you.

2 Okay, again, just as a reminder, we're here
3 until 9:00 if you would like to make additional
4 comments, or you know, register to speak,
5 please type that request in the Q & A or raise
6 your hand, that seems to be working well too.

7 So we'll -- we're continuing
8 to be here. I don't think that the other two
9 speakers that we have been waiting and that
10 we've posted their names in the chat are here.

11 So again, we are going to go
12 on an off-camera break until we get some
13 additional speakers, thank you.

14 (Silence for 8 minutes.)

15 MS. AHLFELD: Just a reminder
16 that our hearing remains open until 9:00 p.m.
17 We do not have any new registered speakers at
18 this time.

19 For those of you that are
20 still with us that would like to make some
21 additional comments, you can type your speaker
22 request into the Q & A which -- and you can
23 access that by clicking on the Q & A button at
24 the bottom of your -- your screen.

25 Our other two speakers have

2 not joined us, and so again we're here until
3 9:00 tonight. If you would like to make
4 additional comments, please type that request
5 into the Q & A at the bottom of the screen. And
6 until we get some more speaker requests we're
7 going to continue our off-screen break. Thank
8 you.

9 (Silence for 10 minutes.)

10 MS. AHLFELD: Hi everyone.
11 Just a reminder that we're here until 9:00 p.m.
12 tonight. We do not have any registered -- new
13 registered speakers.

14 If anybody that has provided
15 previous comments would like to make some
16 additional comments, you can type your name
17 into the -- into the Q & A at the bottom of
18 your screen. We don't have anymore registered
19 speakers, then we will continue with our
20 off-screen break.

21 Again, we are here until
22 9:00 p.m. this evening so please let us know
23 through the Q & A if you would like to make
24 some additional comments. Thank you.

25 (Silence for 15 minutes.)

2 MS. AHLFELD: Okay. It is
3 now 9:00 and we do not have any additional
4 registered speakers.

5 This concludes the public
6 comment portion of this hearing. I will now
7 turn it back over to Ayo Olanipekun for the
8 Port Authority of New York and New Jersey for
9 closing remarks.

10 Ayo?

11 (No response.)

12 MS. AHLFELD: Unmute
13 yourself.

14 MR. OLANIPEKUN: Thank you
15 Kristen.

16 On behalf of the Port
17 Authority, the FAA, representatives from
18 Teterboro Airport, FHI and HMHR Consultants who
19 put this virtual event together, I would like
20 to thank each and every one of you who
21 participated in the workshop and public
22 hearing. We value your feedback and look
23 forward to continuing the discussion.

24 It is now 9:00 p.m. This
25 concludes our virtual public hearing. Good

2 night.

3 (Whereupon, at 9:00 P.M., the
4 above matter concluded.)

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C E R T I F I C A T E

STATE OF NEW YORK)
 : SS.:
COUNTY OF RICHMOND)

I, MADELINE TAVANI, a Notary Public for and
within the State of New York, do hereby certify:

That the above is a correct transcription of
my stenographic notes.

I further certify that I am not related to
any of the parties to this action by blood or by
marriage and that I am in no way interested in the
outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my
hand this 13th day October, 2021.



MADELINE TAVANI

Appendix G

Noise Compatibility Program Measures Suggested by Stakeholders

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In conducting the Part 150 stakeholder engagement process, the Port Authority received many suggestions for the Teterboro Airport (TEB) Noise Compatibility Program (NCP) measures. This appendix lists the measures considered in NCP and identifies the origin of each measure by stakeholder. These include measures suggested by the Technical Advisory Committee (TAC) during TAC meetings, measures suggested in public comments received during the development of the Teterboro Airport Noise Exposure Map, measures already in existence, measures suggested by the Study Team, and measures suggested by other stakeholder groups.

Table G-1: Considered Measure in the NCP and Stakeholder Proposers

Recommended / Not Recommended	Measure Name	Stakeholder Proposer	Location in Document
Noise Abatement Measures			
Recommended	TEB Noise Abatement Measure 1: Implement a Runway 24 Departure Turn to 230 degrees at Night	TAC & Public Comments	Section 2.2 Recommended Noise Abatement Measures, beginning on page 2-7
	TEB Noise Abatement Measure 2: Encourage Intersection Departures from Taxiway K on Runway 1 at Night	TAC & The Port Authority	
	TEB Noise Abatement Measure 3: Implementation of a Centralized Aircraft Run-up Pad	TAC & The Port Authority	
	TEB Noise Abatement Measure 4: Implement an Offset Approach Procedure to Runway 19	Public Comments & TANAAC	
	TEB Noise Abatement Measure 5: Implement an Offset Approach Procedure to Runway 6	Concerned Residents Along the Flight path at Teterboro (CRAFT)	
	TEB Noise Abatement Measure 6: Implement a Published Approach Procedure to Runway 1	Public Comments, TAC, The Port Authority	
	TEB Noise Abatement Measure 7: Implement a Published Departure Procedure from Runway 19	The Study Team & The Port Authority	
	TEB Noise Abatement Measure 8: Existing Mandatory Permission to Operate Jet Aircraft	Existing & Public Comments	
	TEB Noise Abatement Measure 9: Existing Mandatory Noise Limits	Existing & Public Comments	
	TEB Noise Abatement Measure 10: Existing Mandatory Aircraft Maintenance Run-Up Restrictions	Existing & Public Comments	
	TEB Noise Abatement Measure 11: Existing Voluntary Restraint from Operations between 11:00 p.m. and 6:00 a.m.	Existing & Public Comments	
	TEB Noise Abatement Measure 12: Existing Voluntary Preferential Runway Use at Night	Existing & Public Comments	
	TEB Noise Abatement Measure 13: Existing Voluntary Encouragement of the Use of NBAA Noise Abatement Departure Procedures (NADP)	Existing & Public Comments	
	TEB Noise Abatement Measure 14: Existing Voluntary Restraint from the Use of Reverse Thrust	Existing	
	TEB Noise Abatement Measure 15: Existing Voluntary IFR and VFR Approach and Landing Procedures to Runway 1 at Night	Existing	
	TEB Noise Abatement Measure 16: Existing Voluntary Helicopter Routes	Existing & Public Comments	
Not Recommended for Inclusion in this NCP	Construct a New North-South Runway - Not Recommended for Inclusion in this NCP	Public Comments	Section 2.3 Noise Abatement Measures Considered but Not Recommended for Inclusion in this NCP, beginning on page 2-96
	Noise Barriers - Not Recommended for Inclusion in this NCP	Public Comments & TAC	
	Increase Night Departures from Runway 6 - Not Recommended for Inclusion in this NCP	The Study Team & TAC	
Land Use Measures			
Recommended	TEB Land Use Measure 1: Acquire Noncompatible Residential Parcels	The Study Team	Section 3.2 Recommended Corrective Land Use Management
	TEB Land Use Measure 2: Sound Insulate Eligible Dwelling Units	Public Comments, TAC, & The Study Team	

Recommended / Not Recommended	Measure Name	Stakeholder Proposer	Location in Document
	TEB Land Use Measure 3: Sound Insulate Eligible Non-Residential Noise-Sensitive Structures	Public Comments, TAC, & The Study Team	Measures, beginning on page 3-5
	TEB Land Use Measure 5: Port Authority Assistance with Establishing an Airport Noise Overlay Zone	The Study Team & Land Use Control Agencies within Affected Jurisdictions	Section 3.3 Recommended <i>Preventative</i> Land Use Management Measures, beginning on page 3-19
Not Recommended for inclusion in this NCP	<i>Acquire Avigation Easements - Not Recommended for Inclusion in this NCP</i>	The Study Team	Section 3.4, Land Use Management Strategies Considered but Not Recommended for Inclusion in this NCP, page 3-22
	<i>Implement Cooperative Land Use Agreements - Not Recommended for Inclusion in this NCP</i>	The Study Team	
	<i>Raise Minimum Building Standards - Not Recommended for Inclusion in this NCP</i>	The Study Team	
	<i>Implement Rezoning of Land Uses - Not Recommended for Inclusion in this NCP</i>	The Study Team	
	<i>Include Airport Aircraft Noise in Real Estate Disclosures – Not Recommended for Inclusion in this NCP</i>	The Port Authority	
Program Management Measures			
Recommended	TEB Program Management Measure 1: Maintain Noise Office	Existing	Section 4.2 Recommended Program Management Measures, beginning on page 4-5
	TEB Program Management Measure 2: Maintain Noise and Operations Management System (NOMS)	Existing & Public Comments	
	TEB Program Management Measure 3: Maintain Public Flight Tracking Portal	Existing & Public Comments	
	TEB Program Management Measure 4: Maintain Noise Complaint Management System	Existing & Public Comments	
	TEB Program Management Measure 5: Maintain Noise Office Website	Existing & Public Comments	
	TEB Program Management Measure 6: Continue Community Outreach Activities	Existing & Public Comments	
	TEB Program Management Measure 7: Establish an Airport Noise Community Planners Forum	The Study Team	
	TEB Program Management Measure 8: Establish and Manage a Fly Quiet Program	The Study Team	
	TEB Program Management Measure 9: Make Aircraft Noise Contours Available in a Geographic Information System (GIS)	Public Comments & The Study Team	
	TEB Program Management Measure 10: Update the Noise Exposure Map	Public Comments & The Study Team	
	TEB Program Management Measure 11: Update the Noise Compatibility Program	Public Comments & The Study Team	
	TEB Program Management Measure 12: Airfield Noise Abatement Program Signage	The Study Team	
	TEB Program Management Measure 13: Port Authority to Coordinate with FAA on Implementation of NextGen Procedures	The Port Authority	
Not Recommended for inclusion in this NCP	<i>Incentivize a Quieter Aircraft Fleet - Not Recommended for Inclusion in this NCP</i>	Public Comments	Section 4.3, Program Management Measures Considered but Not Recommended for Inclusion in this NCP, beginning on page 4-25

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Appendix H

Noise Compatibility Program Implementation Schedule

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For planning purposes, the Port Authority expects that the various elements of the Teterboro Airport (TEB) Noise Compatibility Program (NCP) can be initiated within the timeframe identified below. Some measures continue measures already in place; these are listed in Table H-1. Table H-2 identifies the measures that can be initiated within a year of Federal Aviation Administration (FAA) approval, and Table H-3 contains the measures that would be initiated within two years from FAA approval. Table H-4 contains the measures that would have a schedule dependent upon external factors/pandemic recovery. Table H-5 contains the measures for which a schedule has not yet been determined.

Measures Already in Place at TEB

Table H-1: Measures Already in Place

Sources: HMMH and Port Authority, 2019.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 8: Existing Mandatory Permission to Operate Jet Aircraft			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 9: Existing Mandatory Noise Limits			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 10: Existing Mandatory Aircraft Maintenance Run-Up Restrictions			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 11: Existing Voluntary Restraint from Operations between 11:00 p.m. and 6:00 a.m.			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 12: Existing Voluntary Preferential Runway Use at Night			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 13: Existing Voluntary Encouragement of the Use of NBAA Noise Abatement Departure Procedures (NADP)			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 14: Existing Voluntary Restraint from the Use of Reverse Thrust			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 15: Existing Voluntary IFR and VFR Approach and Landing Procedures to Runway 1 at Night			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 16: Existing Voluntary Helicopter Routes			
The Port Authority.	Not Applicable.	Not Applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 1: Maintain Noise Offices			
The Port Authority.	The FAA does not fund program operating expenses. The Port Authority will continue to fund the operation of both Noise Offices.	The Port Authority.	Port Authority approval for additional staff if and when required.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 2: Maintain Noise and Operations Management System (NOMS)			
The Port Authority.	The FAA does not fund program operating expenses. The Port Authority will continue to fund the maintenance of the existing system. However, if a system upgrade and/or replacement is needed in the future, then the cost is expected to be to be approximately \$55,000. If any of the existing noise monitors need to be replaced and/or upgraded in the future, then the cost for hardware and installation of one noise monitor is expected to be	For system replacement and/or upgrades of eligible components: 90 percent FAA Airport Improvement Program and 10 percent Port Authority. Funding for maintenance of the existing system and for system replacement and/or upgrades of non-eligible components	FAA approval of this measure; and Port Authority to secure funding for system replacement and/or upgrades.

	approximately \$35,000. Only noise monitors within the FAA-accepted NEM are eligible for AIP funding. These cost estimates are determined based on the development of the existing system as a baseline with added future anticipated cost for system upgrades and/or replacement. The cost for the implementation of this measure is eligible to be partially funded by the FAA.	will be provided by the Port Authority.	
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 3: Maintain Public Flight Tracking Portal			
The Port Authority.	The FAA does not fund program operating expenses. The Port Authority will continue to fund the maintenance of the existing system. However, if a system upgrade and/or replacement is needed in the future, then the cost is expected to be to be approximately \$3,000. The cost estimate is determined based on the development of the existing system as a baseline with added future anticipated cost for system upgrades and/or replacement. The cost for the implementation of this measure is eligible to be partially funded by the FAA.	For system upgrades of eligible components: 90 percent FAA Airport Improvement Program and 10 percent Port Authority. Funding for maintenance of the existing system and for system replacement and/or upgrades of non-eligible components will be provided by the Port Authority.	FAA approval of this measure; and Port Authority to secure funding for the system upgrades.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 4: Maintain Noise Complaint Management System			
The Port Authority.	The FAA does not fund program operating expenses. The Port Authority will continue to fund the maintenance of the existing system. However, if a system upgrade and/or replacement is needed in the future, then the cost is expected to be to be approximately \$3,000. The cost estimate is determined based on the development of the existing system as a baseline with added future anticipated cost for system upgrades and/or replacement. The cost for the implementation of this measure is eligible to be partially funded by the FAA.	For system upgrades of eligible components: 90 percent FAA Airport Improvement Program and 10 percent Port Authority. Funding for maintenance of the existing system and for system replacement and/or upgrades of non-eligible components will be provided by the Port Authority.	FAA approval of this measure; and the Port Authority to secure funding for the system upgrades.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 5: Maintain Noise Office Website			
The Port Authority.	The FAA does not fund program operating expenses. The Port Authority will continue to fund maintenance and upgrades of the Noise Office website.	Not applicable.	Existing measure – No requirements to implement.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 6: Continue Community Outreach Activities			
The Port Authority.	The FAA does not fund program operating expenses. The Port Authority will continue its community outreach activities.	Not applicable at this time; the Port Authority would seek reimbursement if funding becomes available in the future.	Existing measure – No requirements to implement.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 9: Make Aircraft Noise Contours Available in a Geographic Information System (GIS)			
The Port Authority.	At the present time there is no cost to implement and the Port Authority will use available information and methods to make the contours available.	Not applicable.	Not applicable.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 13: The Port Authority to Coordinate with FAA on Development and Implementation of NextGen Procedures			
The FAA is responsible to design, test and implement the NextGen flight procedure as well as complete the environmental review under NEPA if required.	The expected costs associated with the development and implementation of NextGen procedures are internal to the FAA (e.g., ATO) and other coordinating agencies. The costs to implement such procedures within the FAA are unknown, and an FAA AIP grant would not be required.	The FAA.	FAA approval. Implementation may require an environmental study under NEPA.

Measures to be Initiated at TEB within One Year of FAA Record of Approval

Table H-2: Measures to be Initiated within One Year of FAA Record of Approval

Sources: HMMH and Port Authority, 2019.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 1: Implement a Runway 24 Departure Turn to 230 degrees at Night			
The development, safety review, environmental review, and the decision whether to implement flight procedures consistent with procedure development criteria is the sole responsibility of the FAA. The Port Authority will request that the development process be initiated, then will work with NY TRACON and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA); the FAA would be the responsible party to complete such a study.	The expected costs associated with the development and implementation of this procedure are internal to the FAA (e.g., ATO) and other coordinating agencies. These costs are unknown, and an FAA AIP grant would not be required.	The FAA.	FAA approval, FAA would coordinate development of the procedure with airport users. Use of the procedure is dependent on revisions to flight procedures at EWR and implementation may require environmental study under NEPA.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 2: Encourage Intersection Departures from Taxiway K on Runway 1 at Night			
The development, safety review, environmental review, and the decision whether to implement flight procedures consistent with procedure development criteria is the sole responsibility of the FAA. The Port Authority will request that FAA initiate the development process for this measure and will then work with FAA personnel to implement the measure.	The expected costs associated with the development and implementation of this measure is unknown and internal to the FAA (e.g., Air Traffic Organization) and other coordinating agencies. An FAA Airport Improvement Program grant would not be required.	The FAA.	FAA approval of this measure. TEB ATCT to incorporate into Standard Operating Procedures and the Port Authority to update airfield signage and pilot information.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 4: Implement an Offset Approach Procedure to Runway 19			
The development, safety review, environmental review, and the decision whether to implement flight procedures consistent with procedure development criteria is the sole responsibility of the FAA. The Port Authority will request that FAA initiate the development process for this measure, then will work with ATCT and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA); the FAA would be the responsible party to complete such a study.	The expected costs associated with the development and implementation of this procedure are unknown and internal to the FAA (e.g., Air Traffic Organization) and other coordinating agencies. An FAA Airport Improvement Program grant would not be required.	The FAA.	FAA approval of this measure. The Port Authority supports FAA development of an offset ILS approach to Runway 19. Implementation may require an environmental study under NEPA.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 5: Implement an Offset Approach Procedure to Runway 6			
The development, safety review, environmental review, and the decision whether to implement flight procedures consistent with procedure development criteria is the sole responsibility of the FAA. The Port Authority will request that FAA initiate the development process for this measure, then will work with ATCT and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA); the FAA would be the responsible party to complete such a study.	The expected costs associated with the development and implementation of this procedure are unknown and internal to the FAA (e.g., Air Traffic Organization) and other coordinating agencies. An FAA Airport Improvement Program grant would not be required.	The FAA.	FAA approval of this measure. The Port Authority supports FAA development of an offset approach to Runway 6. Implementation may require an environmental study under NEPA.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 6: Implement a Published Approach Procedure to Runway 1 and Increase Usage at night			
The development, safety review, environmental review, and the decision whether to implement flight procedures consistent with procedure development criteria is the sole responsibility of the FAA. The Port Authority will request that FAA initiate the development process for this measure, then will work with ATCT and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA); the FAA would be the responsible party to complete such a study.	The expected costs associated with the development and implementation of this procedure are internal to the FAA (e.g., ATO) and other coordinating agencies. These costs are unknown and FAA Airport Improvement Program grant would not be required.	The FAA.	FAA approval of this measure. The Port Authority supports FAA development of published approach to Runway 1 and any associated environmental analysis that may be needed.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 7: Implement a Published Departure Procedure from Runway 19			
The development, safety review, environmental review, and the decision whether to implement flight procedures consistent with procedure development criteria is the sole responsibility of the FAA. The Port Authority will request that FAA initiate the development process for this measure, then will work with ATCT and other FAA personnel to further study and develop this procedure. Implementation of this measure may require an environmental study as required under the National Environmental Policy Act (NEPA); the FAA would be the responsible party to complete such a study.	The expected costs associated with the development and implementation of this procedure are internal to the FAA (e.g., ATO) and other coordinating agencies. These costs are unknown and FAA Airport Improvement Program grant would not be required.	The FAA.	FAA approval of this measure. The Port Authority supports FAA development of a published departure from Runway 19 and any associated environmental analysis.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Land Use Measure 4: Assist with Establishing an Airport Noise Overlay Zone			
The local jurisdiction responsible for land use zoning is responsible for development and implementation.	25,000 per jurisdiction to allow each jurisdiction to prepare an airport noise overlay zone and for the Port Authority to provide assistance to each jurisdiction to implement.	90 percent FAA Airport Improvement Program grants and 10 percent Port Authority.	FAA approval.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 7: Establish an Airport Noise Community Planners Forum			
The Port Authority.	At this time there is no cost to implement as Port Authority would provide the venue for the meeting.	Not applicable.	FAA's approval of this measure; and Port Authority to initiate an Airport Noise Community Planners Forum.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 8: Establish and Manage a Fly Quiet Program			
The Port Authority.	Approximately \$150,000. The estimated cost was based on previous efforts at other airports.	90 percent FAA Airport Improvement Program and 10 percent Port Authority (if determined to be eligible for AIP funding).	FAA's approval of this measure; and Port Authority to develop the voluntary Fly Quiet program.

Measures to be Initiated at TEB within Two Years of FAA Record of Approval

Table H-3: Measures to be Initiated within Two Years of FAA Record of Approval

Sources: HMMH and Port Authority, 2019.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Noise Abatement Measure 3: Design and Implement a Centralized Aircraft Run-up Pad			
The Port Authority following an update to the Airport Layout Plan (ALP) and environmental studies satisfying the National Environmental Policy Act (NEPA) could complete implementation and construction of a centralized run-up pad. Construction of the pad is the responsibility of the Port Authority.	An ALP update, the associated environmental review, and construction costs would be approximately \$8,525,000, including a 30 percent soft cost estimate and a 15 percent contingency cost.	90 percent FAA Airport Improvement Program and 10 percent Port Authority.	FAA approval of this measure. The Port Authority to complete full design of the proposed run-up location, ALP update and NEPA analysis.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 12: Update Airfield Noise Abatement Program Signage			
The Port Authority.	The installation of a new sign in conjunction with a centralized aircraft run-up pad has an estimated cost of \$25,000. The existing four signs are in good condition currently, but any future replacement for airfield signage that has exceed its useful life or replacement due to changes in sign panel specifications will be AIP grant eligible.	90 percent FAA Airport Improvement Program and 10 percent Port Authority.	Not applicable.

Measures with Schedule Dependent Upon External Factors/Pandemic Recovery

Table H-4: Measures with Schedule Dependent Upon External Factors/Pandemic Recovery

Sources: HMMH and Port Authority, 2019.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Land Use Measure 1: Acquire Noncompatible Residential Parcels			
The Port Authority.	The Port Authority estimates \$11.54 million to acquire the mobile home park south of Runway 1. This includes purchase price for the land and mobile homes, relocation assistance for eligible residents and related costs.	90 percent FAA Airport Improvement Program and 10 percent Port Authority or local jurisdiction.	FAA approval; identification of parcels; secured funding for acquisition of parcels.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Land Use Measure 2: Sound Insulate Eligible Dwelling Units			
The Port Authority.	\$11.6 million to provide sound insulation treatments to approximately 139 dwelling units and 336 people, subject to the assumptions and limitations set forth in Section 3.2.	90 percent FAA Airport Improvement Program and 10 percent Port Authority, fees paid by users for TEB.	FAA approval; identification of eligible properties; secured funding to sound insulate properties.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Land Use Measure 3: Sound Insulate Eligible Non-Residential Noise-Sensitive Structures			
The Port Authority.	\$10.8 million to provide sound insulation treatments to three facilities, based on the assumptions set forth in Section 3.2.	90 percent FAA Airport Improvement Program and 10 percent Port Authority, fees paid by users for TEB.	FAA approval; identification of eligible properties; secured funding to sound insulate properties.

Measures for TEB without Identified Timeline

Table H-5: Measures Without Identified Timeline

Sources: HMMH and Port Authority, 2019.

Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 10: Update the Noise Exposure Map¹			
The Port Authority.	Approximately \$2 million.	90 percent FAA Airport Improvement Program and 10 percent Port Authority.	FAA's approval of this measure; and Port Authority to secure funding for the update of the Noise Exposure Map when warranted.
Responsible Parties	Estimated Costs	Funding Sources	Requirements
TEB Program Management Measure 11: Update the Noise Compatibility Program²			
The Port Authority.	An NCP update may range from \$300,000 to \$2 million.	90 percent FAA Airport Improvement Program and 10 percent Port Authority.	FAA's approval of this measure; and Port Authority to secure funding for the update of Noise Compatibility Program when appropriate.

¹ If there is a significant change in the number of aircraft operations or fleet mix, the Port Authority will attempt to initiate an evaluation of any changes in the noise environment within two years. Otherwise, an update to the NEM would be planned for five years after the FAA's acceptance date for the current NEM.

² Updating the NCP would only be initiated following any revision of the NEM, and would be initiated within two years of FAA acceptance of a revised NEM.