



# PortViews

## Thinking Inside the Box

### FIFTY YEARS OF CONTAINERIZATION

By Joseph Shinnick

Some decades ago, a visionary trucking-company owner named Malcom McLean was sitting in his truck at the Hoboken Piers, waiting all day to unload his cargo onto a ship. As he was looking out of his truck window at the long line of trucks ahead of him, an idea came to him — an idea so revolutionary in many ways, it would affect almost every man, woman and child from then onward.

McLean imagined — instead of many laborers spending many hours unloading cargo from trucks and then placing the same cargo onto a ship — why couldn't that cargo be contained in a removable truck body, or trailer, that could be removed by crane and immediately reloaded intact onto a ship?

It wasn't until 1955, when McLean sold his trucking company to purchase the shipping company, Pan Atlantic Steamship Lines, a subsidiary of Waterman Steamship Co., that he was able to begin working on the creation of an actual container ship. On April 26, 1956, at Port Newark, his innovative idea of containerization was realized when his converted World War II tanker, named the Ideal X, left for Houston, Texas with 58 of these historic trailers.

The Port Authority of New York & New Jersey was quick to pave the way for the birth of containerization with the construction of the world's first specialized container port in the swamps of Elizabeth, New Jersey, and there, weekly containerized cargo service took off.

*(continued on page 3)*



**This is how it began** 50 years ago on the *Ideal X*.



**At the March 7th news conference** are (from left) New Jersey Governor Jon S. Corzine, Port Authority Chairman Anthony R. Coscia and Vice Chairman Charles A. Gargano, and Port Commerce Director Rick M. Larrabee.

## Port of New York and New Jersey Sets Cargo Record for 2005

### GOVERNOR CORZINE, PORT AUTHORITY ANNOUNCE NEW PORT SECURITY INITIATIVES

International cargo volumes in the Port of New York and New Jersey hit record levels in 2005, said New Jersey Governor Jon S. Corzine, Port Authority Chairman Anthony R. Coscia and Port Authority Vice Chairman Charles A. Gargano, at a press event on March 7, 2006. They announced new port security initiatives, including a public-private task force and a demonstration of technology to enhance security at the East Coast's largest seaport.

During a press conference at the APM Terminal at the Elizabeth-Port Authority Marine Terminal, Governor Corzine, Chairman Coscia and Vice Chairman Gargano noted the following highlights and initiatives:

- Containerized cargo volumes in the Port of New York and New Jersey rose 7.6 percent in 2005 to a new record high, continuing to exceed the Authority's projected cargo growth levels. The dollar value of all cargo moving through the port exceeded \$132 billion for the first time, up 15.6 percent from 2004. The record cargo volume was attributed to a 17 percent increase in trade with Far East Asia and a 15 percent increase in trade with Southeast Asia, a trend that began three years ago, making Asia the Port's largest market.
- ExpressRail, the Port Authority's rail terminals in New Jersey, attained a new record, handling 303,032 containers in 2005, nearly 7 percent more than in 2004.

*(continued on page 4)*

PortViews is published by:

**The Port Authority of New York & New Jersey**

225 Park Avenue South  
New York, NY 10003  
Tel: (212) 435-6915  
Fax: (212) 435-6934  
www.portnynj.com  
email: hmccarro@panynj.gov

**George E. Pataki**  
Governor, State of New York

**Jon S. Corzine**  
Governor, State of New Jersey

**Anthony R. Coscia**  
Chairman

**Charles A. Gargano**  
Vice Chairman

**Kenneth J. Ringler Jr.**  
Executive Director

**James P. Fox**  
Deputy Executive Director

**Edmond F. Schorno**  
Chief of Staff

**Kayla M. Bergeron**  
Chief, Public & Government Affairs

**Ernesto L. Butcher**  
Chief Operating Officer

**R. M. Larrabee**  
Director Port Commerce

**William Ellis**  
Assistant Director Port Commerce

**Dennis Lombardi**  
Assistant Director Port Commerce

**Peter Zantal**  
Port Commerce General Manager,  
Strategic Analysis & Industry Relations

**Hilary McCarron**  
Editor

**Lourde Michel**  
Associate Editor

Established in 1921, The Port Authority of NY & NJ is a bistate public agency that strives to meet the transportation and commerce needs of the region. It operates some of the busiest and most important transportation links in the region. They include: John F. Kennedy International, Newark Liberty International, LaGuardia and Teterboro airports; the Downtown Manhattan Heliport; AirTrain JFK and AirTrain Newark; the George Washington Bridge; the Lincoln and Holland tunnels; the three bridges between Staten Island and New Jersey; the PATH rapid-transit system; Port Newark; the Elizabeth-Port Authority Marine Terminal; the Howland Hook Marine Terminal on Staten Island; the Auto Marine Terminal, the Brooklyn Piers/Red Hook Container Terminal; and the Port Authority Bus Terminal in midtown Manhattan. Economic Development operations include The Teleport, waterfront development, and ferry transportation. The Port Authority also owns the 16-acre World Trade Center site and is developing the new WTC Transportation Hub and permanent PATH terminal as part of both the redevelopment of the site and Lower Manhattan revitalization. The Port Authority is self-supporting and receives no tax revenue from either state.

portViews

# Custom Border Protection

By Lucille Cirillo

*FRIEND OF THE PORT IS A  
REGULAR FEATURE IN PORTVIEWS*

Customs & Border Protection (CBP) plays a dynamic role in the operational life of the Port of New York and New Jersey. As the guardians of our nation's borders, CBP has developed a strategic plan that is focused on integrating security into the business flow of port operations. When asked about port security, Kathleen M. Haage, CBP's Area Director in Newark, stated, "Our port must be the last line of defense against terrorism, not the first." To support that goal, CBP has established a layered approach to border security. The first layer is the screening and targeting of 100 percent of all cargo prior to its arrival on our shores. The second layer is the Container Security Initiative (CSI) program in which CBP officers are assigned in ports throughout the world to screen and examine cargo prior to its departure to the United States. CSI was designed to "push the borders out" beyond our coastline and identify threats before they can arrive on our shores. The third layer is the "24-Hour Rule" that requires manifest data to be provided 24 hours prior to U.S.-bound cargo being loaded at the foreign port. This rule allows CBP to deny the loading of high-risk cargo while the vessel is still overseas. The fourth layer is the Customs-Trade Partnership Against Terrorism (C-TPAT), a planned systematic approach to validate supply-chain security of CBP's trade community partners and engages the private sector in actively partaking in the responsibility of securing commerce. The final layer is the integration of cutting-edge technology that allows CBP officers to screen high-risk cargo quickly and effectively.

CBP reviews the manifest of 100 percent of all cargo prior to the cargo being loaded on board the vessel in the foreign port. CBP officers target cargo from CSI ports, its National Targeting Center, and the local port level by reviewing manifests and conducting database queries. Targets are identified using the expert rule-based Automated Targeting System (ATS) that assesses threat levels based upon information and intelligence that have been programmed into the system. The ATS has provided a means for CBP to build on 25 years of trade profiles that have been previously collected to identify as well as manage risk by capturing and storing manifest and entry data. The three layers of targeting are strategically integrated to ensure that all manifests are reviewed by several sets of expert eyes in addition to the

computer targeting system. Carriers are now required to transmit manifest information 24 hours prior to loading in the foreign port so that CBP can identify high-risk cargo before it is loaded onto a ship bound for our shores. CBP in Newark works with officers located in CSI ports and their host countries as well as foreign governments in non-CSI countries to screen the high-risk cargo. CSI has been very active in conducting examinations overseas. CSI ports have been established in 43 ports that ship approximately 80 percent of imported cargo to the U.S. CBP's goal is to have 50 CSI ports that will cover 90 percent of imported cargo before the end of 2006. By targeting in advance, CBP's goal is to provide both the carrier and the terminal operator with a target list prior to vessel arrival in order to facilitate the release of cargo that poses no threat.

Within the day-to-day operations in the Port of New York and New Jersey, CBP uses non-intrusive technology to facilitate container screening. CBP has extended its hours of operation beyond the traditional 8AM-4PM work day in order to screen and release cargo as expeditiously as possible once it has been determined to pose no threat. CBP is working very hard to keep its commitment to the trade and to staff the radiation portal monitors at each individual terminal. It's their goal to reduce the response time, the threat, and the concern. Each day, CBP officers respond to approximately 200 alerts throughout the terminals. Working with the Laboratory Science Services (LSS), a group of government-contracted scientists, as well as other agencies and private sector partners, CBP has been able to mitigate these threats without impacting the business of the port.

After screening 100 percent of the manifests of arriving cargo, CBP examines approximately 8 percent of the containers arriving within the Port of New York and New Jersey. "In essence, the 8 percent number is truly misleading. An intelligent exam is time consuming; you have to think like a bad guy. The enemy of a good exam is a routine exam. Asking officers to strip containers simply 'just because' is not good enough ... there has to be a reason and they need to be engaged in the process of what they are doing," stated Ms. Haage when asked about the cargo examination process. Ms. Haage also spoke about the critics who have touted that every container arriving in the U.S. should be examined to ensure security. "Should such rhetoric come true, it would severely hurt our stakeholders, our economic status, and ultimately the American consumer.

*(continued on page 5)*

"Nobody realized the significance of that April day in 1956," said Paul Richardson. Richardson graduated from Boston University in 1952, and began working for McLean's Trucking Company in North Carolina, which became the second largest trucking company in the United States. "McLean had a very extensive training program," said Richardson. "The training consisted of six months on the road driving long-haul big rigs, and six months in the main office learning all about administration, terminal management, and so on. I loved it!" Richardson then spent eight years in Boston to be in charge of sales. "Even then, Mr. McLean talked quite a bit about his plan for containerization," said Richardson.

Bill Hubbard was one of McLean's early terminal managers for Tampa and other ports, and remained with his company for 23 years. Hubbard was working on a Navy attack transport in Korea during the Korean War when he first read about McLean's interest in containerization. Hubbard wrote to him and also participated in McLean's training program. Hubbard was also the first person outside the McLean family to leave the trucking company and work for Pan Atlantic. "McLean was a very personable guy who changed the face of cargo shipping," said Hubbard. "General cargo couldn't compete with containerization. The world had to be convinced, and McLean did just that."

In 1957 (the same year that Boeing Company rolled out the first 707 jet for commercial delivery), McLean converted six regular vessels to the new cellular vessels. These containers were designed to handle a wide variety of products. "Container ships revolutionized cargo handling in less than five years," said Hubbard. With these six ships now transporting cargo to Port Newark, Houston, New Orleans, Tampa, and Miami, the Port Authority began dredging operations at Elizabeth-Port Authority Marine Terminal for a deep-water docking facility. An estimated 14 million cubic yards of dirt were removed during this yearlong project.

Barney Sloan worked for the Port Authority at Port Newark from 1959 to 1986, and retired as the manager of marine terminals. "I saw everything grow," said Sloan. "Pan Atlantic changed its corporate name to Sea-Land in 1960 to better describe the services it offered. The first ships carried their own cranes on the ship because none of the ports had cranes yet. Sea-Land was one of the first to build cranes, which cost at least \$1 million each." Hubbard said, "Sea-Land recognized early on

that the cranes would be better suited to be stationed at the ports to free up space on the ships. Some of the ports built cranes to induce ships that had no cranes."

### CONTAINERIZATION CHANGES LABOR

Due to the proliferation of the cranes, the need for longshoremen was reduced considerably. "Between the crew on deck and the crew in the hold, we would normally see 40 to 50 guys working on the cargo," said Sloan. "After the birth of the cranes, we wouldn't

“The Port Authority of New York and New Jersey was quick to pave the way for the birth of containerization...”

need more than 14 guys at a time. There were once 40,000 longshoremen in the Port area," added Sloan. "Now, only about 4,000 laborers can be found doing such tasks as driving fork lifts and driving the new cars off the ships."

### PORT AUTHORITY ASSISTANCE

"Although working with the union in this 'new age' would produce a lot of growing pains, the International Longshoremen's Association, the shipping operators and the Port Authority had a great relationship," said Sloan. "We needed each other, and the Port Authority always met with the shipping operators and the union leaders."

"The Port Authority took a very active financial role in containerization," said Sloan. "The Port Authority paid for cranes and tracks. We owned terminals and leased them out. Sea-Land paid for their first cranes, and after that, the Port Authority assisted operators financially."

### BUILD A CONTAINER SHIP AND THEY WILL COME...

This new containerization concept caught the interest of many other countries such as England, France, Italy, Germany, and Japan, who sent representatives to view and research this new transportation marvel.

During his 27 years with Sea-Land, Paul Richardson moved up the ranks ultimately to Vice Chairman. "I remember very vividly getting into the European market during the

mid-1960s," said Richardson. "Containerization was being adopted worldwide."

What was it like to sail on one of these container ships? Just ask Charles Cushing, who served as a deck officer at the time. "We were very excited about the new ships," said Cushing. "Container ships were a brand new concept, and much different than the usual break-bulk ships." In 1960, Cushing answered a New York Times ad for a mechanical engineer and joined McLean's Pan Atlantic Steamship Company. He was assigned to design and build 40 shipload gantry cranes, as well as to plan the conversion of container ships that would transport goods to Puerto Rico. "When Malcom saw anything float, he would try to envision, if converted, how many containers it could hold," said Cushing.

### THE MAJOR CONTRIBUTIONS OF CONTAINERIZATION

"Malcom was a real genius," said Cushing. "Because of him, there is now a tremendous reduction in transportation costs and a much faster speed of cargo delivery that has permeated to far-away markets — the entire world can now participate in a global marketplace."

### SMOOTH SAILING INTO THE FUTURE

During the late 1960s, Sea-Land owned eight of the largest and fastest container ships in the world, and its network of ports extended to Canada and the Caribbean. Mediterranean countries and Korea opened their ports to McLean in the early 1970s. Sea-Land christened its first diesel-powered containership in 1979, the same year that service to India was inaugurated. The 1980s saw the first Sea-Land cargo shipped from the People's Republic of China. Today, over 200 million containers circle the globe annually.

McLean, a farmer's son from North Carolina with only a high school education, became the father of containerization through hard work and a consistent vision. By thinking *inside* the box, he was able to think "outside the box" in a way that would forever change the world for the better. A very happy 50th anniversary, Mr. McLean, and on behalf of all of us, thank you! 🌐

*Malcom McLean passed away on May 25, 2001, at the age of 87.*

## MALCOM MCLEAN ASSISTS THE VIETNAM WAR EFFORT

*During the Vietnam War era, Sea-Land secured a contract with the United States government to provide container service to four Vietnam ports, as well as an intercoastal service. At that time, the cargo piers that existed in Saigon were choked with ships. It was literally taking weeks before these vessels were able to unload. McLean personally traveled to Washington, DC to discuss this issue with the Pentagon. McLean promised the very skeptical military that he could turn a ship around within 24 hours. The U.S. government gave McLean special permission to tour Saigon and other country locales. Viewing the miserable shipping conditions in the war zone, and experiencing 115-degree heat in the shade, McLean thought right away, "This is a case for containerization!"*

*McLean's concept freed these piers and allowed military equipment and medical cargo to be transported much more quickly to the U.S. forces in Vietnam. Within weeks, Vietnam had the first container terminal outside the United States. McLean did not want these ships returned to the United States empty, so he introduced his concept to the Asian markets. As a result, McLean's efforts led to the growth of containerization throughout Asia and the completion of many overseas facilities, including one of the world's largest in Hong Kong. Bill Hubbard, one of Sea-Land's early terminal managers, said, "I don't think any of us at the time realized that we were changing the world."*

## Port of New York and New Jersey Sets Record for 2005

(continued from page 1)

- A port security task force, to be led by Chairman Coscia, will study ways to enhance port security and develop recommendations in six months.
- A pilot test is under way to track the status of approximately 25 cargo containers from their points of origin to their destinations. The first containers that are part of the program have left Europe and arrived here on March 13.

New Jersey Governor Jon S. Corzine said, "The increased volume of cargo passing through our ports highlights both our strong economic growth, and our increasing security needs. I look forward to working with the Port Authority to implement new security measures that will ensure our safety and the continued prosperity of our ports."

Port Authority Chairman Anthony R. Coscia said, "Most of the federal government's attention has been focused on aviation security because airports and airplanes affect the lives of so many people. However, our nation's ports are equally if not more vulnerable and deserve our full attention. That's why I've asked a number of key stakeholders from New Jersey and New York to explore ways we can better secure our port and develop realistic recommendations that we can implement. While the public generally has little interaction with the day-to-day activities at the port, we want to do everything in our power to make sure that we can greatly reduce any security risk port activities may pose."

Port Authority Vice Chairman Charles A. Gargano said, "The dramatic increases in cargo we have seen underscore the need for us to be more vigilant, and compel us to focus efforts on moving cargo more efficiently

on and off the port property. That's why we continue to invest in new and better rail facilities at our marine terminals, including one at Howland Hook that will open this summer to allow cargo containers to be moved on and off the terminal by rail for the first time."

Port Authority Executive Director Kenneth J. Ringler Jr. said, "The security of all of our facilities has and will continue to be our top priority. At the seaport, we have invested approximately \$70 million since 9/11 to

“The dramatic increases in cargo we have seen underscore the need for us to be more vigilant, and compel us to focus efforts on moving cargo more efficiently on and off the port property.”

better secure port terminals, including better fencing, lighting, closed-circuit television and access systems. During the next two years, we will invest an additional \$6 million for enhanced security projects, such as more closed-circuit television cameras and a biometric access control system at the Port Authority's Administration Building, at public berths and at other critical infrastructure."

### PORT COMMERCE CONTINUES ROBUST GROWTH

Port Authority Port Commerce Director Richard M. Larrabee said that in 2005, the total amount of containerized cargo handled in the Port of New York and New Jersey — measured in 20-foot equivalent units (TEUs) — was 4,792,922 TEUs, a 7 percent increase over the 2004 total of 4,478,480 TEUs and set a new annual record. The total value of all cargo handled in 2005 — more

than \$132 billion — also surpassed the previous record of \$114 billion, Mr. Larrabee said. The Port Import-Export Reporting System (PIERS) reported in 2005 that loaded TEUs in 2005 totaled 3,385,003, a 7.6 percent increase over the 3,147,203 TEUs handled in the port in 2004. Loaded imports and exports totaled 2,408,121 and 976,882 TEUs respectively.

The port's total general cargo volumes, according to data from the U.S. Bureau of Census, increased 10.4 percent to 28,132,497 metric tons in 2005, compared to 25,474,164 metric tons in 2004. General cargo imports totaled 20,236,519 metric tons in 2005, a 9 percent increase over the 2004 import volume of 18,572,460 metric tons. General cargo exports also increased, by 14.4 percent, from 6,901,704 metric tons in 2004 to 7,895,978 metric tons in 2005.

Total bulk cargo was up 2.6 percent to 56,621,526 metric tons in 2005, compared to 55,169,827 metric tons in 2004. Total bulk cargo imports increased from 51,768,248 metric tons in 2004 to 53,449,638 metric tons in 2005. Total bulk cargo exports decreased by 6.8 percent, from 3,401,579 metric tons in 2004 to 3,171,888 metric tons in 2005. Total cargo volumes (bulk and general cargo combined) grew by 5.1 percent, from 80,643,991 metric tons in 2004 to 84,754,023 metric tons in 2005.

The number of automobiles handled in 2005, including small trucks, vans, SUVs and other personal vehicles, totaled 722,411, a figure nearly identical to the 2004 numbers.

For 2005 trade highlights, please visit [http://www.panynj.info/doingbusinesswith/seaport/html/trade\\_statistics.html](http://www.panynj.info/doingbusinesswith/seaport/html/trade_statistics.html). ☺

# Fifty Years of Containerization: Port Authority Vision

By Joseph Shinnick

One of the original construction engineers for Sea-Land was Ron Katims, whose first assignment in 1961 was to work with the Port Authority on the first container facility at Port Newark, while the new container facility at Elizabeth-Port Authority Marine Terminal was being constructed. "We were trying to convert an existing break-bulk facility into a new container facility," said Katims. "We were working with unpaved yards and old warehouses that had to be converted into office space. In fact, my first assignment was to build an addition onto one of the warehouses. As an incentive, I was told that my office would be in part of that converted building."

At that time, Austin Tobin was the executive director of the Port Authority, and Tobin assigned Lyle King to be director of marine terminals. "The Port Authority was really terrific to work with. The new container facility at Elizabeth Marine Terminal was very much Austin Tobin's vision," said Katims. Sea-Land became the facility's first tenant and helped with the planning of what the new terminal would look like. "Austin Tobin understood the

concept of containerization very well," said Paul Richardson, former vice chairman of Sea-Land, who began working for McLean's Trucking Company in 1952. "Austin Tobin said, 'What kind of terminal do you want, and we will build it for you.' All other ports then jumped in."

"The Port Authority was really terrific to work with..."

The Port Authority not only financed the project, but assisted with the basic infrastructure planning as well. And in 1962, the container terminal at Elizabeth Marine Terminal was completed.

"Opening day at Elizabeth Marine Terminal was very exciting," said Katims. "We were getting new containers and good ships. So many things were running through my mind that day." The first of the series of ships that sailed out of the marine terminal was named the Elizabethport.

"We quickly outgrew the first terminal," said Katims. The Port Authority then built a second terminal in Elizabeth in 1974.

The Port Authority also helped form tenant associations who would meet periodically. "It was a great way to meet and know each other," said Barney Sloan, who worked for the Port Authority at Port Newark from 1959 to 1986, and retired as the manager of marine terminals. "We discussed many common issues, including water conservation during one very serious drought. In fact, it was amazing how many ideas tenants came up with."

## CONTAINERIZATION MEETS THE COMPUTER AGE

The late 1960s ushered in the computer age for the movement of cargo. Although it took a long time to develop, all cargo is now computerized from its origin directly to the customer. "The operators also had to use computers to balance the ship due to the various weights of the containers," said Sloan. "All terminals, Port Authority Police and tenant security became computerized." Constant video surveillance now deters most wrongdoing from theft to terrorism. "All around the world – they copied us," said Sloan. ☺

## Custom Border Protection

(continued from page 2)

CBP is determined to strategically carry out its antiterrorism mission while facilitating legitimate trade," stated Ms. Haage.

CBP developed a strategic plan for the implementation of various nonintrusive technologies. Port Newark was chosen as a model for the testing of radiation portal monitors and imaging equipment because of its distinct and diverse cargo operation. CBP worked diligently with the container terminals, The Port Authority of New York & New Jersey, and other stakeholders to execute the installation of first generation nonintrusive inspection technology including radiation portal monitors and imaging equipment. The radiation portal monitors allow CBP officers to efficiently and effectively determine if cargo presents a radiological threat. Imaging equipment assists officers in identifying anomalies in cargo that may indicate the concealment of a terrorist weapon or other contraband.

Recently CBP initiated a new Customs-Trade Partnership Against Terror (C-TPAT) office in Newark. The main benefit of the C-TPAT program is to provide expedited processing

of cargo to C-TPAT. When asked about the program, Ms. Haage responded, "I think it's extremely important for CBP and the trade community to further open the lines of communication and develop a united

"Our port must be the last line of defense against terrorism, not the first."

front against the threat of terrorism. As the C-TPAT program expands, CBP will be able to more thoroughly mitigate risk and improve the flow of commerce."

Calendar year 2006 continues to be an action-packed year for CBP in the Port of New York and New Jersey. There are four core issues on the horizon:

1. *The Central Examination Site Memorandum of Understanding:* Based upon our role in national security and antiterrorism, CBP's goal is to limit the movement of containers and to continue to consolidate its resources and technologies.

2. *ACV Mobile High Energy X-Ray:* Working with the Terminal Operators in the Port of New York and New Jersey, CBP will continue to move toward rolling scans in safe, secure work areas.

3. *Cruise Ship Terminals:* This year, CBP faces the dramatic growth of the cruise ship industry. CBP now staffs three terminals in Manhattan, Brooklyn, and Bayonne, New Jersey.

4. *Port Security:* CBP continues to partner with the Coast Guard, Port Authority Police and other law enforcement agencies to provide a layered security for our bistate waterfront.

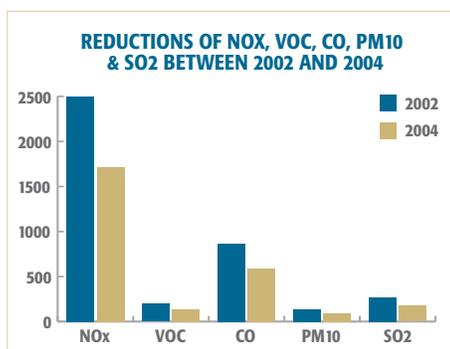
Overall, CBP aims to work with the port community in order to further integrate port and cargo security into the continued growth of the Port of New York and New Jersey. ☺

*Ms. Cirillo is the CBP Public Affairs Liaison for the New York Field Office.*

# Modernizing Equipment Leads to Air Quality Enhancements

ENVIRONMENTAL PROGRESS  
REPORT FOR THE PORT OF NY & NJ

It's always a good feeling to know that you've found a way of saving the company money by improving fuel usage and operational efficiency. Now what if, under this same effort, your equipment modernization program enhances air quality so much that the program can be award-winning?



**Air quality improvements followed** as a result of the ports terminal operators' voluntary equipment modernization programs.

A unique emissions inventory, which has been completed through a voluntary environmental initiative between The Port Authority of New York and New Jersey, APM Terminals, ASI, New York Container Terminal, Maher Terminal and Port Newark Container Terminal, has earned a national AAPA 2005 Environmental Improvement Award. This award-winning inventory was conducted to determine whether air emissions from the 2004 off-road Container Cargo-Handling Equipment (CHE) fleets had improved since originally measured in 2002. Examples of

off-road equipment include yard tractors, top loaders, front loaders and straddle carriers. The idea to quantify air emissions evolved from the Green Practices Task Force, a group comprised of on-port businesses and Port Authority staff. The group regularly meets to share information on business-savvy green practices, which are those that go beyond what is required by environmental laws and regulations.

Despite increases in the number of equipment in the CHE fleet, average operating hours and the total number of containers moved, the results of the survey demonstrated that harmful air emissions have been greatly reduced, and air quality greatly enhanced at the port between 2002 and 2004 due to our terminal operators' voluntary equipment modernization programs. Their efforts included ordering replacement equipment with on-road engines and utilizing on-road fuel for off-road applications, while transcending government requirements. Members of the Green Practices Task Force cited that despite higher upfront investments, the new equipment makes good business sense because of longer manufacturers' warranties and higher operational efficiencies.

These emission reductions are even more dramatic when the data is normalized against a 25 percent rise in freight over the two-year period. For the five container terminals, tons of Nitrogen Oxide, Volatile Organic Compounds, Carbon Monoxide, Particulate Matter with 10 Microns, and Sulfur Dioxide were actually reduced by 45 to 48 percent per 1000 container moves. "About 8 percent of the improvement can also be attributed to installation and use of electric cranes during the two-year inventory period," noted Joe Monaco, who manages



APM Terminal's Frank Baranco (top) and Jim Duffield (bottom left) with Joseph Monaco (lower right), and an environmentally friendly 2004 Taylor 955 Top Loader at Elizabeth-Port Authority Marine Terminal.

the Green Practices Task Force for the Port Authority. "The air quality improvements are clearly the result of our tenants' voluntary equipment modernization programs, for which they deserve a great deal of credit."

There are approximately 20 on-port businesses ranging from terminal operations to automobile handling to bulk operations that participate in the Green Practices Task Force. Toyota Logistics Services has participated in the Green Practices Task Force since Spring 2003. Jo-Ann Tamasco, the Safety and Environmental Engineer for the Toyota facility, said, "The Green Practices Task Force meetings have been very helpful in coming up with new ideas to improve our environmental management system. In one year, we increased our recycling, which saved us \$11,800 in waste disposal costs. We also learned about storm drain filters that can be inserted into drains before a spill happens — to protect water quality — and implemented that idea too. We're pleased that we have found pollution prevention measures that reduce our environmental impact even further."

For more information about the task force, please contact Joe Monaco of the Port Authority at [jmonaco@panynj.gov](mailto:jmonaco@panynj.gov).

## OPERATION SAFE COMMERCE TECHNOLOGY INTRODUCED

Following the Marth 7th news conference, New Jersey Governor Corzine and Port Authority Chairman Coscia witnessed a demonstration of cutting-edge technology being tested to track the status of a limited number of cargo containers from their point of origin to their destination.

The test culminates three years of work by Operation Safe Commerce, a federally funded maritime consortium of agencies and organizations exploring ways to better secure the nation's ports. The Port of New York and New Jersey is the only East Coast port participating in the pilot test. On the West Coast, the ports of Los Angeles and Long Beach, and the ports of Seattle and Tacoma also are participating in a similar test using different technology.

# Annual Review & Outlook

In 2000, the Port Authority embarked on a multibillion dollar, 10-year redevelopment program in order to meet the challenge of projected cargo growth. In 2006, at the midpoint, the Port Authority is well under way in achieving their objective to improve productivity and to enhance services.

"We're more committed than ever to providing the critical transportation infrastructure that helps our tenants and customers deliver on their business goals," said Richard Larrabee, director of port commerce at the Port Authority. To date, the Port Authority has invested over \$2 billion on both land and waterside improvements.

The Kill Van Kull and Newark Bay Channels have already been deepened to 45 feet, ahead of schedule and under the original cost estimate. The 41-foot Arthur Kill channel deepening to the Howland Hook Marine Terminal is to be completed this year.

The Port Authority is working with the Corps of Engineers to deepen the Kill Van Kull, Elizabeth, Ambrose, Anchorage, Newark Bay, Arthur Kill, Port Jersey and Bay Ridge channels to 50 feet over the next decade. "This is a \$1.6 billion project that will allow the safe and economically efficient passage of the newest container ships serving the Port of NY & NJ," said Steve Dorrlor, waterways manager at the Port Authority.

At the rail terminals, the development of the "ExpressRail System" will enhance the flow of intermodal container exchanges between vessels and the railroad. In Elizabeth, construction of tracks 9 and 10 moved forward during 2005. "When this facility is completed, it will have the capacity to handle approximately triple our present throughput," said Peter Zantal, manager, strategic analysis and industry at the Port Authority. "And with the



**Construction is steadily advancing on ExpressRail Staten Island.** Track is being installed and the facility is expected to open later in the spring.

completion in 2006 of construction on the new 39-acre on-dock rail facility that will serve the Howland Hook Marine Terminal in Staten Island, we will bring rail service capabilities east of the Hudson," he added. The ExpressRail System also includes ExpressRail Newark, which serves the Port Newark Container Terminal (PNCT). This facility will also be expanded when it receives additional track this year.

At the marine terminals, the changes are impressive. All of the major terminal operators feature new high-capacity post-Panamax cranes, improved berths and new gate systems. Wharfs have been upgraded and/or extended at Maher Container Terminal, PNCT, and at New York Container Terminal (NYCT). At PNCT, two new 100-foot gauge post-Panamax cranes were installed, and at both NYCT and Maher, crane rail was upgraded to support post-Panamax cranes. At NYCT, a 50-foot deep-water berth addition was completed in 2005.



**This is a current map of Port Newark/Elizabeth.** APM Terminal now has direct access to ExpressRail Elizabeth.

APM Terminal added 84 acres to its terminal, bringing its total acreage to 350. This expansion now gives it direct access to on-dock rail service at ExpressRail Elizabeth. Additionally, APM plans to implement a new gate system using OCR technology and add four ship-to-shore, post-Panamax cranes. When fully completed in 2008, APM will be fully converted from a wheeled operation to a RTG grounded operation. ☺

*Each of the containers to be tracked will contain a cigar-box sized "black box," known as a Container Security Unit and features five sensors that will monitor the container's position through Global Positioning Satellites, whether the door has been opened, whether light is entering the container, and whether the container has any traces of radiation or carbon monoxide. The "black box" will provide immediate information on the container's position and also signal if the container has been breached or if another anomaly has been detected.*

*Assuming the initial pilot test is successful, the test program will be expanded to monitor up to 1,000 containers from March through October.*

*When the test concludes in October, officials will prepare a report on the results of the test and use those results to help create worldwide standards that could be implemented by the federal government and the International Maritime Organization. The organization also will recommend performance standards for a "black box" that can create a competitive industry for developing and producing the technology.*



# ILA Training Commitment Stronger Than Ever

**Construction was completed on the NYSA-ILA training center and the facility officially opened its doors on July 12, 2005.** *Henry Andrews of K Line and ILA President John Bowers cut the ribbon and opened the doors to the state-of-the-art facility. More than 100 industry representatives attended the event.*

A brand new NYSA-ILA training center opened its doors on site at the Port of New York and New Jersey and already has trained 2,400 workers and processed 1,200 new applicants to keep in line with retirements and an anticipated increase in workload. "Completion of this top-notch facility is a testament to the commitment of the NYSA-ILA for a highly trained and efficient workforce," said Beverly Fedorko, director of external affairs for the association.

This first-class facility offers programs ranging from hazardous materials handling and port security awareness for the existing workforce to ethics and orientation training for new hires. Skill certifications for heavy off-road equipment such as transtainer, stackers, hustlers and straddle carriers are also offered. With the arrival of new post-Panamax cranes, the center has also certified 26 crane operators.

"Our goal is to develop a workforce that is fully trained and skilled in all of the equipment at the Port," explained Ms. Fedorko. "We are training our longshoremen on all of the equipment because 'cross training' ensures that we have the most highly skilled team in the nation."

In 2006 NYSA will be adding simulators for the crane, straddle carrier, Noel carrier, transtainer and rubber tire gantry equipment. Ms. Fedorko noted that NYSA has recently completed the selection process for a vendor to supply these two mobile simulators and is working closely with them to design a product that meets the training requirements. Ultimately the customized simulators will mimic the exact equipment used by the terminal operators and training will be relevant to the environment, making it very practical and hands-on. An added benefit is that the simulators can also be transported to the terminals for convenience. 



**THE PORT AUTHORITY**  
OF NEW YORK & NEW JERSEY

**PortViews**

Port Commerce Department  
225 Park Avenue South, 11th Floor  
New York, NY 10003

First Class Mail  
U.S. Postage  
**PAID**  
New York, NY  
Permit No. 9948

## in this issue

Thinking Inside  
the Box

PAGE

1

Port of New York  
and New Jersey  
Sets Cargo  
Record for 2005

PAGE

1

Custom  
Border  
Protection

PAGE

2

Annual  
Review &  
Outlook

PAGE

7