

### New York/New Jersey/Philadelphia Metropolitan Area

# redesign

project

## Airspace Redesign: Scoping Information

Airline delays have been receiving increasing attention in local and national news media as the flying public reacts to the inconvenience and lost production caused by these delays. The public is demanding a more stable and predictable schedule that will ensure reasonable expectation of on-time arrivals at destination airports. This demand is coming at a time of dramatic growth in aviation. In response to public and industry desires, the Eastern Region of the Federal Aviation Administration (FAA) has embarked on a regional airspace redesign project intended to mitigate delays.

The decade of the nineties was one of the best ever in terms of aviation growth and expansion. In 1999 the nation's air carriers experienced a record estimated 664.5 million people traveling on U.S. commercial airlines(all carriers). Growth is expected to continue at a 5.1 percent rate each year reaching 239.4 million in 2011. Outpacing the large air carriers, regional commuter airline enplanements are expected to increase by 5.5 percent each year, reaching 137.5 million in 2011.

Regional aviation activity in the New York and Philadelphia areas has grown significantly and the region is one of the busiest in the country for aviation activity.

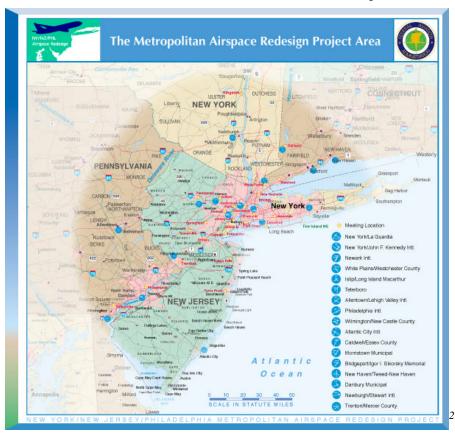
LaGuardia Airport (LGA) has consistently been one of the most delayed airports in the United States. Every year since 1985, LGA has ranked in the top three airports nationwide with respect to aircraft delays per 1,000 operations, which is an industry standard for delay measurement. In 2000, LGA was number one in the nation in delays.

Similar to LGA, John F. Kennedy International Airport (JFK) has consistently been one of the most delayed airports in the United States. Every year since 1985, JFK has ranked in the top 10 airports nationwide with respect to aircraft delays per 1,000 operations.

Newark International Airport (EWR) ranks worst in terms of delays per 1,000 operations as well as average minutes per delay. In five of the last six years, EWR has led the nation in delays.

Philadelphia International Airport (PHL) has experienced increasing delay recently, as it continues to experience significant growth while operating under a constrained airspace. In most years, PHL has ranked in the top five airports nationwide in terms of delays per 1,000 operations as well as average minutes per delay.

Delays may be categorized based on their causal factors. In 1999, FAA attributed 69.2 percent of delays to weather. Even though 1999 was a



(Continued from page 1)

year of unusually severe conditions, weather is the category that historically accounts for the majority of all delays. Clearly control of the weather to minimize delays is not a reasonable expectation. In 1999 the next largest category of delays was those attributed to volume in the national airspace system. These delays accounted for 11.8 percent of the 1999 total. Efficiencies that can be brought to the system by FAA can lead to delay reduction.

The FAA is the federal agency responsible for the safe and efficient operation of aircraft. The airspace redesign that has been undertaken by FAA Eastern Region is intended to help mitigate the delay problem by allowing a more efficient use of the airspace in the New York, New Jersey, and Philadelphia areas. Design and operation of a more efficient airspace, while maintaining a high level of safety, has the potential to provide better on time performance, reduce emissions, and generate economic savings due to less fuel being burned.

In summary, the purpose of the New York/ New Jersey/ Philadelphia Metropolitan Area Airspace Redesign Project is to identify ways to increase the efficiency of air traffic flows into and out of the New York metropolitan area, including Philadelphia, while maintaining or improving the level of safety and air traffic services that are currently in place.

**General Aviation** — Any aviation that is not commercial or military (e.g., corporate or private)

ARTCC — Air Route Traffic Control Center

EWR — Newark International Airport

**JFK** — John F. Kennedy International Airport

**LGA** — LaGuardia Airport

PHL — Philadelphia International Airport

**TRACON** — Terminal Radar Approach Control

#### Airspace Redesign: Three Working Concepts

The purpose of the scoping process is to involve the community in the proposed airspace redesign project. That community involvement is intended to achieve a dual purpose. The first is to educate the public about the need for redesign and to inform them about the particular design concepts for redesign that are under consideration. The second is to provide members of the public a formal opportunity to express their views about the project. During the scoping meetings, FAA representatives will describe in some detail the following three working design concepts or alternatives:

Concept for Modifications of Existing Routing: The design team is developing new or altered aircraft routing into and out of the New York Metropolitan area. The area covers the current controlled airspace of the New York Terminal Radar Control Facility (TRACON), which is roughly a 50-mile radius around the TRACON facility and varies in altitude from the surface to 18,000 feet. The number of routes into and out of the TRACON is limited today based on current radar technology. This design concept adds additional routes into and out of the TRACON area by allowing the airlines to implement advanced onboard navigation systems, such as Global Positioning System (GPS), Loran, Flight Management System (FMS) and 3-D navigation, as well as by designing additional routes that can be spaced closer together due to the increased navigational accuracy provided by such systems. This concept will increase allowable throughput, while reducing delays and reducing mileage required exiting and entering the TRACON area. In addition, this concept will provide a more dispersed traffic flow that, in turn, means that aircraft will be spread out in the sky over the metro area and will reduce the traffic traversing the same routes.

Four Corner Concept: This concept begins with a blank slate and allows the design team to build up a system of arrival and departure routes and procedures that is completely new to the metro area. The idea starts with "placing a square" over the TRACON airspace as the basic structure. Arriving aircraft enter the TRACON airspace at any of the 4 corners of the square. Depending on the current air traffic, arriving aircraft are allowed to enter at any corner. Once an aircraft overflies the corner, it can either proceed to another corner or go directly to the airport to land. A third option is for approaching aircraft to enter into a large overhead circular pattern to await final sequencing into their ultimate destination airport. Aircraft in the holding pattern will be stacked at different altitudes to accommodate large quantities of aircraft in the metro area. Departing aircraft will exit the box on any of the sides. This concept allows controllers to utilize Terminal Control Procedures to a far greater extent. These procedures maximize the use of all available airspace in the metro area and will reduce current 'bottle necks'.

Ocean Routing Concept: This approach utilizes extended climb paths for turbojets operating at low altitudes bringing the aircraft to higher altitudes prior to overflying urbanized areas. Revised departure procedures for this concept are focused on EWR but affect JFK and LGA flight procedures as well. Newark departures from the south runways (22L/R) would be placed over the waterways of the Arthur Kill and Raritan Bay and then turned east toward the Atlantic Ocean. Once over the Atlantic Ocean, Eastbound traffic would turn left and proceed over Long Island, while south and west bound traffic would continue down the coast. Westbound traffic would turn right and cross land in central New Jersey, while southbound would continue on course. All traffic would be in a continuous climb and would cross land at altitudes of no less than 16,000 ft. or higher. Newark departures from the north runways (4L/R) would start a loop to the west after takeoff. North, northwest, and northeast bound traffic would proceed on course after partially looping to the west, while southbound traffic would continue the loop to the south crossing back over Newark Airport and pick up the procedures utilized for runway 22L/R departures. Requirements to accomplish this concept include: (1) moving JFK arrival and departure operations to the east; (2) requiring a 400 foot/nm climb gradient for EWR runway 4L/R departures transitioning to a desired ocean route segment via Raritan Bay and the Industrial Waterway; and (3) providing course guidance in the Standard Instrument Departure procedures to tighten the dispersion of flight tracks.

Public Scoping: Schedule of Meetings

DATE	LOCATION	FACILITY	PHONE NUMBER
Wed., February 7, 2001	Danbury, CT	Inn at Ethan Allen	203-744-1776
Thurs., February 8, 2001	Kingston, NY	Holiday Inn	845-338-0400
Mon., February 12, 2001	White Plains, NY	Crowne Plaza	914-682-0050
Tues., February 13, 2001	Stamford, CT	U-Conn at Stamford, General Re Auditorium	203-251-8400
Wed., February 14, 2001	New Rochelle, NY	Ramada Inn	914-576-3700
Tues., March 6, 2001	Newark, NJ	Holiday Inn	973-589-1000
Wed., March 7, 2001	Carteret, NJ	Holiday Inn	732-541-9500
Thurs., March 8, 2001	Edison, NJ	Ramada Inn	732-661-1000
Mon., March 12, 2001	Clifton, NJ	Ramada Inn	973-778-6500
Tues., March 13, 2001	Hasbrouck Heights, NJ	Holiday Inn	201-288-9600
Wed., March 14, 2001	Park Slope, NY	Berkeley Carrol School	718-789-6060
Tues., March 20, 2001	Springfield, NJ	Holiday Inn	973-376-9400
Wed., March 21, 2001	Somerville, NJ	Immaculata High School	908-722-0200
Mon., March 26, 2001	Parsippany, NJ	Holiday Inn	973-263-2000
Tues., March 27, 2001	Jersey City, NJ	NJ City Univ., Student Union, 2nd Floor Multipurpose Rooms B & C	201-200-3128
Wed, March 28, 2001	Tottenville Section Staten Island, NY	Knights of Columbus Hall	718-948-9882
Tues., April 3, 2001	Uniondale, NY	Hofstra Univiversity, North Side Student Center, Room 101	516-463-6368
Wed., April 4, 2001	Lawrence, NY	Lawrence School #1	516-295-6100
Thurs., April 5, 2001	Elmhurst, NY	Marriott	718-565-8900
Tues., April 24, 2001	NW Staten Island, NY	Staten Island Hotel	718-354-7080
Wed., April 25, 2001	Manhattan, NY	Roosevelt Hotel	212-661-9600
Thurs., April 26, 2001	Bronx, NY	PS 182	718-828-6607
Tues., May 15, 2001	Toms River, NJ	Ramada Inn	732-905-2626
Wed., May 16, 2001	Tinton Falls, NJ	Holiday Inn	732-544-9300
Tues., May 22, 2001	Talleyville, DE	Brandywine High School	302-479-1600
Wed., May 23, 2001	Philadelphia, PA	Wyndham Plaza	215-448-2000
Thurs., May 24, 2001	Trenton, NJ	State of NJ Annex, Committee Rooms 1 & 3	609-292-5199

All scoping meetings will begin at 7:00 p.m. and will conclude at 9:00 p.m. Following the registration of participants, the meeting will begin with a brief presentation by the FAA (7:15p.m.) that will provide a summary of the New York/New Jersey/ Philadelphia Metropolitan Airspace Redesign Project. At the conclusion of the presentation (7:30 p.m.), members of the public will proceed to an open forum and display area, where they will have the opportunity to ask questions and discuss their concerns with FAA representatives. Participants who desire to do so can make written comments or submit oral comments to a court reporter. All such comments will become part of the official scoping record. After the open forum, participants will reconvene in a general session (8:30 p.m. - 9:00 p.m.) at which members of the public may ask FAA representatives questions about the airspace redesign and the environmental review process.

Inclement Weather Policy: In the event of inclement weather, members of the public should call the facility where the meeting is to be held to determine whether or not it has been cancelled. If the meeting is scheduled to take place at a public school, the school district's policy for inclement weather will apply.

New York/New Jersey/ Philadelphia Metropolitan Area Airspace Redesign Project

Litton PRC Mail Stop 6S3 1500 PRC Drive McLean, VA 22102

#### **GENERAL INFORMATION**

The web page address is: http://www.faa.gov/programs/airspace.htm

#### **SCOPING MEETING INFORMATION**

The toll free telephone number is:

1-866-EISLine (1-866-347-5463)

#### **SCOPING COMMENT SUBMITTAL**

#### **MAILING INFORMATION**

Litton PRC
Mail Stop 6S3
1500 PRC Drive
McLean, VA 22102
c/o Jackie Brown

#### **EMAIL**

brown\_jacqueline@prc.com