

Tenant Construction & Alteration Process (TCAP)

The 7460 Process

Presented by Enrique Sanabria, Aviation Technical Services

November 15, 2022

What is a 7460?

- It's a form. Notice of Proposed Construction or Alteration submitted to Federal Aviation Administration (FAA)
- FAA requires submission **at least 45 days prior** to start of project and construction activities
- Required by CFR 14 Part 77

Please Type or Print on This Form

Form Approved OMB No. 2120-0001
Expiration Date: 10/31/2017

U.S. Department of Transportation Federal Aviation Administration		Failure To Provide All Requested Information May Delay Processing of Your Notice Notice of Proposed Construction or Alteration	FOR FAA USE ONLY Aeronautical Study Number
1. Sponsor (person, company, etc. proposing this action): Attn. _____ of: Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Telephone: _____ Fax: _____		9. Latitude: _____ ° _____ ' _____ "	
2. Sponsor's Representative (if other than #1): Attn. _____ of: Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Telephone: _____ Fax: _____		10. Longitude: _____ ° _____ ' _____ "	
3. Notice of: <input type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing		11. Datum: <input type="checkbox"/> NAD 83 <input type="checkbox"/> NAD 27 <input type="checkbox"/> Other	
4. Duration: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary (___ months, ___ days)		12. Nearest City: _____ State _____	
5. Work Schedule: Beginning _____ End _____		13. Nearest Public-use (not private-use) or Military Airport or Heliport: _____	
6. Type: <input type="checkbox"/> Antenna Tower <input type="checkbox"/> Crane <input type="checkbox"/> Building <input type="checkbox"/> Power Line <input type="checkbox"/> Landfill <input type="checkbox"/> Water Tank <input type="checkbox"/> Other _____		14. Distance from #13. to Structure: _____	
7. Marking/Painting and/or Lighting Preferred: <input type="checkbox"/> Red Lights and Paint <input type="checkbox"/> Dual - Red and Medium Intensity <input type="checkbox"/> White-Medium Intensity <input type="checkbox"/> Dual - Red and high Intensity <input type="checkbox"/> White -High Intensity <input type="checkbox"/> Other		15. Direction from #13. to Structure: _____	
8. FCC Antenna Structure Registration Number (if applicable): _____		16. Site Elevation (AMSL): _____ ft.	
21. Complete Description of Proposal: _____		17. Total Structure Height (AGL): _____ ft.	
		18. Overall Height (#16 + #17) (AMSL): _____ ft.	
		19. Previous FAA Aeronautical Study Number (if applicable): _____ -OE	
		20. Description of Location: (Attach a USGS 7.5 minute Quadrangle Map with the precise site marked and any certified survey) _____	
		Frequency/Power (kW)	

Source: [FAA Form 7460](#)

14 CFR Part 77

Establishes a requirement for anyone proposing to build a structure near an airport to report their intentions to the Federal Aviation Administration (FAA)

- Requires submission of FAA Form 7460
- Initiates FAA Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) Process

Part 77 Notification Requirements

At least 45 days notice must be provided to FAA when construction, alteration or a structure meet any of the following:

- Located on airport property or;
- Penetrates a “Notification Surface” or;
- Exceeds 200+ feet AGL or;
- Generally, within 20,000 feet and a 100:1 slope of an airport or;
- When requested by the FAA

Roles and Responsibilities

Project Manager

- Determines need for 7460
- Corresponds and coordinates with contractors/consultants
- Submits complete project information to ATS
- Accurately determines project needs/Methods and Means
- Initiates coordination of CSPP development with Airport Ops
- Initiates/coordinates glare analysis, LOS analysis

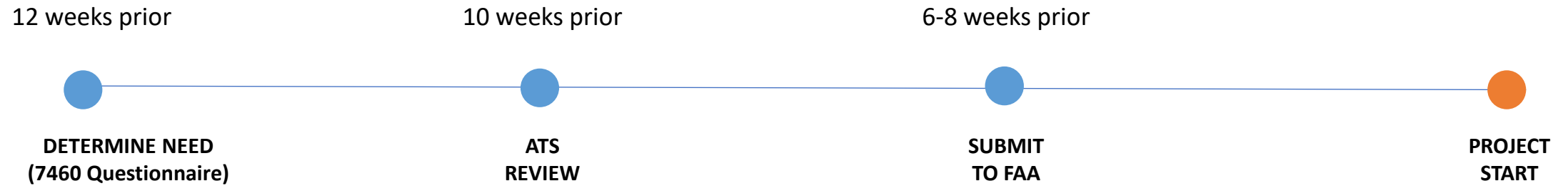
Aviation Technical Services (ATS)

- Reviews 7460 questionnaires
- Analyzes projects for potential conflicts
- Provides guidance on submission strategy
- Submits project information and data to FAA
- Serves as 7460 sponsor and FAA Point of Contact (POC)

Federal Aviation Administration (FAA)

- Ensures safety and efficiency of aircraft operations, and compliance with grant assurances
- Coordinates review by various FAA lines of business
- Can object to projects that adversely impact airport operations
- Issues determination letter

Minimum Project Lead Time



7460 Submittal Requirements

Minimum Requirements¹

- Airport
- Project Description
- TAA, Contract # or Project ID
- Latitude and Longitude (NAD83) in degrees, minutes, seconds
- Site/Ground Elevation (NAVD88)
- Equipment Needs and Max Height
- Project Drawings
- Work Schedule
 - Start and End Date
 - Work hours

Special Requirements

- Construction Safety Phasing Plan (CSPP)
- Line of Sight (LOS) Study
- [Solar Glare Hazard Analysis \(SGHAT\)](#)
- Reimbursable agreement

1. Failure to submit accurate minimum requirements will result in rejection of the submittal by ATS, and/or termination by FAA

Construction Safety And Phasing Plans (CSPP)

- For airside projects, ensures safety compliance when coordinating construction activities with airport operations
- Developed by Airport Operations. Project Manager is responsible for coordinating with them
- “Should be submitted for FAA approval when the project design is 80 percent to 90 percent complete...Provisions in the CSPP can influence contract cost.”
- Template available

	AIP Funded Projects (Includes partial AIP participation) ¹		PFC Funded Projects (100%)	Non-Federally Funded Projects	
	Part 139	Non-Part 139	Part 139	Part 139	Non-Part 139
Part 77 Notice (Construction Objects) ²					
Within AOA	Required	Required	Required	Required	Required
Outside of AOA ...	Required	Required	Required	Required	Required
Sponsor Preparation and Submittal of a CSPP ³					
Within AOA	Required	Required	Required	Certificate holder must comply with §139 requirements ⁴	Not Required
Outside of AOA ...	Not Required	Not Required	Not Required	Not Required	Not Required
PM Review of CSPP for Conformance to AC 150/5370-2 Standards ⁵					
Within AOA	Required	Required	Not Required ⁶	Not required	Not Required
Outside of AOA ...	Not Required	Not Required	Not Required	Not Required	Not Required
ACSI Review of CSPP for Compliance with Part 139 ⁷					
Within AOA	ACSI Discretion	Not Required	ACSI Discretion	ACSI Discretion	Not Required
Outside of AOA ...	Not Required	Not Required	Not Required	Not Required	Not Required

Sources:

[FAA Advisory Circular 150/5370-2G](#)

[FAA ARP SOP 1.00](#)

On-Airport Solar Panels



FORGESOLAR GLARE ANALYSIS

Project: LaGuardia RFP
Site configuration: Pitched Roof
Analysis conducted by Aaron Sanders (asanders@forefrontpower.com) at 02:38 on 20 Nov, 2019.

U.S. FAA 2013 Policy Adherence

The following table summarizes the policy adherence of the glare analysis based on the 2013 U.S. Federal Aviation Administration Interim Policy 78 FR 63276. This policy requires the following criteria be met for solar energy systems on airport property:

- No "yellow" glare (potential for after-image) for any flight path from threshold to 2 miles
- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics (see list below)

ForgeSolar does not represent or speak officially for the FAA and cannot approve or deny projects. Results are informational only.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
Flight path(s)	PASS	Flight path receptor(s) do not receive yellow glare
ATCT(s)	PASS	Receptor(s) marked as ATCT do not receive glare

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

FAA Policy 78 FR 63276 can be read at <https://www.federalregister.gov/d/2013-24729>

Reference:

[FAA Policy: Review of Solar Energy System Projects on Federally-Obligated Airports](#)

- All on-airport solar panel projects must submit Form 7460, including a favorable glare analysis report
- ATS provides sample reports and standard data for ATCT and Flight Path receptors
- Concurrence letter must also be included with submittal
- Refer to [On-Airport Solar Panels](#) for workflow, standard data, templates and samples.

7460 Submission and Tracking System

- All 7460 submissions must use the system
- Automated dashboard and email notifications
- Internal users automatically have access
- External users simply request access
- Clickable Link:

<https://panynj.sharepoint.com/sites/ATS7460>

The screenshot shows the top navigation bar with 'PANYNJ FAA Form 7460', 'Home', 'FAA Form 7460', 'FAQs', and 'Edit'. Below the navigation is a 'New' button and 'Page details' and 'Analytics' links. The main content area has a dark background with a white text box that says 'Welcome to the ATS 7460 Submission and Tracking Site. Click the button below to start a new 7460 submission. The following page includes in-depth guidance for completing the form. Please visit the FAQs if you have any questions.' Below this is a 'Submit New FAA Form 7460' button. At the bottom, there are six icons for 'Submit New 7460', 'Status Tracker', 'Solar Panel Projects', '7460 Map', 'Questionnaire', and 'FAQs'.

Status Tracker - 7460 Submittals

This dashboard is updated daily. It reflects the status of all on-airport 7460s handled by Aviation Technical Services (ATS).

FAA Form 7460

FAA Form 7460 See all

Current Status	ATS Tracking #	Date Submitted	Title	Date Submitted to FAA	Days in F...
Determined - Compl...	2022JFK100	9/6/2022	Building 111- Mechanical Ductwork	9/9/2022	41
In FAA Review	2022JFK101	9/6/2022	Building 111- Mechanical Ductwork	9/9/2022	53
In FAA Review	2022JFK102	9/6/2022	Building 111- Mechanical Ductwork	9/9/2022	53
Determined - Compl...	2022JFK103	9/7/2022	Design/Build of new Central Substation 2	9/16/2022	18
Determined - Compl...	2022JFK104	9/9/2022	JFK Reel Offloading	9/9/2022	11
Determined - Compl...	2022JFK105	9/12/2022	Korean Air Cargo HVAC Cranes	9/12/2022	18
In FAA Review	2022LGA100	9/26/2022	Terminal B - Central Hall West Commercial Fit...	9/12/2022	50

FAA Review

- Initiates coordinated review by various lines of business (disciplines)
 - Airports Division, Flight Standards, Flight Procedures, NAVAIDS, Air Traffic Control, Technical Operations etc.
 - Review is influenced by structure type
- Typically takes 45 – 60 days, but can take longer
- May request additional information based on initial findings
- Results in a determination letter that states:
 - Determination of No-Hazard
 - Determination of No-Hazard, Conditional No-Objection
 - Determination of Hazard – Must be mitigated before work can proceed

Types of Structures

Temporary

Determinations are good for 18 months or until expiration date.

Examples:

- Cranes
- Towers
- Construction sites

Permanent

Determinations do not expire.

Examples:

- Buildings
- Power Lines
- Light Poles

Survey Accuracy

Accuracy Code	Horizontal Tolerance	Vertical Tolerance
1A	+20 ft (6 m)	+3 ft (1 m)
2B	+50 ft (15 m)	+10 ft (3 m)
3C	+100 ft (30 m)	+20 ft (6 m)
4D (Default)	+250 ft (75 m)	+50 ft (15 m)
5E	+500 ft (150 m)	+125 ft (38 m)

1A survey accuracy recommended. FAA may request a 1A survey accuracy letter which can be obtained from Central Survey

Source: [FAA Order 8260.19H](#)

FAA Determination Letters

- Issued by FAA once all lines of businesses have completed their review/commented
- Specifies requirements for compliance
- Specifies an expiration date
- Includes guidelines for requesting an extension, at least 15 days prior to expiration
- Any equipment or structure that exceeds specified heights require a separate submittal



U. S. Department
of Transportation

Federal Aviation
Administration

New York Airports District Office
1 Aviation Plaza
Jamaica, New York 11434
Telephone: 718-995-5770
Fax: 718-995-5790

December 4, 2017

Mr. Michael Gernant
Port Authority of New York & New Jersey
Aviation Department
Aeronautical & Technical Services
4 World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10007

Dear Mr. Gernant:

Teterboro Airport (TEB), Teterboro, New Jersey
ASN 2017-AEA-2002 through 2004-NRA (3DAAP #3D11270)
Temporary Construction Equipment for Drainage Improvements

This office has completed the coordinated review of the subject airport development with all interested parties within the Federal Aviation Administration (FAA).

Based on this review, there is a conditional no objection, subject to the following:

1. These cases were filed using the following data, which define the horizontal and vertical limits of the work area:

ASN	Location	Latitude	Longitude	AGL (feet)	AMSL (feet)
2017-AEA-2002-NRA	TETERBORO, NJ	40-50-57.55N	74-03-36.41W	25	29
2017-AEA-2003-NRA	TETERBORO, NJ	40-50-50.75N	74-03-48.11W	25	27
2017-AEA-2004-NRA	TETERBORO, NJ	40-50-25.38N	74-03-43.27W	25	31

NOTE: This proposal, as filed has no Instrument Flight Rules (IFR) impacts/effects.

2. Mark and light construction equipment in accordance with FAA AC150/5210-5D, chapters 4d3 and 5a1. flags and flashing yellow lights.
3. When working within the Runway Safety Area (RSA), the corresponding runway must be closed. Once work is completed and the runway is reopened, no equipment or stockpiled material may remain in the Runway Object Free Area (ROFA).

Final Thoughts

- Consult ATS early on, including for conceptual projects
- Accurately determine your project and equipment needs and coordinate accordingly
- Use [ATS Submission and Tracking System](#)
- **At least 10 weeks prior to project start:** Submit all required information through [ATS 7460 Submission and Tracking Site](#) to minimize potential for impact on project schedule

Thank You!

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Additional References (clickable links)

- [FAA Advisory Circular 70/7460-1L – Obstruction Marking and Lighting](#)
- [FAA Advisory Circular 150/5345-43J, Specification of Obstruction Marking and Lighting](#)
- [FAA Final Policy for On-airport Solar Panels](#)
- [FAA Policy on Radio Frequencies](#) (refer to Appendix B)
- [ACRP #38 – Understanding Airspace, Objects, and Their Effects on Airports](#)
- [ACRP #195 – Best Practices for Airport Obstruction Management](#)
- [TCAP Central Office Webpage](#)
- [TCAP External Roadmap](#)
- We also want to hear from you, your feedback is important to us [TCAP Survey](#)