

STATEMENT OF ROBERT A. STURGELL, ACTING ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, AND THE HONORABLE D.J. GRIBBIN, GENERAL COUNSEL, U.S. DEPARTMENT OF TRANSPORTATION, BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON AVIATION, ON AIRLINE DELAYS AND CONSUMER ISSUES, ON SEPTEMBER 26, 2007.

Chairman Costello, Congressman Petri, Members of the Subcommittee:

Thank you for holding today's hearing on airline delays and consumer issues. We are now coming to the end of the peak summer travel season. We appreciate having the opportunity to assess how our aviation system performed and to describe the Federal Aviation Administration's (FAA) efforts to reduce congestion and delays in our nation's aviation system. Growing congestion and delays in our aviation system are a serious threat to the U.S. economy and our quality of life. Successfully addressing this threat will require us to embrace new solutions and acknowledge that pursuit of *status quo* policies will do little, if anything, to reverse the substantial decline in system performance that we have experienced in recent years.

This is precisely why the Administration has proposed to overhaul the way we pay for and manage our air traffic control system and to allow airports new flexibilities to embrace market-based pricing mechanisms at heavily congested airports. The prices that system users pay to fly in the United States do not currently reflect the true costs of flying. As a result, the current FAA and airport financing structure actually provides an incentive for more congestion. This is clearly not a sustainable approach.

As we frame the problem, we should note that we are living in the safest period in aviation history and we are constantly striving to make it safer still. In the past 10 years, the commercial fatal accident rate has dropped 57%. In the past three years, the United States averaged approximately two fatal accidents per year and 28 deaths per year; while any loss of life is tragic, this statistic is remarkable, given that there are well over 100,000 aircraft operations per day. General aviation accidents are down. Air traffic control errors are occurring at a rate lower than in the previous two years. Safety is and will always be the primary goal of the FAA. Nothing we do to address congestion and delays will ever compromise our safety mandate.

Still, it is no secret that while we are enjoying a record level of safety, we are at a critical point with congestion and delays. This past summer, we saw record delays in flights across the country. From October 2006 to August 2007, delays are up almost 20%, compared with the same time period from 2005-06. Eighteen of our nation's largest airports have returned to their highest pre-9/11 commercial passenger levels. This past summer, we saw 7,936,885 minutes in delays throughout the system. Of that, 44% occurred in the New York/New Jersey/Philadelphia region. Our aviation system is stretched to the limit. While we are addressing the delays issue with new technologies and procedures immediately, the FAA has, as you know, a long-term plan to address congestion and delays – the Next Generation Air Transportation System (or NextGen) will transform the aviation system and how we control air traffic. We must be able to handle the demands of the future for aviation travel – projected to be one billion passengers by 2015.

NextGen is a steady, deliberate, and highly collaborative undertaking, which focuses on leveraging our latest technologies, such as satellite-based navigation, surveillance and network-centric systems. It is designed to be flexible to take advantage of even newer and better technologies as they become available. Ten years ago, no one could have conceived of carrying thousands of songs in your pocket or being able to send emails using a PDA thumbboard. Nevertheless, those technologies are available and they have revolutionized the way many Americans live their lives. We want to make sure that our air transportation system can accommodate innovations without becoming entrenched in technology that is new today but obsolete tomorrow. But NextGen is not a “plug and play” system that can be dropped in place in 2025; we have already begun putting pieces of it in place – pieces that begin to lay the corners of the puzzle that is the solution to our record delays. In our testimony today, we would like to outline some of the near-term and long-term solutions that the FAA and its partners have in store to relieve the pressure of congestion and delays.

Aviation is one of the most complex industries in that world, consisting of an extremely intricate web of infrastructure, technology, and people. No one piece of today's aviation system can stand alone. We are all in this together, and we look forward to continuing our partnerships with the airport, airline, and business/general aviation communities to ensure that their pieces of their parts of the solution come together to help solve the problem as well.

## **NextGen Solutions**

While the completion of NextGen is the long-term solution to transforming the air transportation system, the FAA is tackling congestion with many near-term initiatives. With the recent award to ITT of the ADS-B contract, our even more recently announced Airspace Redesign for New York/New Jersey/Philadelphia, several other new ATC procedures, and airport infrastructure projects, the FAA is well on its way to implementing the earliest pieces of NextGen to increase efficiency and reduce delays.

We would like to describe some of the key steps that we have recently taken or will be taking in the next few years to reduce delays:

### *NY/NJ/PHL Airspace Redesign:*

The old, inefficient airspace routes and procedures pieced together over the past several decades were overdue to be reconfigured to make them more efficient and less complicated. In addition to more jet routes with increased and better access, the Airspace Redesign includes improved use of available runways, fanned headings for departures and parallel arrivals, and more flexibility to manage delays in severe weather. We project that under the Airspace Redesign, delays will be cut by 200,000 hours annually. This is the single greatest improvement to address congestion we see in the near future for the New York/New Jersey metropolitan area.

We also project that this will save \$248 million annually in operating costs for airlines. Additionally, the increased flexibility during severe weather is projected to save another \$37 million annually. Finally, the environmental advantages include reduced carbon dioxide emissions of a projected 430 million pounds per year, and the residents affected by aviation noise will be reduced by more than 600,000. These are impressive gains.

### *Florida Airspace Redesign:*

To emphasize how our redesign efforts save us time and money, our recent Florida Airspace Redesign has proven very successful in addressing delays. In October 2005, the FAA

implemented the Florida Airspace Optimization (FAO), a series of airspace modifications that included:

- New sectors in Washington Center (ZDC) and Miami Center (ZMA) to reduce and redistribute controller workload;
- New overwater routes to increase north-south capacity; and
- New RNAV and conventional Standard Terminal Arrival Routes (STARs) to eliminate complex crosses and merges into Fort Lauderdale Hollywood International Airport (FLL), Miami International Airport (MIA), Palm Beach International Airport (PBI), and other airports in South Florida.

FAA calculates that in its first year, the redesign has reduced delays, reduced reroutes, and reduced foreign fees attributable to reroutes in the amount of \$22.5 million for traffic inbound to South Florida and \$11.7 million for traffic outbound from South Florida. In the Caribbean, a savings of \$400,000 has been realized due to reduced reroutes and international user fees. The benefits of the FAO total almost \$35 million annually.

*RNAV/RNP:*

The FAA is currently expanding the use of procedures like Area Navigation (RNAV) and Required Navigation Performance (RNP), which collectively result in improved safety, access, capacity, predictability, and operational efficiency, as well as reduced environmental impacts. RNAV operations remove the requirement for a direct link between aircraft navigation and a ground-based navigational aid (i.e. flying only from radar beacon to radar beacon), thereby allowing aircraft greater access to better routes and permitting flexibility of point-to-point operations. By using more precise routes for take-offs and landings, RNAV enables reductions in fuel burn and emissions and increases in capacity.

RNP is RNAV with the addition of an onboard monitoring and alerting function. This onboard capability enhances the pilot's situational awareness providing greater access to airports in challenging terrain. RNP takes advantage of an airplane's onboard navigation capability to fly a more precise flight path into an airport. It increases access during marginal

weather, thereby reducing diversions to alternate airports. RNP has the effect of reducing the overall noise footprint and aggregate emissions.

In April 2005, we added 7 new RNAV departure fixes at Atlanta Hartsfield-Jackson International Airport and 16 new RNAV procedures were added this past summer at Dallas-Fort Worth International Airport. These procedures can be implemented quickly and with less coordination between pilot and air traffic control when a normal departure route is temporarily unavailable because of weather or other cause. This saves time for the controllers and pilots, as well as fuel for the airlines that are equipped to use these procedures. We now have well over 100 RNAV procedures in place throughout the NAS, and are planning to roll out more where we can.

*Ground Delay (GDP) and Airspace Flow Programs (AFP):*

These are programs that help FAA traffic managers distribute delays equally among the relevant flights and enables us to safely meter the rate that traffic arrives at an affected airport or flies through the affected area. A GDP, implemented for a particular destination airport, controls flights destined for that airport by adjusting their departure times. AFPs can be thought of as GDPs in the air. Rather than delaying flights headed to a particular airport, an AFP controls flights routed through a specific section of airspace. An AFP will only impact flights through the airspace that is constrained. AFPs also provide a much more evenly distributed solution for customers. Instead of the large airlines absorbing all of the delays caused by severe weather, general aviation aircraft will be constrained by AFPs if their routes happen to take them through affected areas.

*Flight Schedule Monitor, Flight Schedule Analyzer, and Route Management Tool:*

Flight Schedule Monitor (FSM) creates a common situational awareness among all users and service providers in the National Airspace System (NAS). All parties need to be aware of NAS constraints in order to make collaborative air traffic decisions. FSM presents a graphical and timeline presentation of airport/airspace demand and capacity information and helps analyze and manage ground delay program/airspace flow programs so users can react quickly to NAS constraints.

Flight Schedule Analyzer (FSA) is a tool developed to explore the effectiveness of GDPs and to identify problems in the used in the Collaborative Decision Making (CDM) process. It is primarily an analysis tool.

Route Management Tool (RMT) facilitates increased information exchange between air traffic control and the airline user community. RMT is a query tool that allows users to search for, modify, and view centralized route databases and reference tables.

*Traffic Management Advisor:*

The Traffic Management Advisor helps controllers sequence aircraft through en route airspace into major terminals. TMA calculates a specific time for each aircraft to cross a fixed point in the airport landing route that also considers minimum safe distances between aircraft. Appropriate direction to pilots is then provided using that data, allowing arrival streams that take better advantage of available landing slots. The FAA estimates that when Time-Based Metering is used, there are increases in arrival rates of 3 percent or more. TMA is operational at all air route traffic control centers.

*Adaptive Compression:*

This is a computer program that automatically identifies slots that might go unused and moves other flights into those slots. We can minimize unnecessary delays, and with fewer slots going unused, maximize capacity.

*Controller staffing:*

The FAA understands how critical it is to have an adequately staffed and expertly trained air traffic controller workforce. That is why we developed a comprehensive Controller Workforce Plan to address the wave of retirement-eligible controllers over the next ten years. We have taken proactive steps to ensure we have the right people, at the right place and time. To that end, we are expanding our Collegiate Training Initiative, and we have held numerous job fairs, and streamlined security and medical clearance processes. We hired over 1,100

controllers last year, are hiring 1,700 this year, and plan to hire numbers consistent with the Controller Workforce Plan over next 10 years.

With regard to performance, as noted at the outset, safety is always our top priority. We are meeting our targets for both reducing operational errors and runway incursions, which are down year-over-year. Controller “time on position” (the time a controller actually spends controlling air traffic) system-wide is running about 4 hours and 30 minutes for an 8-hour workday. System overtime is at 1.1 percent, which is below previous years, and total operations per controller are roughly the same as 1999 and 2000.

*Airports:*

Since 2000, 13 new runways have opened at the 35 Operational Evolution Partnership (OEP) airports. These 13 new runways encompass more than 20 miles of new runway pavement, and provide the airports with the potential to accommodate 1.6 million more annual operations. This added capacity and decreased average delay per operation at these airports by 5 minutes. In addition, about 6 months ago, an end-around taxiway was commissioned at Atlanta Hartsfield-Jackson International Airport, the busiest airport in the United States. This provides an alternative to having aircraft cross an active runway and will eliminate 612 runway crossings per day.

Currently, eight OEP Airports have airfield projects (3 new runways, 2 airfield reconfigurations, 1 runway extension, 1 end around taxiway, and 1 centerfield taxiway) under construction. These projects will be commissioned by 2010 providing these airports with the potential to accommodate about 400,000 more annual operations, decrease average delay per operation by almost 2 minutes, and significantly reducing runway crossings.

Ten other projects (3 airfield reconfigurations, 3 runway extensions, and 4 new runways) are in the planning or environmental stage at OEP airports through 2017. In addition, seven communities have planning or environmental studies underway to examine how their metropolitan area will accommodate future demand for aviation. Two communities have environmental processes underway for new airports.

Additionally, we have an initiative to direct Airport Improvement Program funds for enhancements at other high activity airports located within congested metropolitan areas that will improve each metropolitan area's ability to accommodate future aviation demand efficiently. We are also continually seeking ways to strengthen our environmental stewardship as we increase capacity at airports, by developing better systems, technologies, and analytical tools to evaluate aircraft noise and emissions.

The Future Airport Capacity Task (FACT) 2, an FAA study which was recently released, considered the impact of growth in air travel through 2025. Demand and operational capacity at 291 airports spanning 223 metropolitan areas across the country was evaluated. Results indicate that by 2025, 14 airports and eight metropolitan areas will require additional capacity, even if planned improvements are built at airports throughout the system. FACT 2 recommends various capacity improvements including: new runways and new commercial service airports; additional studies to focus and determine appropriate regional solutions like the increased use of secondary airports; congestion management; and the continued development and implementation of NextGen. FAA is starting to work with local communities and airports forecast to be capacity-constrained, including metropolitan regions on the east and west coast to develop plans to address the anticipated capacity issues in each of the targeted areas.

These are a few of the steps that we are taking to address congestion and delays. Of course, as we develop and implement these programs and take these measures now to relieve delay in the short-term, we continue to look forward. We cannot just put a Band-Aid® on the system; we have to build on this foundation now.

### **Consumer Concerns**

We at the Department of Transportation (DO) are not only dedicated to reducing congestion and resultant flight delays, but we are also, of course, committed to improving the treatment afforded air travelers by airlines during flight delays and, in particular lengthy on-ground delays. Clearly, stranding passengers aboard aircraft for several hours simply is not acceptable and something

must be done to minimize such incidents. In this regard, we would like publicly to thank Inspector General Scovel and his staff for the excellent report issued this week. Secretary Peters has directed the staff to carefully and thoroughly review the Inspector General's recommendations as quickly as possible.

While the Inspector General's report is very important to us, we would like to add that we have not been idle while awaiting the results of his investigation of specific lengthy, on-ground delay incidents and the manner in which the industry handles flight irregularities in general. Secretary Peters established a senior staff working group to examine the alternatives available to the DOT to address the consumer protection issue (as well as congestion) and it is well along in its consideration of various alternatives. Thus, we expect to be able to include the Inspector General's recommendations in our on-going deliberations. The Department does have the authority necessary to act on matters involving the treatment of consumers through statutory provisions that prohibit carriers from engaging in unfair and deceptive practices (49 U.S.C. 41712) and require carriers to provide "safe and adequate" service (49 U.S.C. 41702). With respect to deceptive practices, the Office of the Secretary's Aviation Enforcement Office has for a number of months been investigating chronically delayed flights and compliance by airlines with the existing Department requirement that airline reservation agents provide consumers flight delay information upon request. We intend to take whatever action is in the public interest to improve the current situation faced by consumers.

### **Partnerships in Problem-Solving**

While the FAA and DOT are taking aggressive steps to reduce congestion and delays, we are not in this alone. The airlines and other aircraft operators hold important pieces to the puzzle as well. Specifically, the airlines sometimes schedule their flights in a way that pushes the system to capacity under even the best of conditions. Understandably, these schedules are largely a response to market demand. We encourage our friends in the airline industry to reassess their scheduling with an eye towards relieving some of the strain on the system. The long-term savings in reduced delays and happier consumers are well worth it. Airlines have voluntarily made these changes in the past, such as "de-peaking" schedules at Atlanta Hartsfield-Jackson and Dallas-Ft. Worth, and those changes produced smoother operations.

Also worth noting is that general aviation and business aviation use is up. While new users and business models are critical to the growth of the system, the air traffic control system cannot accommodate every new proposed use without a system that matches our costs with the revenues being produced to pay for the system. On a system-wide basis, our cost allocation found that general aviation drives about 16% of the costs of the air traffic control system, while only paying about 3% of the taxes, a situation that is unsustainable given the growth in GA flight time that we expect. We believe that a fairer allocation of costs is necessary to sustain the system and allow it to grow.

### **Reauthorization**

This brings us to our final point, that Congress plays an enormous role in shaping a solution. The Subcommittee has heard this before, but it bears repeating as we move to the final stages of this year's reauthorization debate: a cost-based funding structure is essential to transforming the aviation system. Numerous bipartisan commissions have recommended cost-based funding for the FAA over the last two decades, and air traffic control providers in every other developed country have cost-based funding. Failure to adopt a cost-based system here is unfair to our air travelers and will hinder the implementation of NextGen, and, for the first time in history, put the United States behind other countries that are moving towards the future of aviation.

We need fresh thinking and fresh approaches, and we need them now. There is little connection between what users pay for services and the costs they generate, and this detachment leads to distorted consumption of air traffic services, and ultimately congestion. This is why the Administration developed a proposal that included provisions for cost based financing, the flexibility to charge congestions fees, and market-based congestion pilots at congested airports like LaGuardia. We know the system is not cost-based from the results of the FAA's most recent study. Using comprehensive cost accounting and activity data, we put together the most detailed and transparent cost allocation ever done by FAA or, we believe, by any other air traffic control provider.

The Administration's proposal was crafted to reform FAA's financing system to better enable modernization and reduce congestion. In its proposal, FAA would charge cost-based fees for terminal and en route airspace. At large congested airports, FAA could vary this terminal fee based on the time of day and day of the week, to reduce delays and congestion. The Administration's proposal also included market-based mechanisms (such as auctions or congestion pricing) to allocate takeoffs and landings. This would be used at airports in which varying the cost-based terminal fee would not be sufficient to reduce congestion.

The Members of this Subcommittee are well aware of the long-term challenges facing the FAA. We appreciate your support of our programs, and the hard work and long hours you have put in towards reauthorizing the FAA's programs. We are at a crossroads in aviation history and the path we choose now will have ramifications for generations of air travelers to come. We are eager to continue working with the Congress on the reauthorization process.

We have taken steps to reduce congestion and delays. However, the system is still stretched to capacity and congestion and delays are still problems, and unless we change our approach now, things will only get worse. We expect that by 2015, the system will be carrying one billion passengers per year. International passenger traffic is expected to grow by 70% in that same timeframe. If we don't make changes to our system, our projections indicate that by 2014, we will see an increase in delays of over 60% than what we have today.

We need NextGen. We believe that we have a fairly strong consensus on that point. We also need the cost-based financing reforms or market-based congestion programs, or we will not have the tools to get there in time to meet the demand. We must seize the opportunity this year to deliver it with a cost-based and fair financing structure.

Mr. Chairman, that concludes our prepared statement. We would be happy to answer any questions that you or the other Members of the Committee may have.