S. Hrg. 110-1174

# CONGESTION AND DELAYS: THE IMPACT ON PASSENGERS AND POSSIBLE SOLUTIONS

# **HEARING**

BEFORE THE

SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY

OF THE

# COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

SEPTEMBER 27, 2007

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

75–971 PDF

WASHINGTON: 2012

#### SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

#### ONE HUNDRED TENTH CONGRESS

#### FIRST SESSION

#### DANIEL K. INOUYE, Hawaii, Chairman

JOHN D. ROCKEFELLER IV, West Virginia JOHN F. KERRY, Massachusetts BYRON L. DORGAN, North Dakota BARBARA BOXER, California BILL NELSON, Florida MARIA CANTWELL, Washington FRANK R. LAUTENBERG, New Jersey MARK PRYOR, Arkansas THOMAS R. CARPER, Delaware CLAIRE MCCASKILL, Missouri AMY KLOBUCHAR, Minnesota

TED STEVENS, Alaska, Vice Chairman JOHN McCAIN, Arizona TRENT LOTT, Mississippi KAY BAILEY HUTCHISON, Texas OLYMPIA J. SNOWE, Maine GORDON H. SMITH, Oregon JOHN ENSIGN, Nevada JOHN E. SUNUNU, New Hampshire JIM DEMINT, South Carolina DAVID VITTER, Louisiana JOHN THUNE, South Dakota

Margaret L. Cummisky, Democratic Staff Director and Chief Counsel
Lila Harper Helms, Democratic Deputy Staff Director and Policy Director
Christine D. Kurth, Republican Staff Director, and General Counsel
Paul Nagle, Republican Chief Counsel

#### SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY

JOHN D. ROCKEFELLER IV, West Virginia, Chairman
JOHN F. KERRY, Massachusetts
BYRON L. DORGAN, North Dakota
BARBARA BOXER, California
BILL NELSON, Florida
MARIA CANTWELL, Washington
FRANK R. LAUTENBERG, New Jersey
MARK PRYOR, Arkansas
THOMAS R. CARPER, Delaware
CLAIRE McCASKILL, Missouri
AMY KLOBUCHAR, Minnesota

TRENT LOTT, Mississippi, Ranking JOHN McCAIN, Arizona KAY BAILEY HUTCHISON, Texas OLYMPIA J. SNOWE, Maine GORDON H. SMITH, Oregon JOHN ENSIGN, Nevada JOHN E. SUNUNU, New Hampshire JIM DEMINT, South Carolina DAVID VITTER, Louisiana JOHN THUNE, South Dakota

# CONTENTS

	Page
Hearing held on September 27, 2007	1
Statement of Senator Dorgan	$4\overline{5}$
Statement of Senator Klobuchar	46
Statement of Senator Lautenberg	43
Prepared statement	44
Statement of Senator Lott	48
Statement of Senator Rockefeller	1
Statement of Senator Stevens	43
Prepared statement	1
Statement of Senator Thune	50
Witnesses	
Kolshak, Captain Joe, Executive Vice President—Operations, Delta Air Lines,	
Inc.	26
Dynamid statement	28
Prepared statement Reding, Robert W., Executive Vice President—Operations, American Airlines Prepared statement Rowe, Zane, Senior Vice President, Network Strategies, Continental Airlines	$\frac{20}{22}$
Proposed stotement	$\frac{22}{24}$
Rowa Zana Sanjar Vice President Natwork Strategies Continental Airlines	32
Pranarad statement	34
Prepared statement	01
tation	8
Prepared statement	9
Sturgell, Robert A., Acting Administrator, Federal Aviation Administration,	·
accompanied by Hon. D.J. Gribbin, General Counsel, U.S. Department of	
Transportation	2
Prepared statement	3
Appendix	
Boxer, Hon. Barbara U.S. Senator from California, prepared statement	53
Flynt, Raymond M., President and CEO, Travelers Aid International, pre-	
pared statement	63
Forrey, Patrick, President, National Air Traffic Controllers Association	
pared statement  Forrey, Patrick, President, National Air Traffic Controllers Association (NATCA), prepared statement  Response to written questions submitted by Hon. Barbara Boxer to:	53
Response to written questions submitted by Hon. Barbara Boxer to:	
Captain Joe Kolshak	82
Robert W. Reding	79
Hon. Calvin L. Scovel III	74
Robert A. Sturgell	64
Response to written questions submitted by Hon. Frank R. Lautenberg to:	0.4
Joe Kolshak	84
Robert W. Reding	79
Zane Rowe	89
Hon. Calvin L. Scovel III	75
Robert A. Sturgell and Hon. D.J. Gribbin	65
Response to written questions submitted by Hon. Mark Pryor to:  Joe Kolshak	85
Robert W. Reding	80
Zane Rowe	92
Hon. Calvin L. Scovel III	92 76
Pohort A Sturgell and Hon D. I. Cribbin	70
Robert A. Sturgell and Hon. D.J. Gribbin	70
Hon. D.J. Gribbin	79
Joe Kolshak	80
Zane Rowe	85
2010 1000	55

# CONGESTION AND DELAYS: THE IMPACT ON PASSENGERS AND POSSIBLE SOLUTIONS

#### THURSDAY, SEPTEMBER 27, 2007

U.S. SENATE, SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY. COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION, Washington, DC.

The Subcommittee met, pursuant to notice, at 10:35 a.m. in room SR-253, Russell Senate Office Building, Hon. John D. Rockefeller

IV, Chairman of the Subcommittee, presiding.

#### OPENING STATEMENT OF HON. JOHN D. ROCKEFELLER IV, U.S. SENATOR FROM WEST VIRGINIA

Senator Rockefeller. With the forbearance of the Vice Chairman of the Subcommittee, Senator Lott-he's on his way-I have various pieces of bad news, the first of which is good news, and that is, we're very happy to see you, all six of you. Second, we have five votes starting at approximately 11 o'clock. So, with the forbearance of the former Chairman, I suggest that we eliminate opening

statements and that we go right to your testimony.

The testimony will come from Mr. Robert Sturgell, who is Acting Administrator of the Federal Aviation Administration; Mr. Gribbin, who is General Counsel, Department of Transportation; the Honorable Calvin Scovel, who is Inspector General, U.S. Department of Transportation; Mr. Robert Reding, Vice President, American Airlines; Captain Joe Kolshak, who is Executive Vice President, Operations, Delta Air Lines; and Mr. Zane Rowe, who is Senior Vice President, Network Strategies, Continental Airlines.

So, why don't we just do it in the order that I said it, which may or may not be politically correct or logically reasonable. Mr. Sturgell?

Senator STEVENS. I concur. And will you print our statements in the record?

Senator Rockefeller. Absolutely.

Senator STEVENS. Thank you.

Senator Rockefeller. Goes without saying.

[The information previously referred to follows:]

PREPARED STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

Thank you Senators Rockefeller and Lott for holding today's hearing. The summer travel season was certainly difficult for both the airlines and their passengers. The airline delays and cancellations experienced over the last few months have impacted the travel schedule of many travelers.

I understand the frustration felt as a result of airline delays and cancellations. When I travel to my home state, on average, the flight time to transit from Washington, D.C. to Anchorage, Alaska can take almost 10 hours and that doesn't include

additional time due to flight delays.

As the demand for air service increases, the FAA and the airlines will be challenged to cope with the increased demand by developing and implementing a mod-ern air traffic control system. If the passenger demand for air transportation continues to outpace air traffic capacity, the cost to the U.S. economy could be signifi-

Congress is in an opportune position to significantly modernize our antiquated air traffic control system and should make every effort to take advantage of that oppor-

The FAA, Congress, and industry stakeholders need to expedite a multifaceted modernization approach that improves utilization of congested airspace, ground systems, and ground infrastructure. Coordination between the government and indus-

While most of the traveling public has become tolerant of modest flight delays, government agencies and the airlines need to take note of the lessons learned over

the past few months.

I recognize delays will never be avoided altogether, but how we deal with them and track them can certainly be improved. Without quick action and planning regarding modernization, we are on the precipice of aviation gridlock.

I look forward to working with my colleagues to create solutions to this problem.

## STATEMENT OF ROBERT A. STURGELL, ACTING ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, ACCOMPANIED BY HON. D.J. GRIBBIN, GENERAL COUNSEL, U.S. DEPARTMENT OF TRANSPORTATION

Mr. Sturgell. Good morning, Chairman Rockefeller, Senator Stevens. I'm privileged to be here in front of you today to address the Committee on delays and congestion. I'll be making a joint statement on behalf of the Department for Mr. Gribbin, as well.

I can understand the frustration with delays, having experienced them, myself, this summer. But, first and foremost, I want to say that the National Airspace System is as safe as it's ever been. Over the past 20 years, general aviation accidents have dropped by a third, and commercial aviation is, itself, in the golden age of safety.

Efficiencies—delays, in particular—are another matter. More people are flying than ever, and more smaller planes are carrying them. And, compounding this, the FAA's current system of taxes and fees provides little incentive to use the airspace efficiently.

Aviation today is a deregulated system, where the government does not create or control airline schedules. The passenger wants

choices. Choices fill up schedules.

The competition created by deregulation has also resulted in lower ticket prices for the traveling public. But when passengers arrive at the airport and see that a dozen flights are scheduled at the same time, they know it's not going to happen.

Senator Rockefeller. Would you excuse me, sir?

Mr. Sturgell. Yes, sir.

Senator Rockefeller. It occurs to me, if the votes were to start at 11, that's a total of 20 minutes. Five minutes, you can blame totally on me. But the question is, are you all going to read all of your statements, or are you going to summarize them so that we have a chance to ask a question or two?

Mr. Sturgell. I have cut this down so that we can discuss-Senator Rockefeller. You've minimized it.

Mr. Sturgell.—which I think is the most important aspect of this.

Senator Rockefeller. You've minimized it, OK.

Mr. STURGELL. You bet.

I do want to point out that commercial traffic has returned in different ways after 9/11. Delays are up 20 percent since last year, and 30 percent from the summer of 2000. And, we've seen dramatic increases in traffic in different major markets. Particularly, also I want to point out that high altitude jet traffic has grown, as well, up 43 percent from 2000 to 2006. We do expect operations, takeoffs and landings, to grow by another 1.4 million per year through 2020.

Our policy with delays is to address capacity—to grow it first, improve efficiency through payment procedures or technology. And, we are addressing each one of those as we go forward. We can talk about that later.

But I do want to say that, in terms of technology, as we move to the NextGen system, the transformation is beginning now, and we need to ensure that we can fund that implementation, and fund it in an expeditious manner. The problems are now. The problems will get worse in 2015, when we expect a billion passengers to be using the system. As you know, our authorization is set to expire soon, so we think the forward momentum of NextGen is in jeopardy. That's short term, but in the longer term we need to link our costs with the revenues of the system—again, otherwise, we will slow down this implementation.

I'm hopeful that we can continue to work through this process together, and I look forward to the questions.

Thank you.

[The joint prepared statement of Mr. Sturgell and Mr. Gribbin follow:]

PREPARED STATEMENT OF ROBERT A. STURGELL, ACTING ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, AND HON. D.J. GRIBBIN, GENERAL COUNSEL, U.S. DEPARTMENT OF TRANSPORTATION

Chairman Rockefeller, Senator Lott, 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 the 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 percent. In the past 3 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 2 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 percent, compared with the same time period from 2005–2006. 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 percent occurred in the New York/New Jersey/Philadelphia region. Our aviation system is stretched to the limit. As we currently address the problem with new technologies and procedures, 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.

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 e-mails 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 foundation of 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 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 this 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 10 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 48 minutes for an 8-hour workday. System overtime is at 1.66 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 has 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**

At the Department of Transportation (DOT), we 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 minize 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 rec-

ommendations 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 toward 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 percent of the costs of the air traffic control system, while only paying about 3 percent 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 his-

tory, put the United States behind other countries that are moving toward the fu-

ture 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 is 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 includes market-based mechanisms (such as auctions or congestion pricing) to allocate take-offs 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 toward 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 percent 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 percent 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 fi-

nancing 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.

Senator Rockefeller. Thank you. And that was helpful, brief, to the point.

And Mr. Gribbin will follow your example.

Mr. GRIBBIN. Thank you, Mr. Chairman. Actually, in the order of time, we'll just let Mr. Sturgell's statement stand as the Department's statement. So, there is no reason for me to make an additional statement.

Senator Rockefeller. I won't ask anybody else to match that.

Mr. Gribbin. OK.

[Laughter.]

Senator Rockefeller. Thank you, sir.

Mr. Scovel?

### STATEMENT OF HON. CALVIN L. SCOVEL III, INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION

Mr. Scovel. Thank you, Chairman Rockefeller, Senator Stevens, members of the Subcommittee. I appreciate the opportunity to testify this morning.

This hearing is both timely and important, given the recordbreaking flight delays and cancellations that travelers experienced

this year.

Secretary Peters has serious concerns about the airlines' treatment of passengers during extended ground delays and requested that we examine incidents in which passengers were stranded on aircraft for extended periods of time. We issued our report on Tuesday, which includes a series of recommendations that the Department, airlines, and airports can take to improve airline customer service. Today, I'll discuss four key points that evolved from our study.

First, the airlines should detail their policies and plans to minimize long, onboard delays and off-load passengers within certain periods of time and adhere to such policies. I wish to be clear on this, because some media reports and aviation industry representatives have mischaracterized our position by stating that the Inspector General recommends imposition of a single time standard for off-loading passengers. This is not so. Our view, through repeated iterations of our customer service reviews, has consistently been that a "one size fits all" approach is not desirable in this area. The responsibility is up to the individual airlines, and I wish to keep the spotlight on them.

Second, airport operators should become more involved in contingency planning for extraordinary flight disruptions. Our examination of 13 airport contingency plans found that only 2 airports had a process for monitoring and mitigating long, onboard delays. This involves contacting the airline to request a plan of action after an aircraft has remained for 2 hours on the tarmac. In our opinion, airport operators need to become more involved in contingency

planning for extraordinary flight disruptions.

Third, best practices and ongoing initiatives that are properly executed should help to mitigate long onboard delays in the short term. These include setting the maximum amount of time that passengers will remain onboard aircraft before deplaning and keeping gate space available for off-loading passengers in times of irregular

operations.

Finally, DOT, the FAA, airlines, and airports should complete actions immediately to improve airline customer service and minimize long delays. First, airlines should specify in detail the efforts that will be made to get passengers off aircraft that are delayed for long periods of time. Second, airlines should establish specific targets for reducing chronically delayed or cancelled flights. Third, airport operators should establish a process for monitoring and mitigating long, onboard delays. Fourth, DOT should investigate incidents involving long, onboard delays. And, finally, airlines, airports, and the FAA should establish a task force to develop and coordinate contingency plans for dealing with lengthy delays.

That concludes my statement, sir. I'd be happy to answer questions.

[The prepared statement of Mr. Scovel follows:]

Prepared Statement of Hon. Calvin L. Scovell III, Inspector General, U.S. Department of Transportation

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss airline customer service issues and the actions needed from the Department of Transportation (DOT), Federal Aviation Administration (FAA), airlines, and airports to minimize long, on-board delays. This

hearing is both timely and important given the record-breaking flight delays, cancellations, diversions, and on-board tarmac delays that air travelers have already experienced this year. Based on the first 7 months of the year:

- Nearly 28 percent of flights were delayed, canceled, or diverted—with airlines' on-time performance at the lowest percentage (72 percent) recorded in the last 10 years.
- Not only are there more delays, but also longer delay periods. Of those flights arriving late, passengers experienced a record-breaking average flight arrival delay of 57 minutes, up nearly 3 minutes from 2006.
- More than 54,000 flights affecting nearly 3.7 million passengers experienced taxi-in and taxi-out times of 1 to 5 hours or more. This is an increase of nearly 42 percent as compared to the same period in 2006.

As you know, Secretary Peters has expressed serious concerns about the airlines' treatment of passengers during extended ground delays. Earlier this year, she requested that we examine the specific incidents involving American Airlines (American) and JetBlue Airways (JetBlue), during which passengers were stranded onboard aircraft for extended periods of time, and the Air Transport Association's member-airlines' contingency plans for dealing with long, on-board delays. She also requested that we highlight industry best practices that can help to mitigate these situations and provide recommendations on what actions should be taken to prevent a recurrence of such events. We issued our report on September 25, 2007, which included a series of recommendations the Department can take to improve airline customer service.

Today, I would like to discuss four key points on actions that would help to improve airline customer service and minimize long, onboard delays. These points are based on the results of our recent review as well as our previous airline customer service reviews.

The airlines should specify in detail their policies and plans to minimize long, onboard delays and off-load passengers within certain periods of time and adhere to such policies. The American and JetBlue events of December 29, 2006, and February 14, 2007, respectively, underscored the importance of improving customer service for passengers who are stranded onboard aircraft for extended periods of time. On those dates, thousands of passengers experienced long, onboard delays, in some cases for over 9 hours, with little more than a snack and beverage for the entire time. However, the events were neither isolated incidents nor limited to American and JetBlue; these delays occurred throughout the system and at many airlines.

Although severe weather was the primary cause of the delays, it was not the only factor—neither airline had a system-wide policy and procedure in place to mitigate long, on-board delays and off-load passengers within a certain period of time. In fact, prior to the American and JetBlue incidents, only a few airlines reviewed had an established time limit on the duration of tarmac delays, as we reported in our 2001 review.<sup>4</sup> Since these incidents, eight airlines have now set a time limit on delay durations before deplaning passengers but five still have not.

We still maintain that all airlines' customer service plans should specify in detail the efforts that will be made to get passengers off aircraft that are delayed for long periods, either before departure or after arrival. Airlines should also incorporate these policies in their contracts of carriage and post them on their Internet sites. To ensure adherence to the policies, airlines must resume efforts to self-audit their customer service plans. We recommended most of these actions in our 2001 report, and the airlines agreed and stated plans to implement them.

Airport operators should become more involved in contingency planning for extraordinary flight disruptions. Our examination of 13 airports' contingency plans

<sup>&</sup>lt;sup>1</sup>The Air Transport Association is the trade association for America's largest air carriers. Its members transport over 90 percent of all the passenger and cargo traffic in the United States. 
<sup>2</sup> Alaska Airlines, Aloha Airlines, American Airlines, ATA Airlines, Continental Airlines, Delta Air Lines, Hawaiian Airlines, JetBlue Airways, Midwest Airlines, Northwest Airlines, Southwest Airlines, United Airlines, and U.S. Airways. During our review, ATA Airlines terminated its membership in ATA.

<sup>&</sup>lt;sup>3</sup>OIG Report Number AV-2007-077 "Actions Needed To Minimize Long, On-Board Delays," September 25, 2007. OIG reports and testimonies are available on our website: www.oig.dot.gov. <sup>4</sup>OIG Report Number AV-2001-020, "Final Report on Airline Customer Service Commitment," February 12, 2001.

<sup>&</sup>lt;sup>5</sup>Austin-Bergstrom International, Chicago O'Hare International, Dallas/Fort Worth International, Dallas Love Field, General Mitchell International, George H. Bush Intercontinental, Hartsfield-Jackson Atlanta International, Honolulu International, Indianapolis International, John F. Kennedy International, Minneapolis-St. Paul International, Phoenix Sky Harbor International, and Seattle-Tacoma International.

found that only 2 airports have a process for monitoring and mitigating long, onboard delays. This involves contacting the airline to request a plan of action after an aircraft has remained for 2 hours on the tarmac. We also found that all airports intervene only upon an airline's request primarily because they do not have the authority to interfere with a carrier's operations during long, on-board delays.

In our opinion, airport operators need to become more involved in contingency planning for extraordinary flight disruptions, including long, on-board delays during extreme weather or any other disruptive event. Airports are public agencies heavily supported by public funding and should ensure that passengers' essential needs are met and prevent long, on-board delays to the extent possible. As recipients of Federal funds for airport improvement projects, airports have an obligation to increase airport efficiency, decrease delays, and transport passengers in the most efficient manner.

Therefore, large- and medium-hub<sup>6</sup> airport operators should establish a process for monitoring and mitigating long, onboard delays that involves contacting the airline to request a plan of action after an aircraft has remained for 2 hours on the tarmac. Absent any airline policy, the airport operators should work with airlines to establish policies for deplaning passengers and ensure that these policies are adhered to.

There are best practices and ongoing initiatives that, if properly executed, should help to mitigate long, on-board delays in the immediate term. Secretary Peters asked that we highlight some of the best practices we found that could help in dealing with long, onboard delays. During our review of selected airlines and airports, we found several practices that airlines and airports are taking to mitigate the effects of these occurrences. These include:

- setting the maximum amount of time that passengers will remain onboard aircraft before deplaning.
- "intelligent canceling"—canceling flights most likely to be affected by the weather event without being too optimistic or pessimistic. Pre-canceling flights before the passengers leave home keeps them away from the airport, thus reducing congestion.
- keeping gate space available for off-loading passengers in times of irregular operations.

The best practices we identified during our review are not all inclusive, and the airlines or airports should consider incorporating them into their ongoing operations, especially the best practice of setting the maximum amount of time that passengers will remain onboard aircraft before deplaning.

However, in our opinion, a more comprehensive plan of action is needed to prevent and mitigate long, on-board delays and should involve collaboration among airlines, airports, FAA, and DOT. Therefore, a national task force of representatives from each of these groups should be established to develop and coordinate contingency plans to deal with lengthy delays. Although the airlines formed a task force in response to our 2001 report recommendations, the effort never materialized as priorities shifted after September 11, 2001. Now is the time to reconvene the task force.

Also, after our review began, some airports moved forward with other initiatives meant to assist the airlines in dealing with long, on-board delays. For example, the Port Authority of New York and New Jersey set up a task force to find ways to reduce flight delays at the region's three main airports: John F. Kennedy (JFK), LaGuardia, and Newark Liberty International Airports. The task force is addressing two main areas—technical issues and customer service. In the technical area, the Port Authority and FAA are working on procedural improvements, such as more efficient use of the runways at JFK. In the customer service area, the focus is on identifying best methods for getting passengers off aircraft and enhancements for reducing the amount of time passengers are kept on aircraft.

FAA is also taking action to minimize delays; the Agency expanded an existing initiative this summer to other parts of the National Airspace System to reduce the amount of time that flights sit on tarmacs waiting to depart. This initiative, known as the Airspace Flow Program, gives FAA and the airlines the capability to maximize the overall use of the National Airspace System while minimizing delays and

<sup>&</sup>lt;sup>6</sup>FAA defines (1) large hubs as those airports that each account for at least 1 percent of the total U.S. passenger enplanements and (2) medium hubs as those airports that each account for between .025 percent and 1 percent of the total passenger enplanements. Large-hub airports (30 in total) account for 69 percent of all passenger enplanements, while medium-hub airports (37 in total) account for 20 percent of all enplanements.

congestion. These efforts, which are managed by FAA's Command Center, do not create additional capacity but limit the negative effects of bad weather.

DOT, FAA, airlines, and airports should complete actions immediately on outstanding recommendations—some dating back to 2001—to improve airline customer service and minimize long, on-board delays. Given the events of this past winter, DOT should take a more active role in overseeing customer service issues involving long, on-board delays, and there are actions that the Department, the airlines, airports, and FAA can undertake immediately to do so. Many of the actions are not new and date back to recommendations in 2001 on airline customer service, which were directed at delay and cancellation problems. To improve the accountability, enforcement, and protection afforded to air travelers we recommend, among other things, that:

- DOT conduct incident investigations involving long, on-board delays;
- DOT oversee the airlines' policies for dealing with long, on-board delays;
- airlines define what constitutes an "extended period of time" for meeting passengers' essential needs and set time limits for delay durations;
- airlines establish specific targets for reducing chronically delayed or canceled flights;
- airlines disclose on-time flight performance;
- · airlines resume efforts to self-audit their customer service plans; and
- large- and medium-hub airport operators establish and implement processes for monitoring lengthy delays.

Mr. Chairman, in addition to the steps I have just outlined, it is imperative that FAA keeps its short-term capacity measures on track. This is particularly important given that the development and implementation of the Next Generation Air Transportation System is a long-term undertaking. Key short-term initiatives include new airfield projects at six airports (including projects at Washington Dulles and Chicago O'Hare), new routes and procedures that can reduce flight times, and airspace redesign efforts. History shows that airspace changes are vital for realizing benefits from new runway projects and can enhance the flow of air travel even without new airport infrastructure.

Before I discuss these key points in detail, I would like to briefly describe why airline customer service is again a central issue and highlight a few statistics showing how air travelers are affected by delays and cancellations.

Airlines Agreed To Execute a Voluntary Airline Customer Service Commitment

As this subcommittee is aware, accommodating passengers during long, on-board delays is a major customer service challenge that airlines face. However, this is not a new problem for the airlines. Airline customer service first took center stage in January 1999, when hundreds of passengers remained in planes on snowbound Detroit runways for up to eight and a half hours. After those events, both the House and Senate considered whether to enact a "passenger bill of rights."

Following congressional hearings on these issues, ATA member airlines agreed to execute a voluntary Airline Customer Service Commitment <sup>7</sup> to demonstrate their dedication to improving air travel (see figure 1). The Commitment provisions include meeting passengers' essential needs during long, on-board delays.

 $<sup>^7</sup>$ ATA signed the Commitment on behalf of the then 14 ATA member airlines (Alaska Airlines, Aloha Airlines, American Trans Air, America West Airlines, Continental Airlines, Delta Air Lines, Hawaiian Airlines, Midwest Express Airlines, Northwest Airlines, Southwest Airlines, Trans World Airlines, United Airlines, and U.S. Airways).

# Figure 1. Provisions of the Airline Customer Service Commitment

- · Offer the lowest fare available.
- Notify customers of known delays, cancellations, and diversions.
- · Deliver baggage on time.
- Support an increase in the baggage liability limit.
- · Allow reservations to be held or cancelled.
- Provide prompt ticket refunds.
- Properly accommodate disabled and special-needs passengers.
- · Meet customers' essential needs during long, on-aircraft delays.
- · Handle "bumped" passengers with fairness and consistency.
- Disclose travel itinerary, cancellation policies, frequent flyer rules, and aircraft configuration.
- Ensure good customer service from code-share partners.
- Be more responsive to customer complaints.

Source: Airline Customer Service Commitment, June 1999

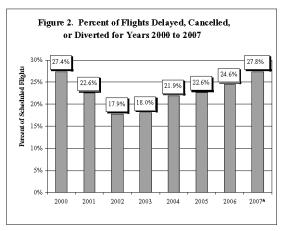
Because aviation delays and cancellations continued to worsen, eventually reaching their peak during the summer of 2000, Congress directed our office to evaluate the effectiveness of the Commitment and the customer service plans of individual ATA airlines. We issued our final report in February 2001. Overall, we found that the ATA airlines were making progress toward meeting the Commitment, which has benefited air travelers in a number of important areas, such as offering the lowest fare available, holding reservations, and responding in a timely manner to complaints. However, these areas are not directly related to flight delays or cancellations—which the Commitment did not directly address—and these areas are still the underlying causes of deep-seated customer dissatisfaction.

#### Rising Flight Delays Are Leading to More Long, On-Board Delays

A review of vital statistics shows the impact that flight delays and cancellations had on air travelers during 2006 and the first 7 months of 2007, compared to peak-year 2000. The 2006 travel period was not only the busiest since 2000, it also reached near record 2000 levels for flight delays and cancellations. Domestic-wide for 2006, nearly 25 percent of flights were delayed, canceled, or diverted, the highest percentage since the year 2000, when it hit 27 percent. Based on the first 7 months of 2007, airlines' on-time performance was at the lowest percentage (72 percent) recorded in the last 10 years; nearly 28 percent of flights were delayed, canceled, or diverted compared to about 24 percent during the same period in 2006.

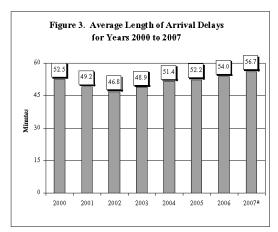
Figure 2 illustrates the changes in percent of flights delayed, canceled, or diverted from 2000 to 2007.

<sup>&</sup>lt;sup>8</sup> As measured by scheduled departures.



\*January through July Source: BTS data

Not only are there more delays, but also longer delay durations. Domestic wide for 2006, for those domestic flights delayed, passengers experienced an average flight arrival delay of 54 minutes. Figure 3 illustrates the average flight arrival times from 2000 to 2007. Based on the first 7 months of data, it is clear 2007 could be even worse. For flights that arrived late, passengers experienced an average flight delay of nearly 57 minutes, up nearly 3 minutes from 2006.



\*January through July Source: BTS data

These rising flight delays are leading to more on-board tarmac delays. Based on the first 7 months of 2007, over 54,000 scheduled flights—affecting nearly 3.7 million passengers—experienced taxi-in and taxi-out times of 1 to 5 hours or more. This is an increase of nearly 42 percent (from 38,076 to 54,029) as compared to the same period in 2006 (see table).

Table.—Number of Flights With Long, On-Board Tarmac Delays of 1 to 5+ Hours
[January through July of 2006 and 2007]

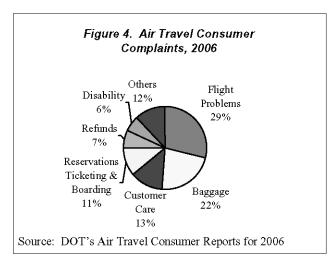
Time period	2006	2007	Percent change
1–2 Hrs.	33,438	47,558	42.23
2–3 Hrs.	3,781	5,213	37.87
3–4 Hrs.	710	1,025	44.37
4–5 Hrs.	120	189	57.50
5 or > Hrs.	27	44	62.96
Total	38,076	54,029	41.90

Source: BTS data

#### Rising Flight Delays Are Also Leading to More Air Traveler Complaints

Against this backdrop of increasing delays and cancellations, consumer complaints are also rising. DOT's Air Travel Consumer Reports disclosed that, for the first 7 months of 2007, complaints involving U.S. airlines increased nearly 65 percent (3,947 to 6,504) over complaints during the same period in 2006, with complaints relating to flight problems (delays, cancellations, and missed connections) more than doubling (1,096 to 2,468) for the same period. Complaints involving U.S. airlines in 2007 have already exceeded 2006 complaint totals, including complaints about flight problems.

Over the last several years, DOT ranked flight problems as the number one air traveler complaint, with baggage complaints and customer care <sup>9</sup> ranked as number two and number three, respectively. As shown in figure 4, flight problems accounted for more than one quarter of all complaints the Department received in 2006. So far, this year is becoming a near record-breaking year percentage-wise for flight problem complaints, with those accounting for nearly 38 percent of all complaints the Department received in the first 7 months of 2007.



Passengers' Flight Experiences Are Further Complicated by Capacity and Demand Matters

Air travelers' dissatisfaction with flight problems, especially cancellations, is further compounded by reduced capacity and increased demand, which leads to fuller flights. Domestic-wide, the first 6 months of 2007 (the most recent data available) compared to the same period in peak-year 2000 show that:

<sup>&</sup>lt;sup>9</sup>Complaints such as poor employee attitude, refusal to provide assistance, unsatisfactory seating, and unsatisfactory food service are categorized as customer care complaints.

- The number of scheduled flights (capacity) decreased from 5.5 million in 2000 to 5.0 million in 2007, a drop of 9 percent. Scheduled seats also declined by over 9 percent between 2000 and 2007, from 510 million to 462 million.
- Even though the number of flights and seats declined, passenger enplanements went up over 12 percent, from 312 million passengers in 2000 to 350 million passengers in 2007.
- Reduced capacity and increased demand led to fuller flights. For 2007, average load factors increased from 71.1 percent in 2000 to 79.7 percent in 2007, with an unprecedented 86.1 percent in June.
- Reduced capacity and higher load factors can also result in increased passenger inconvenience and dissatisfaction with customer service. With more seats filled, air carriers have fewer options to accommodate passengers from canceled flights.

The extent to which delays and cancellations will continue to impact passengers in 2007 depends on several key factors, including weather conditions, the impact of the economy on air traffic demand, and existing capacity management at already congested airports.

I would now like to turn to my key points on actions needed to improve airline customer service and minimize long, onboard delays.

#### The Airlines Must Specify in Detail Their Policies and Plans To Minimize Long, On-Board Delays and Off-Load Passengers Within Certain Periods of Time and Adhere to Such Policies

The airlines continue to face challenges in mitigating extraordinary flight disruptions such as long, on-board delays during extreme weather. Based on Bureau of Transportation Statistics (BTS) data, 659,988 flights were delayed in 2006 due to poor weather conditions (9.2 percent of all commercial flights). Based on the first 7 months of 2007, the number of flights delayed due to poor weather conditions increased by nearly 18 percent for the same period in 2006 and is on pace to exceed 2006 totals.

The severity of the on-board delays last winter drew national attention, and the events that received the most attention—the American and JetBlue incidents—underscored the importance of improving customer service for passengers who are stranded onboard aircraft for extended periods of time.

On December 29, 2006, American's operations at Dallas-Fort Worth International Airport (DFW) were severely affected by unprecedented weather leading to 654 flight cancellations, 124 diversions, and 44 long on-board delays exceeding 4 hours. The diversions to Austin-Bergstrom International Airport generated substantial interest because some of the lengthiest on-board delays occurred at that airport—in one case for over 9 hours. JetBlue's JFK operations also suffered on February 14, 2007, when severe weather hit the northeastern United States, leading to 355 cancellations; 6 diversions; and 26 long, on-board delays exceeding 4 hours.

We also found that other airlines experienced flight disruptions on those two dates; some were able to minimize the time passengers spent on-board aircraft while others experienced similar on-board delays. For example, Delta Airlines had more flights delayed at JFK than JetBlue on February 14, 2007, with a total of 54 flights delayed more than 1 hour versus 43 for JetBlue.

Lack of a System-Wide Policy Contributed to American's and JetBlue's Long, On-Board Delays

While weather was the primary contributor to the extraordinary flight disruptions, it was not the only factor in passengers being stranded onboard aircraft for extended periods of time. We found that neither airline had a system-wide policy or procedure in place to mitigate long, on-board delays and off-load passengers within a certain period of time. American also did not control the number of diverted flights to some airports, which overwhelmed its operations at Austin.

JetBlue was committed to its long standing practice of not canceling flights. As a result, its personnel at JFK airport became overwhelmed with the sheer number of arriving and departing aircraft on the ground at the same time, with no gates available for deplaning passengers on arriving flights.

available for deplaning passengers on arriving flights.

After the December 29 event, American instituted a new policy designed to prevent on-board delays from exceeding 4 hours and implemented an airborne diversion distribution plan aimed at spreading out its diversions to more airports to prevent overloading any given airport. American has also implemented decision assistance technology designed to "automatically track and monitor delayed and diverted flights and assist in creating a centralized approach for the prioritizing the handling of such flights."

JetBlue also set a time limit for any long, on-board delay away from a gate—a 5-hour maximum—and established procedures to monitor delayed flights. Also, just a week after the February 14 incident, JetBlue published its own customer bill of rights. JetBlue plans to offer compensation in the form of vouchers for flight disruptions, such as cancellations.

Contingency Planning for Extreme Weather Is Not a New Concern for Airlines

Contingency planning for extreme weather is not a new concern for airlines, as evidenced by the June 1999 Commitment provision, which states that:

- The airlines will make every reasonable effort to provide food, water, restroom
  facilities, and access to medical treatment for passengers aboard an aircraft
  that is on the ground for an extended period of time without access to the terminal, as consistent with passenger and employee safety and security concerns.
- Each carrier will prepare contingency plans to address such circumstances and will work with carriers and the airport to share facilities and make gates available in an emergency.

However, as we noted in our 2001 report, the airlines had not clearly and consistently defined terms in the Commitment provision such as "an extended period of time." We also noted that only a few airlines' contingency plans specify in any detail the efforts that will be made to get passengers off the aircraft when delayed for extended periods, either before departure or after arrival. Our opinion was then, as it is now, that this should be a top-priority area for the airlines when implementing their contingency plans, especially with the record-breaking onboard delays we have already seen in 2007—particularly those exceeding 4 hours.

We recommended that the airlines:

- clarify, in their customer service plans, what is meant by an "extended period of time" and "emergency," so that passengers will know what they can expect during extended on-aircraft delays.
- ensure that comprehensive customer service contingency plans specify the efforts that will be made to get passengers off the aircraft when delayed for extended periods, either before departure or after arrival.

In response to our 2001 report recommendations, the airlines agreed to:

- clarify the terminology used in their customer service plans for extended delays.
- establish a task force to coordinate and develop contingency plans with local airports and FAA to deal with lengthy delays.

While a task force was formed, the effort never materialized as priorities shifted after September 11, 2001. Our testimony before the Senate Committee on Commerce, Science, and Transportation in April 2007 10 recommended that the task force be reconvened, and, to date, there has been no action to do so.

Airline Contingency Plans Are Still Not Adequate To Handle Long, On Board Delays
Our recent review examined the actions taken by each airline to clarify terms relating to customers' essential needs during long, on-board delays and found the following:

- Five of the 13 airlines still had not clearly and consistently defined terms in the Commitment provision, such as "an extended period of time" for meeting customers' essential needs during long, on-board delays.
- Of the eight airlines that have defined "an extended period of time," the trigger thresholds for meeting passengers' essential needs vary from 1 to 3 hours. We think it is unlikely that passengers' definition of an extended period of time will vary depending upon which airline they are flying. A consistent policy across the airlines would be helpful to passengers.

Also, 8 of the 13 airlines have now set a time limit on delay durations before deplaning passengers but 5 still have not.

Given the extended ground delays that stranded passengers onboard aircraft this past winter, all airlines should specify in detail the efforts that will be made to get passengers off the aircraft when delayed for extended periods, either before departure or after arrival.

 $<sup>\</sup>overline{\ ^{10}\, \text{OIG}}$  Testimony Number CC–2007–042, "Refocusing Efforts To Improve Airline Customer Service," April 11, 2007.

Airlines Must Resume Efforts To Self-Audit Their Customer Service Plans

In our 2001 report, we recommended, and the ATA airlines agreed, that the airlines establish quality assurance and performance measurement systems and conduct internal audits to measure compliance with the Commitment provisions and customer service plans.

In June 2001, we confirmed that 12 of the 14 ATA airlines that were signatories to the Commitment had established and implemented their quality assurance and performance measurement systems. In our 2006 review, 11 however, we found that the quality assurance and performance measurement systems were being implemented at just five of the ATA airlines. The other ATA airlines had either discontinued their systems after September 11, 2001, or combined them with operations or financial performance reviews where the Commitment provisions were overshadowed by those issues.

The key to the success of the airlines' new policies designed to prevent long, onboard delays is for each airline to (1) have a credible tracking system for compliance with its new policy and with all other Commitment provisions and (2) implement its customer service plan, reinforcing it with performance goals and measures.

These systems and audit procedures will also help DOT to more efficiently review the airlines' compliance with the Commitment provisions and ensure that airlines comply with their policies governing long, on-board delays, especially in the event that health and safety hazards arise from such delays.

# Airport Operators Must Become More Involved in Contingency Planning for Extraordinary Flight Disruptions

In addition to examining airline contingency plans for mitigating long, on-board delays as requested, we also examined contingency plans from selected major airports nationwide. We requested contingency plans from 13 airports (including 12 hub airports). We received plans or responses from the 13 airports and found the following:

- Only two airports have a process for monitoring and mitigating long, onboard
  delays that involves contacting the airline to request a plan of action after an
  aircraft has remained on the tarmac for 2 hours.
- Airports intervene only upon an airline's request primarily because they do not
  have the authority to interfere with a carrier's operations during long, on-board
  delays
- Most plans address assisting airlines, when assistance is requested, during long, on-board delays. This includes providing gates for deplaning passengers or, when a gate is not available; deplaning passengers using mobile air stairs; loading passengers onto buses; and returning to the terminal.

Based on discussions with airport, airline, and FAA personnel, it appears that in the recent incidents that stranded passengers for extraordinarily long periods, there was not a coordinated effort by the airlines, airport operators, and FAA to deal with such events.

In our opinion, airport operators need to become more involved in contingency planning for extraordinary flight disruptions, including long, on-board delays during extreme weather or any other disruptive event. Airports are public agencies heavily supported by public funding and should ensure that passengers' essential needs are met and prevent long, on-board delays to the extent possible. As recipients of Federal funds for airport improvement projects, airports have an obligation to increase airport efficiency, decrease delays, and transport passengers in the most efficient manner.

Also, air travelers can still choose which connecting airport to fly through to get to their final destinations or take direct flights to avoid chronically delayed airports all together. If certain airports continue to maintain a reputation for long flight and tarmac delays, passengers may simply choose other airports whenever possible

tarmac delays, passengers may simply choose other airports whenever possible. In our view, large- and medium-hub airport operators should establish and implement a process for monitoring and mitigating long, onboard delays that involves contacting the airline to request a plan of action after an aircraft has remained for 2 hours on the tarmac. Absent any airline policy, the airport operators should work with airlines to establish policies for deplaning passengers and ensure that these policies are adhered to.

<sup>&</sup>lt;sup>11</sup>OIG Report Number AV-2007-012, "Follow-Up Review: Performance of U.S. Airlines in Implementing Selected Provisions of the Airline Customer Service Commitment," November 21, 2006.

# There Are Best Practices and Ongoing Initiatives That, if Properly Executed, Should Help in Mitigating Long, On-Board Delays in the Immediate Term

Secretary Peters asked that we highlight some of the best practices we found that could help in dealing with long, onboard delays. During our review of selected airlines and airports, we found several practices by some airlines and airports to mitigate the effects of these occurrences. Also, after our review began, some airports moved forward with other initiatives meant to assist the airlines in dealing with long, on-board delays. In addition, ATA announced on February 22, 2007, a new initiative for dealing with such situations. FAA also expanded an existing initiative this summer to other parts of the National Airspace System to reduce the amount of time that flights sit on tarmacs waiting to depart. We have included these actions along with best practices identified during our review to provide an overall picture of the actions being taken across the industry that relate to the Secretary's concerns.

While it is too soon to evaluate the effectiveness of these ongoing initiatives, they all have merit and, if properly executed, should help in mitigating long, on-board delays in the immediate term.

Airlines' and Airports' Best Practices and Ongoing Initiatives

Best Practices: The best practices we identified during our review are not all inclusive, and the airlines or airports should consider incorporating them into their ongoing operations, especially the best practice of setting the maximum amount of time that passengers will remain onboard aircraft before deplaning. However, in our opinion, a more comprehensive national plan of action is needed to prevent and mitigate long, onboard delays, which should involve collaboration and coordination among the airlines, airports, FAA, and DOT. These practices include the following:

- Setting the maximum amount of time that passengers will remain onboard aircraft before deplaning them. For example, an airline at one airport it services has a 1 hour policy that was executed effectively during the December 29, 2006, incidents. On that day, the airline had a record 11 diversions into 1 airport with the longest on-board delay lasting about 90 minutes.
- "Intelligent canceling"—canceling flights most likely to be affected by the weather event without being too optimistic or pessimistic. Pre-canceling flights before the passengers leave home keeps them away from the airport, thus reducing passenger congestion at the airlines' check-in counters and gate areas. There are trade-offs when implementing this practice—passengers avoid experiencing long, on-board delays, but they need to be re-accommodated on later flights, preferably that same day. However, reduced capacity and higher load factors can result in increased passenger inconvenience and dissatisfaction with customer service. With more seats filled, air carriers have fewer options to accommodate passengers from canceled flights.
- Keeping gate space available for off-loading passengers in times of irregular operations. This could be done by the airport authority or the carriers. The gate would be available for arrival aircraft and used solely for deplaning passengers.
- Implementing programs that provide volunteers from throughout the airline's system that are flown or driven to the destination needing assistance. These volunteers (i.e., customer service agents) act as additional help during irregular operations. The goal of the agents would be to separate and service passengers needing to be rebooked from those passengers arriving at the airport already ticketed for on-time flights or non-canceled, operating flights.
- Implementing flexible staffing arrangements and periodic duty rotations to meet the challenges during irregular operations. For example, certain non-customer service employees have been cross-trained to assist in re-booking passengers whose flights have been canceled.
- Holding teleconferences before a known weather event (e.g., winter storm, hurricane, tropical depression, etc.) with possibly affected airports' general managers. In addition to asking for recommendations from the general managers, they discuss the status of snow removal equipment, liquid de-icing amounts and availability, staffing, and possible scheduled operation (aircraft and passenger) reductions. Similar meetings are already held between FAA and airlines.
- Using the Aircraft Communication Addressing and Reporting System (equipped on most commercial aircraft) to send a message to the airlines' Operations Control Center notifying it that the aircraft has been away from gate for more than 3 hours without departing.

• Constantly monitoring aircraft on the tarmac; in cases of aircraft remaining for more than 2 hours, airport staff will contact the appropriate airline manager to coordinate the aircraft's return to a gate. If necessary, airport staff will assist in deplaning an aircraft and will provide an escort, buses, and mobile stairs. Finally, staff will ensure that airport services (e.g., concessions, security, and ground transportation) remain open during an irregular operation.

Airports' Ongoing Initiatives To Address Long, On-Board Delays: During our review, two major airport operators put forth initiatives to address long, onboard delays. The Port Authority of New York and New Jersey set up a task force to find ways to reduce flight delays at the region's three main airports. The Port Authority; which operates JFK, LaGuardia, and Newark Liberty International Airports; leads the group. The task force includes airline executives and Federal, state, and city government officials.

The task force convened its first meeting July 18, 2007, with 42 airline executives and Federal, state, and city government officials attending, including then FAA Administrator Blakey. The task force met a second time on September 18, and another meeting is scheduled for November 2007; conference calls are planned to occur periodically. The task force plans to issue a report by the end of 2007.

The task force is addressing two main areas—technical issues and customer service. In the technical area, the Port Authority and FAA are working on procedural improvements, such as more efficient use of the runways at JFK. Also, work is being delegated to the airlines that are looking into ways the airports could be changed to reduce flight delays. In the customer service area, the focus is on identifying best methods for getting passengers off aircraft and enhancements for reducing the amount of time they are kept on aircraft.

Hartsfield-Jackson Atlanta International Airport is moving forward with a plan to cut gate delays for arriving passengers by busing people from planes directly to concourses when airline gates are full. The City of Atlanta, which operates the airport, approved a \$2.5 million proposal for 4 new buses that can transport about 80 passengers and their carry-on luggage. The plan also includes sets of mobile stairways that allow passengers to leave planes and another vehicle to help disabled passengers. Airlines requesting the service will reimburse the city for the use of the buses.

It is encouraging to see that some airport operators are becoming more involved in mitigating long, on-board delays. However, as passenger traffic continues to grow, airports will need to become more proactive in dealing with long, on-board delays, especially those airports with limited airfield or gate capacity. Airports will also need to proactively deal with in-terminal delays when multiple flights are canceled and passengers are stranded in the gate areas where terminal capacity could be limited

#### ATA Initiative To Address Long, On-Board Delays

On February 22, 2007, ATA announced an initiative for dealing with long, onboard delays and proposed the following course of action:

- Each airline will continue to review and update its policies to ensure the safety, security, and comfort of customers.
- Each airline will work with FAA to allow long-delayed flights to return to terminals in order to off-load passengers who choose to disembark without losing that flight's position in the departure sequence.
- ATA will ask the Department to review airline and airport emergency contingency plans to ensure that the plans effectively address weather emergencies in a coordinated manner and provide passengers with essential needs (i.e., food, water, lavatory facilities, and medical services).
- ATA will ask the Department to promptly convene a meeting of air carrier, airport, and FAA representatives to discuss procedures to better respond to weather emergencies that result in lengthy flight delays.

While we understand the current pressures that ATA and its member airlines face in maintaining profitability, we are concerned that the actions proposed merely shift responsibility from ATA to the Department. We agree that the Department must be an active partner, but ATA's proposed course of action is not significantly different than what the airlines agreed to do in response to our 2001 recommendations, such as "to establish a task force to coordinate and develop contingency plans with local airports and FAA to deal with lengthy delays."

FAA's Expanded Program To Reduce Flight Delays

In preparing for this summer's peak season, FAA expanded an air traffic program that reduces flight delays. The Airspace Flow Program, as it is known, gives airlines the option of either accepting delays for flights scheduled to fly through storms or

flying longer routes to safely maneuver around them.

The Agency successfully launched the program last year at seven locations in the Northeast. According to FAA, on bad weather days at major airports in the region, delays fell by 9 percent compared to the year before. Cost savings for the airlines and the flying public from the program were estimated to be \$100 million annually. The number of Airspace Flow Program locations—chosen for their combination of heavy traffic and frequent bad weather—was expanded from 7 to 18. The additional locations will ease delays for passengers flying through the southern and midwestern United States and for those on transcontinental flights.

Before last year, severe storms often forced FAA to ground flights at affected airports. This "penalized" flights whose scheduled paths would have taken them around the storm had they not been grounded with the flights directly affected by the storms. This program allows FAA to manage traffic fairly and efficiently by identifying only those flights scheduled to fly through storms and giving them estimated departure times. Airspace Flow Programs will also be used in conditions not

related to weather, such as severe congestion near major cities.

#### DOT, FAA, Airlines, and Airports Should Complete Actions on Outstanding Recommendations To Improve Airline Customer Service and Minimize Long, On-Board Delays

Given the events of this past winter, DOT should take a more active role in overseeing customer service issues, and there are actions that it, the airlines, and airports can undertake immediately to do so. Many of the actions are not new and date back to recommendations in our 2001 report, which were directed at delay and cancellation problems—key drivers of customer dissatisfaction with airlines. These recommendations are listed below.

Conduct incident investigations involving long, on-board delays. Based on the results of our review, the Department's Office of General Counsel—in collaboration with FAA, airlines, and airports—should review incidents involving long, on-board ground delays and their causes; identify trends and patterns of such events; and im-

plement workable solutions for mitigating extraordinary flight disruptions.

Oversee the airlines' policies for dealing with long, on-board delays. The Office of Aviation Enforcement and Proceedings should ensure that airlines comply with their policies governing long, onboard delays, especially in the event that health and safety hazards arise from such delays, and advise Congress if the airlines retreat from the Commitment provisions or dilute the language in the current contracts of carriage.

carriage.

Implement the necessary changes in the airlines' on-time performance reporting to capture all long, on-board delays. Delay statistics (see statistics in the table on page 15) do not accurately portray the magnitude of long, on-board delays because (1) if a flight taxies out, sits for hours, and then taxies back in and is canceled, the delay is not recorded; and (2) if a flight is diverted to an airport other than the destination airport and sits on the tarmac for an extended period of time, the flight is not re-

corded in delay statistics.

Carriers are not required to report gate departure times when a flight is later canceled. So, there is no record of how long a flight remains at the gate or sits on the tarmac before it is canceled. This is true for flights with lengthy delays at the originating airport that are later canceled. This was the case with some JetBlue flights at JFK on February 14, 2007, and at airports where flights were diverted and then canceled, such as some of the American flights diverted to Austin on December 29, 2006.

BTS is looking into whether changes are needed in how the airlines record long, on-board delays. BTS should make this a priority and implement the necessary changes in the airlines' on-time performance reporting requirements to capture all events resulting in long, onboard delays, such as flight diversions and cancellations.

Clarify terms in airlines' contingency plans. Those airlines who have not already done so must: (1) define what constitutes an "extended period of time" for meeting passengers' essential needs; (2) set a time limit on delay durations before deplaning passengers; and (3) incorporate such policies in their contracts of carriage and post them on their Internet sites.

Establish specific targets for reducing chronically delayed or canceled flights. In 2001, we recommended that the airlines establish in the Commitment and in their Customer Service Plans targets for reducing the number of flights that have been

chronically delayed (i.e., 30 minutes or longer) or canceled 40 percent or more of the

In response to our recommendation, the airlines stated they were "willing to accept the challenge of reducing chronically delayed or canceled flights, for factors we can control, in order to relieve unneeded and unwanted passenger frustration. However, there were no actions identified on how or when the airlines would go about establishing targets for reducing the number of flights that have been chronically delayed. After September 11, 2001, the airlines' focus shifted, but the problem has returned and must be resolved.

Disclose on-time flight performance. We recommended in our 2001 report that the airlines disclose to customers at the time of booking and without being asked the prior month's on-time performance rate for those flights that have been delayed (i.e., 30 minutes or longer) or canceled 40 percent or more of the time. Currently, the airlines are required to disclose on-time performance only upon request from the

The ATA airlines disagreed with this recommendation and, as an alternative, agreed to make on-time performance data accessible to customers on the airlines Internet sites, on a link to the BTS Internet site, or through toll-free telephone res-

However, we found in 2006 that only 5 of the 16 airlines we reviewed made ontime performance data available on their Internet sites. Given the ease of availability of this information to the airlines, we continue to recommend that the airlines post on-time flight performance information on their Internet sites and make it available through their telephone reservation systems without being prompted.

Resume efforts to self-audit customer service plans. Also, in our 2001 report, we recommended, and the ATA airlines agreed, that the airlines establish quality asrecommended, and the ATA airlines agreed, that the airlines establish quanty assurance and performance measurement systems and conduct internal audits to measure compliance with the Commitment provisions and customer service plans.

These systems and audit procedures will also help DOT to more efficiently review the airlines' compliance with the Commitment provisions and ensure that airlines

comply with their policies governing long, on-board delays, especially in the event that health and safety hazards arise from such delays.

Reconvene the task force. In response to our 2001 report recommendations, the airlines agreed to establish a task force of representatives from airlines, airports, and FAA to develop and coordinate contingency plans to deal with lengthy delays, such as working with carriers and the airports to share facilities and make gates available in an emergency. Although the airlines formed a task force, the effort never materialized as priorities shifted after September 11, 2001. Now is the time for airlines to reconvene the task force and develop and coordinate contingency plans with local airports and FAA to deal with lengthy delays

Implement processes for monitoring lengthy delays. Large- and medium-hub airport operators should establish and implement a process for monitoring and mitigating long, onboard delays that involves contacting the airline to request a plan of action after an aircraft has remained on the tarmac for 2 hours. As part of the plan, the airport operators need to work with the airlines to ensure that the airlines' deplaning policies are adhered to. Absent any airline policy, the airport operators should work with airlines to establish policies for deplaning passengers and ensure that these policies are adhered to.

The busy holiday travel season will soon be upon us, and the extent to which delays; including long, on-board delays and cancellations; will affect passengers in the remainder of 2007 and beyond will depend upon how DOT, FAA, airlines, and airports coordinate their efforts to avoid a repeat of the events of this past winter and current 2007 events.

That concludes my statement. I would be glad to answer any questions that you or other members of the Subcommittee might have.

Senator Rockefeller. Thank you, sir. Mr. Reding?

#### STATEMENT OF ROBERT W. REDING, EXECUTIVE VICE PRESIDENT—OPERATIONS, AMERICAN AIRLINES

Mr. REDING. Good morning, Mr. Chairman and members of the Subcommittee.

This morning, I'd like to focus on current efforts to reduce delays, the critical need for investment in the next-generation satellitebased air traffic control technology, known as NextGen, and the changes we, at American, have made to improve our service to cus-

tomers when they experience delays.

At the outset, though, let me simply say that no one has articulated more effectively the urgent need for NextGen, and the importance of a truly fair and stable funding stream to support it, than has the Subcommittee. American greatly appreciates your tireless

leadership in this area.

As the head of operations for our Nation's largest airline, let me assure you that neither we, at American, other ATA carriers, nor the FAA is simply waiting for NextGen to eventually come along and solve all of our problems. We are doing tangible things to—not only to reduce delays, but to improve our customer service during them. In our view, one of the most important efforts underway to reduce delays today is the FAA's plan to mitigate the complexity of the current air traffic flow in the New York airspace. American strongly supports FAA's efforts, and believes that they will bring benefits elsewhere. Indeed, delays at the New York area airports frequently ripple throughout the entire country.

For our part, American has undertaken several initiatives to improve our operations, reduce delays, and enhance our customer

service.

In terms of scheduling, American has actually reduced capacity in our domestic system over the past few years, and agreed, in discussions with the FAA, to cut over 13 percent of our schedule at Chicago O'Hare. These efforts, as well as not adding capacity to delay flights at JFK International Airport as a significant attempt by American to mitigate delays caused by scheduling more flights than today's ATC system can handle.

In addition, our key hubs in Dallas/Fort Worth and Chicago, we have also spread flights more evenly throughout the day to allevi-

ate certain chokepoints.

Finally, we recently decided to add 5 to 7 minutes of ground time, which gives late flights a better chance to catch up, and

keeps fewer planes sitting as they wait for open gates.

Without question, this year has been a challenging one for all airlines, their passengers, and employees, and in particular at American, where we've experienced severe weather beyond anything we have seen in decades, leading to a well-publicized tarmac delay, while December thunderstorms in Texas were virtually unknown until last year.

Let me assure you that I'm not here today to blame the weather. Working with our employee groups, we are focusing on six priorities. These include how we manage delays and how are employees communicate and interact with customers. Additionally, in the event of weather or other delays which require us to take our operations off schedule, we now have, at our Systems Ops Control Center, a diversion coordinator who keeps up with diverted flights. We've developed software to track these diversions by city and flight, and it alerts the coordinator when a flight approaches certain time limits on the ground.

In addition to our customer service plan, American has implemented new guidelines intended to prevent extraordinarily long ground delays for our customers. Our policy is that passengers

aboard airplanes on the ground for more than 4 hours will be provided an opportunity to disembark if it is safe to do so. If we are unable to provide an opportunity to disembark, these flights will have a priority in getting to a gate. And, unfortunately, generally it's an option that most likely will result in a flight's cancellation.

In the end, however, while American and others in the industry have implemented numerous customer service changes on the ground, we still have major issues in the air, as you all well know.

The bottom line is that there is not much we can do once an aircraft leaves the gate and enters onto a taxiway. At that point, we come under the control of the antiquated air traffic control system. As a result, I cannot emphasize enough the urgent need for implementation of a satellite-based ATC system utilizing RNAV/RNP procedures and further developing the Automatic Dependence Surveillance-Broadcast system known as ADS-B. In particular, RNAV/RNP technology has shown great success at airports where it's been deployed. At a limited number of airports, we've been able to safely allocate existing airspace much more efficiently due to the flexibility that RNAV/RNP procedures can provide. We support expanding the number of airports using that system as quickly as possible.

We, at American, are ready to go with respect to RNAV/RNP. All of our jets are equipped with RNAV systems, 70 percent with RNP, and we plan to equip the rest of the fleet. We would hope that all

airlines follow suit, if they have not already done so.

Over the long term, such a commitment by all users of the highaltitude and high-density airspace to a redesigned and modernized air traffic control system will be essential in order to make the country's airline industry the dependable, efficient, mass-transportation system that we all expect there to be.

Thank you. That concludes my remarks. I'll be available for any questions.

[Laughter.]

[The prepared statement of Mr. Reding follows:]

PREPARED STATEMENT OF ROBERT W. REDING, EXECUTIVE VICE PRESIDENT—OPERATIONS, AMERICAN AIRLINES

Good morning, Chairman Rockefeller, Ranking Member Lott, and members of the Subcommittee. My name is Bob Reding and I am Executive Vice President of Operations for American Airlines. I have responsibility for all airport, flight and maintenance operations as well as the operational planning, safety, security and environmental departments for the airline.

This morning I would like to focus on our current efforts to reduce delays, the critical need for investment in the next generation, satellite-based air traffic control technology (known as NextGen), and the changes we at American have made to improve our service to customers when they experience delays. At the outset though, let me simply say that no one has articulated more effectively the urgent need for NextGen and the importance of a truly fair, stable funding stream to support it, than has this Subcommittee. American greatly appreciates your tireless leadership in this area.

As the head of operations for the Nation's largest airline, let me assure you that neither we at American, the ATA carriers, or the FAA is simply waiting for NextGen to eventually come along and solve all of our problems. We are taking tangible steps today to not only reduce delays, but to improve our customer service during delays.

In our view, one of the most important efforts underway to reduce delays today is the FAA's plan to mitigate the complexity of the current air traffic flow in the New York/New Jersey/Philadelphia airspace. American strongly supports FAA's ef-

forts and believes that they will bring significant relief to air travelers not only in the Northeast but throughout the country. Indeed, delays at the New York-area airports frequently ripple throughout the entire country. FAA estimates that it can reduce delays nationwide by 20 percent by the year 2011 by redesigning the air traffic

routings in the Northeast corridor.

In addition, American has undertaken several initiatives to improve our operations, reduce delays, and enhance our customer service efforts. Organizationally, we announced last week executive leadership changes with the explicit goal of better aligning our technical operations with our airport services. My expectation is that these changes will foster greater collaboration and cooperation within the company's key operational departments, improving our operational reliability and customer service.

In terms of scheduling, American has actually reduced capacity in our domestic system over the past few years and agreed in discussions with the FAA to cut over 13 percent of our schedule at Chicago O'Hare. These efforts, as well as not adding capacity to delay-plagued JFK International Airport, are a significant attempt by American to mitigate delays caused by scheduling more flights than today's ATC

system can handle.

In addition, at our key hubs in Dallas/Fort Worth and Chicago, we have also spread flights more evenly throughout the day, effectively "depeaked" our operations, to alleviate certain chokepoints during the day. Finally, we recently decided to add five to 7 minutes of ground time, which gives late flights a better chance to catch up and keeps fewer planes sitting as they wait for open gates. American, who has retained 91 percent of its maintenance in house, is also focusing on its maintenance practices to ensure that aircraft get maintained and repaired on-time and in position for their scheduled flying.

Without question, this year has been a challenging one for all airlines, their passengers and employees. That's been particularly true at American, where we have experienced severe weather beyond anything we have seen in decades, leading to a well-publicized tarmac delay. While December thunderstorms in Texas were virtually unknown until last year, let me assure you that I am not here today to blame

the weather.

Back in 1999, American Airlines and its regional affiliate, American Eagle, adopted a Customer Service Plan that is available to the public on our website. We do our best every day to abide by that plan. This plan provides that during long ground delays we make reasonable efforts to ensure that our customer's "essential needs"—that is, food, water, lavatory facilities, medical attention, etc.—are met. Each airport has a plan with specific procedures to meet these essential needs.

has a plan with specific procedures to meet these essential needs.

That said, American Airlines has learned a great deal from this past year's operational and customer service challenges and has taken additional actions. Even before the extreme weather from late December through July came along, we had launched a grassroots effort within our company to come up with common-sense ap-

proaches to ensure we do our best to deliver excellent customer service.

Working with our employee groups, we are focusing on six key areas of priority aimed at improving the customer experience at every point along the way.

The six key areas include:

- · Delays and how we manage them.
- Enhanced communication of delay information to our customers.
- Gate interactions and the boarding experience.
- Flight and cabin crew interaction with our customers.
- · Cabin interior condition.
- · Baggage handling and resolution.

Task forces within the airline are examining all of these strategic areas. Upcoming changes include blocking seats in key markets on peak holiday travel dates so we can use them to re-accommodate passengers whose flights are delayed or canceled. We are programming our computer system to recognize when a connecting passenger is not going to make the connection so his or her seat can be provided to other travelers. We are adding self service machines on the secure side of the terminal to make it more convenient for the customer to obtain a new boarding pass. As part of our enhanced communications efforts, we are using electronic displays at gates and even some airport TVs to inform the customer of weather changes. To ensure that our employees can successfully handle weather-diverted flights, we are providing our diversion-designated airports with appropriate ground service equipment to handle aircraft types that would not normally transit that station.

Additionally, in the event of weather or other delays which require us to take our operations off schedule, we now have at our System Operations Control Center a diversion coordinator who keeps up with diverted flights and how long they have been on the ground in the diversion city. Finally, we have also developed new processes in coordination with the FAA to monitor the status of our diverted flights and ensure that these flights have increased priority for return to their original destina-

In addition to the Customer Service Plan, American has implemented a new guideline intended to prevent extraordinarily long ground delays for our customers. Our policy is that passengers aboard airplanes on the ground for more than 4 hours will be provided an opportunity to disembark, if it is safe to do so. If we are unable to provide our customers an opportunity to disembark, these flights will have a priority in getting to a gate for deplanement, but it will most likely result in that flight's cancellation due to operational constraints such as crew legalities. We still need closer coordination with air traffic control in these off-schedule-oper-

ations so an aircraft diverted to another city due to bad weather is not penalized if it must return to a gate. Today, they must go to the end of the line for take-off, after disembarking passengers at a gate, even though they may have been on the taxiway the longest time awaiting ATC take-off clearance.

In the end however, while American Airlines and others in the industry have implemented numerous customer service changes on the ground, we still have major issues in the air, as you well know. The bottom line is that there is not much we can do once an aircraft leaves the gate and enters onto the taxiway. At that point, we come under the control of an antiquated air traffic control system. As a result, I cannot emphasize enough the urgent need for implementation of a satellite-based ATC system. The technology exists and we must harness it and put it to effective

In particular RNAV/RNP technology has shown great success at airports where it has been deployed. At a limited number of airports, we have been able to safely allocate existing airspace much more efficiently due to the flexibility that RNAV/ RNP procedures can provide. We support expanding the number of airports using that system as quickly as possible.

Another critical tool in development is a fully Automatic Dependent Surveillance-Broadcast System, also known as ADS-B, which will increase situational awareness

for the pilot and allow pilots to make real-time decisions regarding traffic separation, leading to enhanced safety and efficiency.

RNAV/RNP is a critical component to NextGen, and we at American are ready to go. All of our jets are RNAV capable and 70 percent already have RNP equipment installed with plans for every aircraft in American's fleet to become RNP equipped. We would hope that all airlines follow suit if they have not already done so. Over the long term, such a commitment to a redesigned and modernized air traffic control system by all users of the high altitude and high density airspace will be essential in order to make this country's airline industry the dependable, efficient mass transportation system that we all expect it to be.

Mr. Chairman, that concludes my statement. I would be happy to answer any

questions that you or Members of the Subcommittee may have.

Senator Rockefeller. Thank you very much, Mr. Reding.

Let me just say that—to the witnesses—that we will not have a chance to, obviously, ask all of our questions, so we'll submit them to you. And that's just as important to us, because we get those and read them. And I should also point out to my colleagues that they have 10 days in which to submit those questions.

Captain Kolshak?

### STATEMENT OF CAPTAIN JOE KOLSHAK, EXECUTIVE VICE PRESIDENT—OPERATIONS, DELTA AIR LINES, INC.

Mr. Kolshak. Mr. Chairman, Vice Chairman, and members of the Aviation Subcommittee, I'm pleased to be here today to offer Delta's views on the problem of airspace congestion and delays.

On behalf of Delta employees and customers worldwide, I want to thank Senators Rockefeller and Lott for their leadership in pursuing the real solution to our congestion crisis; namely, funding,

development, and implementation of the next-generation air traffic control system. We commend you for tackling this decades-long

challenge.

Congestion and delays have been with us for quite some time, but this year, as you know, they've reached a crisis point. Delays cost us more than \$700 million a year. More importantly, our customers pay the price in lost time, inconvenience, and frustration. This summer's extreme delays and cancellations were concentrated in specific areas of the country, like the Northeast and the New York airports, that dramatically underperformed. The reasons are varied and complicated, and there is no silver-bullet solution. It will ultimately take aggressive use of available technology, collaborative planning, and better management and performance in using

existing capacity.

We all know that delays have increased in the New York area, and a prime driver is the lack of airspace. New York airports consistently fail to meet their published capacities. For example, the design capacity of JFK exceeds 100 operations per hour. However, this year even JFK, with four runways available, routinely only averaged 68 operations per hour. Mr. Chairman, we must make better use of both ground and airspace assets in New York. Demand has exploded in New York from every class of user, each of which places similar demands on the system. FAA data shows that commercial users accounted for only 53 percent of New York TRACON activity. The remaining activity came from business jets and general aviation. Since 2000, business jets carrying few people have increased IFR operations by approximately 36 percent.

In my written statement, I've outlined a number of initiatives that will help to reduce congestion in the short term. One such initiative that will yield major efficiency gains is expanded use of RNAV arrivals and departures, as mentioned by my colleague. With RNAV capacity, which most of today's commercial airlines have, virtually all navigational inaccuracy is removed, and aircraft are able to fly arrivals and departures and en route tracks with greater precision. Atlanta implemented RNAV arrivals 2 years ago, and positive results have been gained. We estimate that Delta will save, when fully implemented, over \$30 million a year, and we've

reduced delays by 3 to 5 minutes.

Another thing that must be done is that DOT must appoint a czar at the FAA to lead the Northeast Congestion Initiative. As was done in South Florida when delays became severe 2 years ago, the results were phenomenal. Our arrival performance in South Florida improved 44 percent, and delays of over 90 minutes

dropped by 60 percent, year over year.

But delay—but, despite our best efforts, delays will still occur. To mitigate their impact, Delta has very detailed and comprehensive plans in place to cancel flights in advance, rebook and notify passengers, and work with entities, like the Port Authority, to find gates for flights with extended delays.

Mr. Chairman, we've taken the proper steps to minimize the impact of ATC delays and congestion on our customers. We urge the Committee to continue to allow carriers to develop procedures and commitments based on their unique customer and operational re-

quirements.

Thank you for the opportunity to address you personally on these very important issues. I'll be pleased to answer any questions you may have.

[The prepared statement of Mr. Kolshak follows:]

PREPARED STATEMENT OF CAPTAIN JOE KOLSHAK, EXECUTIVE VICE PRESIDENT— OPERATIONS, DELTA AIR LÍNES, INC.

Mr. Chairman, Senator Lott and members of the Aviation Subcommittee it is a pleasure to appear before you today to offer Delta's views on the continuing problem of airspace congestion and the resulting impact on delays.

First and foremost, on behalf of all Delta employees and customers worldwide I want to thank and commend Senators Rockefeller and Lott for your leadership and commitment toward addressing the real solution to our congestion crisis, namely the funding, development and implementation of a modern, NextGen Air Traffic Control

System. We are indebted to you for tackling this decades-long challenge.

As I was preparing for this opportunity to speak with you, I happened to find some material from as far back as 60 years ago that highlighted that the aviation community faced then some of the same problems we face today with our Air Traffic Control System today. In the 1946 Delta Manual for Employees, the ATC system was described as a "modern" system of VORs, ILS approaches and analog-based radar. In over 60 years, little has changed with that system in spite of all the technological advances that have occurred. But even more appropriate to my testimony here today, I happened to find an article from the July 26, 1968 issue of *Time Maga*zine. Responding to reports of aircraft experiencing extended take-off, en-route and arrival delays of over 2 hours in the Northeast, then-"Federal Aviation Deputy Administrator David D. Thomas laid the blame on congestion. Said he: What has happened is that the airports, particularly in the New York area, are finally approaching saturation." Finally, in a 1956 letter to Delta employees, one of my predecessors, Charlie Dolson, distributed a pamphlet that listed the problems with the ATC system at that time as being too complicated, too cumbersome, lacking flexibility, and tent at that time as being too compileated, too cumbersome, tacking flexibility, and lacking capacity. Also, among its recommendations for the future, it states that "Those responsible for air traffic control planning must develop a new ATC system that will be able to efficiently handle today's traffic and be capable of expansion so that it will be fully adequate for the foreseeable future. . . . This is not quite as large an order as it may sound. A lot of the preliminary work has been done [and] the solutions for almost all ATC problems are known; practically no invention is needed." All this sounds painfully familiar five and six decades later.

As you can gather from the quote above, congestion and delays have been with us for quite some time, but today, they have reached yet another crisis point in certain regions of the country and in particular, at certain airports. In those locations demand has once again outstripped capacity. For any airline, particularly for Delta, where we try each day to provide the best service possible despite current ATC issues, it is an untenable situation. The impact has been extremely costly to Delta and its customers. We estimate that delays cost our airline more than \$700 million a year. More importantly our customers are paying the price with lost time, inconvenience, and ever-increasing frustration, and the maddening part is that, unlike in

1968, the technology to relieve many of the causes is readily available.

Let's be clear. Delays and congestion are our enemies, and we cannot be successful as a company or an industry if we do not strive to achieve best in class on-time and operational performance. Our customers both demand and deserve that level of service. This past summer's performance in New York and JFK in particular are totally unacceptable, and we are taking aggressive steps with airports and govern-

ment agencies to address the situation.

In our view, the unacceptable delay and cancellation rates for this summer—the highest in history—are primarily concentrated in specific regions of country like the northeast. As the largest operator in the New York area with 564 operations at the 3 principal airports—JFK, EWR and LGA—we saw a precipitous decline in on-time performance and increase in cancellations over the past year. When compared with other parts of our system, NY airports underperformed. The reasons are varied and complicated, but just as there is no one cause for the problem, likewise, there is no silver bullet for a solution. It is going to take outside-the-box thinking, aggressive use of available technology, and detailed planning by everyone involved first to mitigate the impact on our customers and eventually to solve the problem and allow for the inevitable future growth of our air transportation system.

We have done a detailed analysis of JFK because delays at that airport reached

record levels this past summer. Our capacity over the past 2 years has increased

20 percent—roughly the same increase as the second largest operator, JetBlue, and as other carriers that serve the airport. Each of us was responding to customer demand, and Delta's load factor performance during this period confirms that we are

giving our customers the flights and destinations they desire.

In Delta's case, our goal was to restore JFK to its status as the preeminent U.S. International gateway. We increased the number of international destinations by 65 percent from 20 to 33. And of those 33 destinations, 21 are to unique markets like Mumbai, Moscow, Kiev, and Accra, that no other U.S. carrier serves. Our competition in those markets is primarily foreign flag carriers, and in order to be successful in those unique international markets, we must feed those services with connecting traffic from all across the U.S. since only 50 percent of our traffic in those markets is local. This is where regional jets are essential, since they allow us to offer service to smaller communities like Portland, Buffalo and Norfolk. In the markets where we were initially forced to provide service with propeller-driven aircraft, we have aggressively substituted larger and faster regional jets and continue to upgauge to larger jets to reduce congestion and delays even further. Our goal remains to connect passengers conveniently in those communities with the larger gauge international and trans-continental flights serving the markets they desire.

### What Is Causing Increase in Delays at JFK in NY Area?

As I said before, there is no one single cause of the delays and congestion in New York, but a common structural issue for the 3 largest New York airports is lack of airspace. If one looks at FAA delay numbers, the data shows that delays have increased in the New York Terminal Radar Approach Control (TRACON) and New York Air Route Traffic Control Center (ARTCC) as well as the 3 main commercial airports. Most revealing is the sharp decline in the ability of those airports to meet their published capacities. In particular, during the period from January through May, 2007, for JFK—with 4 available runways—the FAA published an average capacity—or call rate—of 84 operations per hour, yet the airport averaged only 68 operations per hour. The design capacity of JFK is in excess of 100 operations per hour. For a comparison, the FAA published a call rate of 75 operations per hour and delivered 65 for New York's LaGuardia airport—with only 2 available runways, which cannot be used simultaneously. This trend continued throughout the summer as actual operations were generally 20 percent lower than the call or flow rate.

### **LGA**

- -Max capacity 80 ops/hr with 2 runways
- -Average called 75 ops/hr

(94% of max capacity)

-Actual operations - **65 ops/hr** (81% of max capacity)

### **JFK**

- -Max capacity 100 ops/hr with 4 runways
- -Average called 84 ops/hr

(84% of published)

-Actual operations - **68 ops/hr** (68% of max capacity)

-JFK should be able to support current operations at an acceptable performance level.

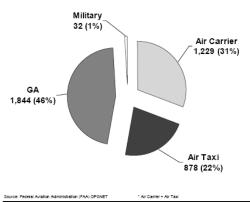
There are many reasons for the lower flow rate. However, as a pilot, I noticed that the FAA routinely limited operations at JFK to only 2 of 4 runways. While weather is often a factor in reduced runway usage, there are many days where usable concrete sits idle while our passengers suffer from the resulting delays and congestion. We should not set artificial restrictions on operations until we are utilizing all available experience the circuit.

able capacity at the airport.

Mr. Chairman, having identified the under-utilization of ground capacity at JFK, we fully understand that the next barrier to reducing airport congestion in the Northeast is the efficient use of airspace routes in the New York terminal control area. Demand has exploded in the New York TRACON by every category of users, each with different aircraft-operating capabilities but placing similar demands on the ATC system. According to FAA data for July 2007, commercial users combined accounted for only 53 percent of NY TRACON activity. The remaining activity was filled with the increasing use of business jets and General Aviation aircraft. Since 2000, Business jets with limited capacity have increased IFR operations approximately 36 percent, and their demand on the airspace is in most cases equal to that of commercial airliners with hundreds of passengers onboard.

# Commercial\* Ops are ~53 percent of NYC-Area TOTAL Activity

3,983 Daily Departures (incl. 2,107 Commercial) in July 2007



No one is denying those aircraft the right to utilize the airspace and the ATC system. However, the current FAA funding system places the bulk of the monetary cost on commercial airline passengers, which is unfair. Business jets should not only pay their fair share of air traffic management costs, but they should also incur any restrictions that are imposed on commercial operators. In the absence of a long term solution requiring a more balanced funding mechanism for corporate users, the most effective short-term solution is to limit their access to the system, just as we have seen at LaGuardia, and as we are likely to see at JFK and Newark.

#### **Near-Term Solutions**

In response to the past summer's delays, the industry, government and the Port Authority of New York/New Jersey are all collaborating to develop near term steps and plans to ensure that we do not have a reoccurrence next summer at JFK and in the New York area. It is important to recognize that the congestion problems are most severe during the summer peak season, so DOT and the operators must begin planning now for future peaks at JFK, LaGuardia, and Newark, as well as in the Terminal control area, which encompasses 15 airports including very large General Aviation facilities like Teterboro. Therefore, any near term solution must address the fundamental structural airspace problems that affect *all* operators using the TRACON airspace.

The FAA recently released its final Environmental Impact Study for the redesign of the airspace in the Northeast. This is a long-overdue first step in opening up the airspace bottleneck over the Northeast. We will continue to work with the FAA to help facilitate timely implementation of the new routes.

Delta and other carriers have put forth a series of specific recommendations to address the airspace concerns in the NY region. These include:

- Accelerating the NY/NJ Airspace redesign Project.
- Addressing the reduction in airport throughput (actual operations falling short of the "called" rate).
- · Utilizing available technology to reduce spacing on final approach.
- Utilizing multiple runways at EWR and JFK.
- Improving surface management (traffic flows between runways and gates).
- Expanding the use of Area Navigation (RNAV) procedures where aircraft are able to fly tightly controlled routes.
- Eliminating miles-in-trail departure restrictions to airports greater than 500 miles away.
- Utilizing "capping" and "tunneling" techniques to expedite departures.
- Realigning/relocating arrival, departure and overflight routes to further facilitate deconfliction.
- Creating new routes where practical.
- Installing Omnidirectional Airport Lighting on selected runways to aid arrival in hazy conditions.

Let me briefly highlight two specific initiatives that Delta believes will pay large and immediate dividends. First, JFK is an airport that was designed to handle a large volume of traffic with an appropriate mix of large and small aircraft, commensurate with its international gateway status. It has four excellent runways that should be capable of handling 100 operations per hour in good weather. As I mentioned earlier, the flow rate over the summer often fell well short of the "call rate," or level of operations the tower said it could handle on that day. The reason was that only two runways were being utilized. Fundamentally, any future FAA plans that address congestion at JFK must include consistent setting and publishing of operational flow rates that optimize ground capacity at the airport.

The second area that could yield major efficiency gains is expanded use of RNAV arrivals and departures. RNAV allows aircraft to fly specific vertical and horizontal routes accurately. In the past, aircraft relied on less-accurate navigation sources that required increased spacing between aircraft due to what was then-acceptable navigational inaccuracy. With RNAV capability, which most of today's commercial airliners have, virtually all of that inaccuracy is removed and aircraft can fly arrivals, departures, and en-route tracks with precision. The Atlanta airport implemented RNAV arrivals over 2 years ago and the results have been significant. The program, combined with other airport improvements, is expected to save Delta approximately \$30 million per year and has reduced delays on average between 2.6 to 4.5 minutes per departure. This program should be implemented at JFK next summer.

In taking steps in the near term to develop the right solutions, FAA should use demand management or rationing only after all other available capacity enhancements are in place, and then still *only* as a last resort. We believe a broad range of cooperative steps by the operators, including voluntary schedule reductions during peak periods will produce real improvements.

ing peak periods, will produce real improvements.

Delta has already announced plans to ensure we reduce operations during the most congested peak periods of the day at JFK next summer, but we need the cooperation of other carriers—both foreign and domestic—to ensure those operations are not simply backfilled. We applaud DOT/FAA for taking the initial step of requiring all carriers to submit their schedules for next summer to determine demand levels before making decisions about appropriate actions to reduce operations.

line an earlier's to submit their schiedules for leak summer to deverimine the determine definition to leak summer. In our view, theoretical concepts like congestion pricing or auctions will not push international flights out of JFK's peak hours. Instead, they will eventually harm consumers by increasing ticket prices. In addition, such pricing mechanisms will harm feeder flights from smaller communities by making them uneconomical. Simply put, we have to operate throughout the day and at peak hours to meet our international schedules, which are dominated by a system of international time slots.

Finally, we believe DOT must appoint a "czar" to lead the Northeast congestion initiative. This was done in South Florida in recent years when delays became segments.

Finally, we believe DOT must appoint a "czar" to lead the Northeast congestion initiative. This was done in South Florida in recent years when delays became severe, and you can readily see the positive results. There needs to be one person accountable for boosting capacity who is empowered with broad authority to make decisions that address individual and regional issues.

#### **Customer Impact**

Ultimately, the primary beneficiary of these improvements will be the consumer, who bears the brunt of extended tarmac or taxiway delays. We recognize, however, that unforeseen delays will occur, and to mitigate their impact Delta has imple-

mented very detailed and comprehensive plans both at JFK and throughout our system. At JFK our plans include close coordination with the Port Authority of New York/New Jersey (PANYNJ) to get inbound or outbound flights with extended ground delays to a gate. These plans are activated for all delays whether they involve extreme weather or other circumstances that lead to customer inconvenience.

Consistent with our Customer Service Commitment adopted in 1999 and our internal Operations Control Center (OCC) procedures, Delta has enhanced its well-defined processes to ensure that extra provisions including adequate food and water, and servicing of lavatories, are made available to flights with ground delays or holds exceeding taxi time plus 1 hour. In addition, our OCC is notified of any lengthy delay and each such flight is closely monitored to promote timely communication with the flight crew and station to determine the best course of action for our customers, whether it be cancellation, a return to terminal, or continuation to destination. For any delay reaching 2 hours, Company Senior Executives are notified to inform them of the studion and enlist their involvement in the decision—making processing the studion of the studion and enlist their involvement in the decision—making processing the studion of the studion and enlist their involvement in the decision—making processing the studion and enlist their involvement in the decision—making processing the studion and enlist their involvement in the decision—making processing the studion of the studion and enlist their involvement in the decision—making processing the studion of ess. As the Chief of Operations, I personally receive these calls, and our OCC remains very proactive in making sure our customer's needs are met.

At JFK, we hired an additional 500 front line personnel in the past year to ensure that we could better serve our customers needs as we grew our operation. We also implemented a plan to meet the needs of Delta customers stranded in our two terminals for extended periods due to excessive delays or cancellations. These included the purchase of extra cots, and preparations to ensure that customers are provided with water, snacks, soft-drinks, meal and hotel vouchers, and that all unaccompanied minors and elderly or disabled passengers receive special attention.

Mr. Chairman, we have taken proper steps to minimize the impact on our customers who experience lengthy delays, missed connections, or cancellations due to ATC congestion. We urge the Committee to continue allowing the carriers the opportunity to develop procedures and commitments based upon their unique customer and operational requirements.

Mr. Chairman and members of the Committee, thank you for the opportunity to address you personally on these very important issues. I will be pleased to answer

any questions you may have.

Senator Rockefeller. Thank you, sir.

Mr. Rowe? I failed to identify your airline at the beginning. You're Continental.

#### STATEMENT OF ZANE ROWE, SENIOR VICE PRESIDENT, NETWORK STRATEGY, CONTINENTAL AIRLINES

Mr. Rowe. Thank you. Good morning. My name is Zane Rowe and I am the Senior Vice President of Network Strategy for Continental Airlines.

Scheduling an airline with a hub in Newark is a challenge. The experience that our passengers and employees endure every day in Newark is one of the reasons that we firmly believe that business as usual, as to the air traffic control system funding and structure, cannot continue.

Today, we have an aging air traffic control system incapable of keeping up with the rising demand of air travel in this nation, and especially in the New Jersey and New York region. To address the delays that are the result of the aging air traffic control system, we must not acknowledge failure by mandating slots, caps, or congestion pricing. We must think rationally, like this Committee did when it passed its FAA reauthorization bill last May. As you have said, in the long run we have to modernize the ATC system and become satellite-based.

Satellite-based systems will significantly increase the capacity of our air traffic control system by more accurately pinpointing aircraft and allowing better use of airspace.

Some argue that the only way to have a quick fix for the broken ATC system in the short run is to slot or cap certain airports. Slots are knee-jerk reactions to larger ATC problems. Even caps to limit growth should be used only as a last resort. The New Jersey/New York region has diverse and complex traffic. Commercial operations account for only a portion of this activity and any fix in the region must encompass all airports and all users, both corporate and commercial.

The general view of those who propose slots is that commercial airlines are over-scheduled and this over-scheduling and can be fixed by limiting commercial airline flights at congested airports. In reality those who favor slotting are simply suggesting that we penalize small communities' aviation employees and adversely impact economic growth. Slots may prevent further flights from being scheduled, but they do not promote jobs and commerce, and they do not encourage anyone in or out of government to find a solution to the root cause of delays.

Those in search of a quick fix to congestion and delays have also proposed congestion pricing as a possible solution, in the form of a cost penalty. Congestion pricing is when a fee is charged in exchange for access to an airport during a specific hour. In theory, the congestion fee will alter airline behavior by making it more expensive to fly during peak times, the very times passengers demand air travel.

Continental has already de-peaked its schedule at Newark Liberty and, as I submitted in my written testimony, we have maintained total airport operations below the published FAA level. Newark has fewer flights today than it did ten years ago. There is no over-scheduling, and yet, it is consistently the most delayed airport in the country.

The good news is that some relief is possible even in the short term. After ten long years, Airspace Redesign, if not stopped by Congress, will result in some improvement as early as next year. It has been 20 years since the airspace in the New Jersey/New York region was redesigned; and, in that time the use of corporate jets has risen significantly.

I have attached to my written testimony a number of procedural and software enhancements that are being utilized at some other airports around the country which can add capacity at Newark and in the region. Many of these enhancements could be in place in a matter of months.

Clearly, we need to explore and move quickly on the many operational tools available to us at each individual airport, and in the region, as a whole. We must prioritize the use of the system to benefit the greatest number of users. We simply cannot decide that failure is our only option. And, we simply must not decide that business as usual is the path of least resistance, politically or otherwise, because that will simply result in permanent gridlock.

My thanks to the Committee for allowing Continental a chance to speak on this important topic. I will be happy to answer any questions.

Thank you.

[The prepared statement of Mr. Rowe follows:]

PREPARED STATEMENT OF ZANE ROWE, SENIOR VICE PRESIDENT, NETWORK STRATEGIES, CONTINENTAL AIRLINES

#### Overview

Good Morning. My name is Zane Rowe and I am the Senior Vice President of Network Strategy for Continental Airlines. I am responsible for planning and sched-uling the airline worldwide and needless to say when it comes to scheduling Newark Liberty International Airport, the Nation's most delayed airport for most of the last 15 years, my job is quite challenging. Continental is the world's fifth largest airline operating 3,100 daily flights to 144 domestic destinations and 138 international destinations via hubs at New York/Newark, Cleveland, Houston and Guam.

When we received word that this committee wanted to "examine the growing occurrence of congestion and delays in the Nation's air transportation system's knew that Continental needed to be present. Scheduling an airline with a hub in Newark is a challenge. The experience that our employees and passengers endure every day in Newark, not just during the summer of 2007, is one of the reasons that we firmly believe that business as usual—as to air traffic control (ATC) funding and

structure-cannot continue.

Today we have an aging air traffic control system incapable of keeping up with the rising demand of air travel in this Nation and especially in the New Jersey/New York region. As long as the weather is good and/or FAA's Air Traffic Control decides that it can allow reasonable spacing between aircraft while in the jet-highways or on final approach (e.g., currently 3 miles depending on aircraft type), the system can handle the traffic (in fact, in the last 10 days leading up to Tuesday of this week, Continental's system ran over 90 percent on-time with Newark's on-time performance reaching as high as 93 percent). But any change in that baseline formula for en route (known as miles in trail) or spacing on final approach and the system moves toward gridlock instantly—sunshine or rain.

Contributing to the delays is the fact that the air traffic control system may not

always deliver aircraft from the jet-highways in the skies to the runways in the most efficient manner. FAA regulations specify minimum spacing between aircraft. The amount of spacing depends on weather and aircraft size. When there is more spacing between airplanes than is required for the circumstances, efficiency is lost and the impact is immediate. The landing slots that are lost cannot be recovered

and delays result.

For example, if three miles is required between aircraft, the landing rate would be about 40 aircraft per hour. If the spacing slips to four miles, the landing rate decreases to about 30 aircraft per hour, or a 25 percent reduction. Increased spacing on final approach reduces the arrival rate at the airport, typically results in FAA implementing some type of traffic management initiative, (either a ground stop or ground delay program), and causes arrival delays to back up across the country. FAA took action earlier this year to address the problem of excess spacing on final approach; however it is not yet clear if the policy changes have accomplished this

objective.

Our service at Newark and elsewhere in the Northeast depends on the safe, efficient and consistent delivery of aircraft to the runways. While we continue to work diligently on the delays and cancellations within our control, it is difficult to plan when aircraft are not delivered to the airport runways in a consistent and efficient manner. Certainly some delays and cancellations are Continental's responsibility such as maintenance, crew scheduling, holds for baggage and late arriving customers to mention a few and we continue to try to address these issues every day.

To address the delays that are the result of the aging ATC system we must not look to artificial solutions that asknowledge follows such as alots come or constant.

look to artificial solutions that acknowledge failure such as slots, caps, or congestion FAA Reauthorization bill last May. This bill included a \$25 fee for modernization of our ATC system—this is exactly the kind of forward thinking we need if we are to solve the delay problem for our Nation's air travelers.

As this Committee has recognized, in the long run—we have to modernize the ATC system and become satellite-based (instead of land-based radar). Satellite-based systems will significantly increase the capacity of our air traffic system by more accurately pinpointing aircraft and allowing better use of airspace (jet-high-

ways) and less separation (both en route and on approach to landing).

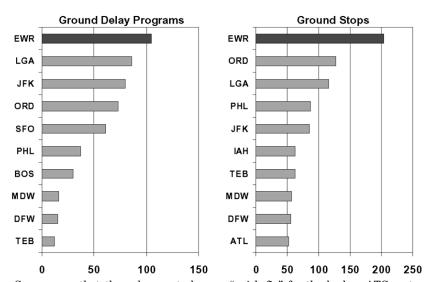
As this Committee has also recognized, a satellite-based system is highly capital intensive and must be funded through a stable financing scheme which allows capital financing and which is funded fairly by the users. Fortunately this Committee not only recognizes the importance of building and financing the NextGen ATC system on a cost-based formula, it has offered a positive and creative option for doing so which, if passed, will provide real and effective solutions to our current problems. Both the structure and the funding mechanism are crucial given the significant amounts of funding necessary and the need to drive rational behavior by the users. The current system of forcing some users to pay for the use of the system, pay for the future system and subsidize other users drives irrational behavior by those who are getting subsidized. It is important to make these decisions now—"Business as Usual" is no longer an option.

## Ground Delay Programs, Ground Stops, Congestion Pricing and Slots—Should They Be Part of the Short Term Solution?

As the Nation's media has well covered these last few months, this summer was a miserable experience for many of our passengers. In the summer of 2007, our passengers learned that if it was sunny in their city of origin and sunny in the city of their destination and even sunny between the two cities, the FAA could still use one of its "tools" and impose a departure delay due to "volume delays". These departure delays, known as "ground delay programs" wreak havoc on airline schedules and performance because when FAA issues a ground delay program for an airport like Newark, all Newark bound airplanes from around the country are given new expected departure times. Sometimes these departure delays are short (15–20 minutes) and sometimes they can be quite lengthy (two hours or more), depending on the nature and duration of the disruption.

A second tool that FAA uses to control the flow of air traffic is ground stops. Ground stops result in the FAA imposing a stop or cessation of additional departures heading toward the affected airport. Unfortunately for Continental and passengers using Liberty International, Newark experienced more ground delay programs and ground stops for the period January to June 2007 than any other U.S. airport (chart below). While helping to manage unplanned service disruptions, these FAA programs do not provide long term fixes to the congestion issue. In the long term, we need to fund a satellite-based system so we can move away from utilizing these short term "tools" to "manage" the delays.

Top U.S. Airports for FAA Impose Ground Delay Programs and Ground Stops



Some argue that the only way to have a "quick fix" for the broken ATC system in the short run is to "slot" or "cap" certain airports. This decision would be premature, we believe, as the other tools currently at hand have not yet been given an opportunity to be implemented or proven beneficial. Before we limit the provision of aviation to the marketplace and restrict economic growth arbitrarily, we must ensure that all other avenues have been explored—and they have not. These quick fixes must be a last resort. Additionally, in order to be effective, these procedures would have to be applied to all operations in the NJ/NY region, similar and competitive airports like JFK and Newark Liberty, as well as be broad enough to cover not only U.S. commercial operations but other users of the system as well.

The general view of those who propose slots is that commercial airlines are "overscheduled" and that this "over-scheduling" can be fixed by limiting commercial airline flights at congested airports. Let's look at the issue of "over-scheduling" for a minute. In New York, there is LaGuardia which is already slotted by the FAA presumably at a level the government thinks is acceptable. Yet, according to government statistics it continues to be one of the most delayed airports in the country. New Jersey is home to Newark Liberty International Airport, the Nation's most delayed airport for much of the last 15 years. In an effort to combat delays at Newark, Continental "de-peaked" its operation (eliminating the normal ebb and flow of hub traffic so that there is a steadier level of arrivals and departures throughout the day) in 1996. Continental has also deliberately kept the total number of airport operations not only below what the FAA has historically handled but also below levels 10 years earlier. In fact, there are fewer total flights at Newark today than there were in 1997—yet Newark is consistently the most delayed airport in the country. Continental has undertaken these activities despite the fact that there was plenty of passenger demand for increased service. In fact, we undertook these activities simply to minimize Newark delays all the while JFK and other New York City area

simply to minimize Newark delays all the while JFK and other New York City area airports such as White Plains have experienced increases in scheduled flights.

Those who would suggest that the way to "fix" the ATC problems is to limit the number of commercial passengers who can fly to New Jersey/New York City by limiting or slotting the commercial airports, are simply suggesting that we penalize small communities, aviation employees and jeopardize the economics of the region. Slots are not a viable long term solution because they stunt the potential for economic growth of the region surrounding the airport to be slotted. Slots may prevent further flights from being scheduled but they do not promote jobs and they do not encourage anyone—in or out of government—to find a solution to the root cause of the delays. Slots are simply an admission of failure by all parties involved that other solutions to delays/congestion do not exist. And, if you look at LaGuardia as an example, slots do not solve the delay problem.

Additionally, imposing slots on the New Jersey/New York City region is inherently more risky for U.S. consumers and cities because it can significantly harm U.S. carrier competitiveness versus foreign carriers. Historically the U.S. has ex-

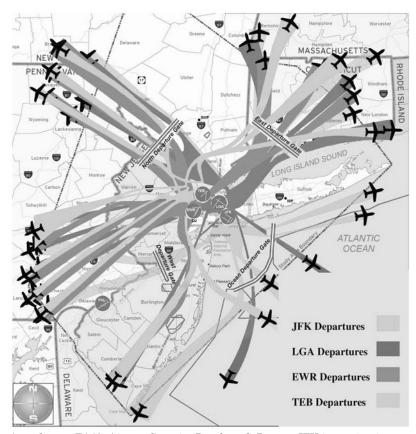
U.S. carrier competitiveness versus foreign carriers. Historically the U.S. has exempted foreign carrier operations from being slotted, thus requiring a U.S. carrier to cut its schedule to compensate. This would mean that domestic carriers would be forced to cut back flights to small feeder cities (e.g., rural communities) which is bad news for rural communities that depend upon air service links for their economic livelihood. A cut back in demonstration and the communities that depend upon air service links for their economic livelihood. nomic livelihood. A cut back in domestic operations could also have negative impacts on an airline's other existing routes as fewer connecting passengers would be moving through the system. This cycle where we cut back small cities, hurting our feed to international destinations, which could result in foreign carriers increasing their service, which could lead to the government forcing U.S. carriers to cut back domestic flights even further, could conceivably be endless. All the while foreign carriers get free access to U.S. airports when U.S. carriers and consumers lose out.

Those in search of a "quick fix" to congestion and delays have also proposed congestion pricing as a possible "solution". Congestion pricing is an idea that charges a fee per departure or arrival in exchange for access to an airport during a specific congested hour during the day. In theory the congestion fee is set at such a level an airline is financially discouraged to operate a flight, or to change the operating time to a less congested period. The fee would increase during peak times—the very times passengers demand air travel—and the fees would be lower during off peak hours. Congestion pricing has been used in other industries effectively but those other industries have used pricing to smooth demand. If you look at the three primary NJ/NY airports, however, you will see that demand cannot be smoothed. Operations are at a steady flow all day. And as I have already mentioned, Continental has already de-peaked its schedule at Newark Liberty. So, what would congestion pricing accomplish? Of course, the answer is that congestion pricing will do nothing more than reduce service to small communities, reduce job growth and raise fares for commercial passengers. One of the major causes of the problem—the growth in private jets—would not even be affected as these flights are generally not "scheduled".

Ironically, the increased "revenue" from these so called market-based options would quickly become an incentive NOT to fix congestion!

Slots and congestion pricing are not quick fixes—they are "knee jerk" reactions to larger ATC problems. Even "caps" to limit growth should be used only as a last resort. The New Jersey/New York City area has diverse and complex traffic. On average, the region's TRACON handled just under 4,000 daily departures from a total of 15 airports including commercial passenger and cargo flights, charter airlines, air taxis, general aviation and military flights. ATC controllers handle different aircraft with different speeds and separations. Commercial operations account for only a portion of this total activity and any "fix" of the region must encompass all airports and commercial and private jet users alike.

The below illustration attempts to show how all these operations in the New York City area overlap and tend to create flight delay/congestion challenges.



According to FAA's Airport Capacity Benchmark Report, JFK is nearing its capacity limit. As previously noted, Newark is below the number of operations it has historically handled and LaGuardia is already slotted. It should be clear that we cannot "fix" one airport without addressing the entire New Jersey/New York City region and all types of aircrafts. Any attempt to do so will be unsuccessful because delays are not a New Jersey or New York City problem, they are a regional problem, encompassing the airports of Newark Liberty; New York LaGuardia (LGA); New York JFK; White Plains, NY; Newburgh, NY; Teterboro, NJ; Morristown, NJ; Farmingdale, NY; Bridgeport, CT; Islip, NY and Caldwell, NJ.

### If Not Slots and Congestion Pricing—Then What?

The good news is that some relief is possible even in the short term.

After 10 long years, Airspace Redesign, if not stopped by Congress, will result in some improvement as early as next year. It has been 20 years since the airspace in the New Jersey/New York region was redesigned. In that time major auto highways around the northeast region (and the country!) have all undergone major renovations—in many cases with the addition of new lanes—to accommodate the local growth of businesses and communities. The New Jersey Turnpike, which runs along side Newark Liberty has had several additional lanes added over the last few years. Yet the jet-highways in the skies have remained unchanged despite the significant growth in demand for commercial and corporate jet air service to NJ/NY. Complicating the congestion issue even further, as the use of corporate jets has risen sig-

nificantly in the last 10 years, these not-so-marginal users of the system are holding up full planes of 100 to 300 people or more (737s, 757s or larger 777s) as air traffic controllers are forced to work smaller corporate jets with their one or two or three executives into an airport like Teterboro (TEB).

Continental is taking a number of steps to provide relief to our operation at Newark Liberty by spending millions of dollars on items ranging from advanced flight operations software to hiring additional employees dedicated to Newark flight operations to introducing a brand new aircraft into the Continental fleet which promises to provide additional capacity without additional ATC burden. A quick review of our actions follows:

- Continental will introduce a new, state-of-the-art turbo prop aircraft at Newark, the Q400, which can operate on Newark's shorter, crosswind runway in more weather conditions thus reducing aircraft requirements on Newark's longer runways and relieving pressure on those departure points also used by JFK. The Q400 is also larger than Continental's regional jets which it will be replacing at Newark.
- Continental continues to increase flight block times (the amount of time scheduled for a flight including taxi times and flight time) to achieve DOT on-time performance requirements/regulations. For example, a flight from Washington National to Newark is "blocked in" at an average time of 1:20 when the flight itself takes 36 minutes.
- Continental has added passenger capacity at Newark by operating larger aircraft while keeping the number of operations relatively steady over the last few years.
- Continental pioneered the use of offshore radar routes which enable the airline
  to fly out over the ocean east of New Jersey, for aircraft going to the west or
  south, to avoid excessive taxi delays during periods of congestion and severe
  weather. Since the airlines have limited access to the military airspace off the
  East Coast, these routes actually fly considerably offshore to the east of the
  military airspace, thus ensuring access to the routes when needed.
- Continental has invested in SkySolver technology which is used to develop precancellation scenarios. Pre-canceling flights helps the airport and airline to rebound quicker once the severe weather event has passed.
- Continental developed a slot substitution program that allows us to manipulate or prioritize company landing slots when FAA imposes ground delay programs.
- Continental has doubled the number of Air Traffic Systems Specialists at our operations center in Houston.
- Continental has hired additional management and operational employees at Newark Liberty to focus solely on Newark air traffic control issues.
- Continental now keeps pilots and flight attendants on the same schedules to avoid multiple downline connecting crew delays.
- Continental has increased our crew scheduling buffer (decreasing productivity and increasing layovers) for late night flights departing Newark to reduce crew rest delays the next morning.
- For 10 years, Continental has been an active supporter of the NY/NJ/PHL Airspace Redesign project submitting independent comments, attending public meetings, etc.
- Continental is actively supporting DOT's task force formed to address the congestion/delay issue in the Northeast.
- Continental is also participating in the Port Authority of NY/NJ's task force to address congestion/delays in NJ/NY.
- Continental meets regularly with FAA (at all levels) to address performance issues.

Attached please find more details on the many initiatives which could provide some relief to delays in the New Jersey/New York region.

#### Conclusion

Delays are the pivotal problem of this Nation's ATC operation and they will continue to be so in the future unless we make the hard decisions today for the traveler of tomorrow. The idea of fair treatment among all users is key to balancing use and cost of the system and ensuring the vast majority of flying consumers still have a chance of getting to their destination safely and on-time. And, for those who maintain they are marginal users and decline to pay their fair share based on the belief

that they are marginal, we should allow for access to the ATC system on a standby basis.

Clearly we need to explore and move quickly on the many operational tools available to us at each individual airport and in the region as a whole and we must explore our abilities to prioritize the use of the system to benefit the greatest number of users. We simply cannot decide that failure is our only option. And, we simply must not decide that "business as usual" is the path of least resistance politically or otherwise—because that will simply result in gridlock becoming institutionalized.

Again, my thanks to the Commerce Committee for allowing Continental an opportunity to speak on this important topic today. We appreciate your leadership in these matters and look forward to working with you to create a better, more efficient and stable-funded ATC system for tomorrow.

#### ATTACHMENT

### **Newark ATC Operational Improvements**

#### EWR Final Approach Spacing

The spacing between aircraft on final approach determines the airport arrival rate, and in conjunction with demand, the need to implement traffic management initiatives. Extra spacing on final approach, in addition to the minimum required by FAA for safe operations reduces airport capacity and efficiency, and causes delays. There is evidence that spacing on final approach at EWR is more than is required by FAA standards. FAA needs to ensure that aircraft are delivered to the runways as efficiently as possible with minimum additional spacing beyond applicable FAA standards for the conditions at the airport.

#### • Improved Runway Use

In order to achieve the maximum arrival rate published by FAA for EWR, it is necessary to use two runways for landing. The weather and wind determine which runways may be used. Specific ATC and flight procedures are needed to maximize the availability and use of the second arrival runway:

#### o Converging Runway Display Aid (CRDA)

CRDA is a software tool which enables the air traffic controllers to safely sequence aircraft to intersecting or converging runways, regardless of weather conditions. FAA should develop CRDA procedures for use during both visual and instrument meteorological conditions for runways 11 and 22L and runways 11 and 4R to increase the percentage of time that two arrival runways are available.

## $^{\circ}\,$ RNAV and RNAV Visual Approaches Runways 4L, 22R and 29

The primary arrival runways at EWR are runways 4R and 22L. Use of runway 4L, 22R, or 29 as the secondary arrival runway is determined by the wind and weather. Controller and pilot workload is reduced by developing special RNAV procedures with precise, repeatable flight tracks for use in combination with instrument and visual approaches to runway 4R or 22L. FAA, in cooperation with the users at EWR, should publish RNAV procedures to facilitate use of a second arrival runway.

## EWR Runway 4L Visual Approaches

New York TRACON has developed procedures for visual approaches to runway 4L in combination with the ILS approach to runway 4R. Under certain wind conditions and airport configurations, landing on runway 4L is more efficient than landing on runway 11 or 29. FAA should utilize visual approaches to runway 4L more frequently to ensure a second arrival runway is available.

### EWR Runway 4R and 29 Intersecting Runways Waiver

Newark Air Traffic Control Tower has applied for a waiver that would improve the safety and efficiency of simultaneous landings on runways 4R and 29. The waiver is similar in concept to a waiver given to Chicago O'Hare as a means of recovering capacity lost when land and hold short procedures were restricted. The waiver will minimize the probability of an unnecessary go around, thereby reducing noise, emissions, and fuel burn. FAA should expedite the approval of this waiver and implement the procedures as soon as possible. FAA should review the EWR airport operating configurations to determine if there are other R to safely enhance capacity.

#### o Publish RNAV Standard Terminal Arrival Routes (STAR) to Runway 11

RNAV STAR's reduce pilot and controller workload and communications, and improve airspace efficiency. Development of dedicated arrival routes to runway 11 will facilitate its use as a second arrival runway or as a platform for circling procedures to runways 4L, 22R, and 29. FAA should expedite the publication of RNAV STAR's for runway 11.

o Install Omni-Directional Approach Light System (ODALS) for Runway 11

During certain times of the day or under reduced visibility conditions, pilots have difficulty seeing the airport when approaching from the west. This delays the issuance of a visual approach clearance to runway 11, and makes controllers reluctant to land on runways 22L and 11 simultaneously. An ODALS, or other suitable lighting system, would enhance the conspicuity of the runway and permit controllers to issue clearance for a visual approach. FAA should expedite the installation of an ODALS.

 Develop RNP Parallel Approach Transition (RPAT) Procedures for Runway 4L/R and 22L/R

RPAT procedures are designed to permit approaches to closely spaced parallel runways in less than visual approach weather conditions using NextGen technologies available in most Continental aircraft rather than legacy ground-based navigation aids. Implementation of RPAT at EWR will expand the time when two arrival runways are available and reduce the number of ground delay programs and ground stops needed to manage traffic. RPAT procedures do not require any additional ground infrastructure

 $^{\circ}$  Develop Simultaneous Offset Instrument Approach Procedures (SOIA) with PRM-like Capability

An alternative to RPAT is PRM/SOIA. The basic operational benefits are similar: two arrival runways in weather less than that required for pure visual approaches. SOIA relies on offset localizer approaches, which can be used by all current users of the NAS, but require equipment to be installed on the airport. The procedures require a PRM-like surveillance that can be provided by ADS-B or multi-lateration (Detroit is in the final phases of approval for this capability.) FAA should conduct an assessment to determine which procedures can be implemented most quickly.

## • DCA-EWR Low-Altitude Alternate Route

Short segment flights to EWR are, on balance, more adversely impacted by FAA Traffic Management Programs. Flights from DCA and BOS are particularly affected. FAA, with Continental support, has developed alternate low-altitude route options for DCA-EWR segments. The purpose is to reduce take-off delay awaiting access to the EWR overhead arrival stream, as well as to provide a separate arrival flow for Runway 11–29. This program should be expanded and used when weather conditions at the airport permit.

#### • EWR Business Plan

The FAA Newark Tower is in the process of formulating a EWR Business Plan on how best to operate the airport from an ATC perspective on a daily basis. The plan is expected to establish specific targeted arrival rates for the various airport configurations and weather/wind conditions. The Air Traffic Control Tower, New York TRACON, and surrounding en route facilities should be held accountable for these standards. The plan should be finalized, approved and published as soon as possible.

#### • Air Traffic Control Tower Simulators

Simulation is used extensively in aviation to expedite and improve initial training and to permit frequent recurrent training. The USAF uses tower simulators to train its controllers and FAA has begun deploying these devices to select locations around the NAS. As retirements accelerate and training demands increase, it is imperative that simulation technology be available for EWR and the other NY metro towers. These simulators will speed training, improve safety, and ensure that training activities do not adversely impact airport capacity and efficiency.

## • Airspace Redesign

FAA issued the Record of Decision for the New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign Project on September 5, 2007. The ROD indicates implementation will take up to 5 years and will occur in several "qualitatively different stages." The first stage, which can implemented fairly quickly, and without

changes in current airspace structure or operations in adjacent facilities, includes several items which will improve EWR operations:

- Departure dispersal headings;
- Additional airway parallel to existing Jet Route 80 for departures;
- RNAV arrival and departure routes and sectorization changes in New York Center designed to reduce complexity and add en route capacity at higher altitudes:
- RNAV procedures for TEB arrivals and departures.

The FAA should review all elements of the airspace redesign project, and move forward expeditiously with short-term changes that will improve the arrival and departure performance at EWR. (Note: Near-term changes have been identified and provided to FAA for review and consideration.)

• New York Integrated Control Complex (NYICC)

The airspace redesign project preferred alternative includes creation of a new unique air traffic control facility that combines airspace currently handled by NY TRACON, NY Center and portions of other adjacent en route facilities and uses terminal separation rules (3 nm) rather than standard 5 nm en route separation. Intuitively, the authorization to use terminal separation rules in a larger geographical area and to higher altitudes will increase airspace capacity. FAA must begin the development of the NYICC as soon as possible and expedite the expansion of terminal separation rules in the project area.

• Accelerate EWR ASDE–X Implementation and Provide Data Distribution Box for ATC and Airlines

ASDE—X technology improves ground safety and controller situational awareness. It enables FAA and the airlines to better manage ground traffic during irregular operations. ASDE—X is being installed at EWR. The installation should be expedited to the extent possible and the coverage expanded to include the airline ramp areas. A data distribution capability should be included to process multiple FAA surveillance sources and provided to the airlines. A similar package is being installed on an expedited basis at JFK.

• Accelerate LAAS/GBAS Installation for EWR/TEB

The Local Area Augmentation System provides GPS precision approach capability. It appears FAA is in the final phase of LAAS equipment certification. A singular station can provide approach capability for multiple runways at a single airport and often at adjacent airports. Expedited installation of a LAAS station serving EWR and TEB will facilitate development of advanced flight procedures that could be used to enhance the safety and efficiency of arrivals and departures. FAA should procure a LAAS station for EWR and work together with the operators at EWR and TEB to test new flight procedures.

Senator ROCKEFELLER. There are, in life, speed readers, and there are speed speakers. You all fall in the second category.

[Laughter.]

Senator ROCKEFELLER. Just one question from me, and that has to do with the fact that, only one of the three commercial airlines mentioned general aviation. The question is, partly, what are the rights of people to be landing on-time, if planes that are—corporate jets carry two or three, but they're taking every second of time from the air traffic controllers. So, my question to any of you—and probably only one or two should answer, so everybody else can ask—what percentage of the delays do you think, in the New York, New Jersey, Philadelphia area can be attributed to general aviation aircraft using air traffic control resources? And, second, if the FAA implements measures to limit operations at airports in congested airspace, will those limits extend to general aviation airports in the same airspace? To wit, if controls are in place in Newark and Kennedy, should they not also be imposed in Teterboro?

Mr. Rowe. I'd be happy to start the answer and then defer to

any of my colleagues here to complete it.

I think—to your point, Senator, it's a great point, and one that's of grave concern to us. In our written testimony, we included a chart that showed how intertwined not only the four main airports are in the region, as well as any additional airports and airspace. So, any answer to congestion, I think, needs to be dealt with on a regionwide basis. And, as we are so intertwined with general aviation—we don't have the specific percentages that we think they're causing, as far as delay—but it is clearly impacting scheduled carriers, and a lot of proposals, in fact, impact scheduled carriers and, by default, incentivize other passengers where there are two or three on a corporate jet. So, it's a grave concern. It's a great point

that you mention.

Mr. Kolshak. Senator, I'll just add a couple of factoids. In the New York airspace, 50—only 53 percent of the traffic is borne by commercial aircraft, the rest is general aviation "business jets." There are 15 airports in the New York TRACON, and we're narrowly focusing on three—LaGuardia, Newark, and JFK. And I fully agree that, if there is a solution, it has to be spread beyond those airports. If we treat those airports as a symptom, we're not curing the problem. We have to cure the basic problem. It's beyond those three airports, and it's clearly a lack of capacity in the New York airspace. And the solution is not a long-term solution—there is a long-term solution, and that's Next Generation, which you've been a great supporter of, but there are short-term initiatives. And we— Bob and I both mentioned one of them, and that's RNAV, and we could implement that tomorrow, just like we did in Atlanta, and that would provide real, tangible solutions to delays. The other one is to appoint one person—we call him a czar—in charge of the three different entities within the FAA—the towers, the facilities, the TRACON and the en route sectors—so that we can cure this from a systemic view, not a one-off, not a silo-based approach.

Mr. REDING. Chairman, I would just like to add one item. And I agree with my colleagues that it has to be a system-wide solution, but I need to distinguish between the general aviation aircraft that some of us fly on the weekend, and we just fly around in small air-

craft——

Senator Rockefeller. Well, let me make that very clear.

Mr. Reding. We are talking about business jets.

Senator ROCKEFELLER. Ninety percent of all general aviation aircraft are excluded from our bill.

Mr. REDING. Exactly, Mr. Chairman. So, we want to make that point. It is the traffic that uses the high-altitude, high-density air-space, and that is the traffic that adds to the woes in the New York airspace. But we have to include the Teterboros and the White Plains and the other airports that have those business jets utilizing the same airspace that the commercial jets utilize.

Senator Rockefeller. And the same time of the ATC folks.

Mr. REDING. And the same time. And we are very concerned about the advent of the very light jets—

Senator ROCKEFELLER. Right.

Mr. REDING.—that are to come, and we will have thousands of these jets added to, already, our existing problems.

Senator ROCKEFELLER. It's another joy for you to consider. Senator Stevens?

## STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

Senator STEVENS. Gentlemen, you've been talking systems. And I think that, not only systems, but policies, have affected this congestion and the delays during this past year. Let me just give you one example. I'm sure you know I fly more and longer hours than probably any other Senator. And I recall, once, getting to a hub, and, as we tried to change planes, we were told that the crew hadn't arrived yet, they were coming in from another place. We would wait. After waiting 3 hours, we were told we could get on the plane, because the crew had arrived. But, once we got on the plane, the crew told us the pilot hadn't arrived. So, we waited another 2 hours on the plane, and the pilot arrived. When he arrived, he announced he was sorry to say that, because of the two delays, that the ground crew had put the fuel on another plane, but it put the food on a different plane. So, we waited another 2 hours. The net result was that we got to our destination after the airport had closed, they had to call baggage handlers to come back to work to unload the plane.

Now, the system is stressed, but your policies are stressing people. And I think you have to look at this system. I know there are a lot of labor-relations problems in what I'm saying, but you have to look at this system and eliminate these delays that cause us to miss connections because of crew problems. And I hope that we can get into that as we go, because I—as I said, I probably go to more airports in a year than any other Senator, and I say that the people who are waiting in those waiting rooms are very distressed this year. I have never seen so many of delays related to crew problems and to service problems, of any time in the last 39 years. So, I hope that you'll look at that. I don't need an answer, I just hope you'll look at it.

Thank you.

Senator ROCKEFELLER. Thank you, Senator Stevens.

Senator Lautenberg?

## STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM NEW JERSEY

Senator LAUTENBERG. Thanks, Mr. Chairman.

We can all agree on the unpleasantness and the cost of delays, but finding the source of these is—doesn't have a simple answer.

One of the things that I've seen, Mr. Sturgell, is a statement by former FAA Administrator Blakey. She said, in today's New York Times, "Airlines need to take a step backward from scheduling practices that are disconnected from reality, in that some schedules aren't worth the electrons they're printed on." Now, she served 5 years in that capacity, and we had statements like this—and these problems didn't occur overnight. She also said, as well as a FAA spokesman, Ian Gregor—said, "There's no such thing as an unsafe staffing level, because FAA will slow traffic and put more space between the planes if staffing got too low."

We—you, Mr. Sturgell, testified, yesterday, that controller staffing was adequate, and there are 14,800 on staff. I'm talking about controllers. But FAA's own document showed that certified controllers—those fully capable—numbers have fallen to an 11-year low, 11,467. And when we make claims that there are 14,800 on staff, there is something amiss.

[The prepared statement of Senator Lautenberg follows:]

PREPARED STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM NEW JERSEY

Mr. Chairman,

The holiday travel season is coming and Americans are already making plans to be with family and friends. But after last year's debacle at the airports, I am concerned more passengers will be stranded because of delays and canceled flights. It's clear Congress needs to act.

Last year was the worst year for flight delays since 2000. One in four planes was late. This year has been worse. Newark Liberty International Airport had the worst delays in America. For travelers who fly between Washington and the New Jersey-

New York area, a thirty-six minute flight is often stretched into 2 hours

After 5 years of the FAA sitting on the sidelines and seemingly being asleep at the controls, the agency has finally showed some leadership to end delays and address the needs of travelers. This week, it announced plans to limit flights at Newark Liberty International and John F. Kennedy Airport starting in March 2008. While this is one option that should be carefully considered, it is not enough and we can't simply fix all our problems by arbitrarily cutting the number of flights.

Our air travel system is still overburdened. And these changes will not relieve all

the stress. We must build a better future for passenger transportation—a future that affords our travelers more choices. Without choices, airline companies will over-

book and over-schedule—in order to make money.

Already, passenger rail is the travel option greater numbers of people prefer. More people travel by train between New York and Washington, D.C. than fly. It's more convenient, and those trains are more energy-efficient and on-time. Amtrak continues to reach record ridership levels.

The bill Senator Lott and I wrote, the "Passenger Rail Investment and Improvement Act of 2007," was unanimously reported out by this Committee. Last week, the Senate Finance Committee voted to fund our bill with two-point-seven (2.7) billion dollars worth of new passenger rail projects. Senators Lott, Kerry, and Smith helped push that train down the track.

Our Amtrak bill will make passenger rail a real option for travelers—and complement our aviation system. It can free up airport slots for flights under four hun-

dred (400) miles so those slots can be used for long-distance routes.

And it will get passenger rail into our towns and cities, making it more conven-

ient and a realistic alternative.

Somebody has to fix the mess that America's travelers are left in. We must also have a balanced transportation system and an adequate rail network can go hand in hand with a robust aviation system to accommodate our travelers.

Thank you Mr. Chairman. I look forward to hearing from our witnesses.

How's your agency going to be able to safely and efficiently handle record amounts of air traffic, and mitigate delays, when there are fewer certified controllers than any year since 1996? And why are you content to make matters worse for travelers by slowing them down if you can't maintain enough controllers to do the job?

Now, I recognize that you have just started as the "Acting Administrator" and it's a very tough job. While we look at the problems at the FAA they're not yours directly, but you're the one who

is responsible for answering for FAA right now.

Mr. Sturgell. Senator Lautenberg, as I said yesterday, and you pointed out, we do have a controller workforce plan. We've been operating under it the last several years now. That plan calls for us to staff the system at 14,807 controllers by the end of this fiscal

year. We are currently above that number, and expect to finish up the year well above that number. With respect—

Senator Lautenberg. Fully certified.

Mr. STURGELL. With respect to fully certified versus certified controllers who have moved to new locations, who are in training, and developmentals, there are several stages of developmentals, and, in each stage, you are qualified to work traffic for the stage that you have trained on. We have always used developmental controllers to staff those positions, and they have always been included in prior years' staffing agreements, when there were agreements with NATCA, the controllers union. The numbers included developmental controllers, because everyone recognized they do carry out work on positions for which they are trained.

Senator LAUTENBERG. Mr. Chairman, I don't want to encroach on our colleagues' time, but there are further questions that have to be asked here. Are we going to try to—

Senator ROCKEFELLER. We hope to—

Senator LAUTENBERG.—convene—

Senator ROCKEFELLER. We hope to. That's why we're doing a quick first round—

Senator Lautenberg. Thank you very much.

Senator ROCKEFELLER.—to see how long we can delay the vote. Senator Lott is taking care of that.

[Laughter.]

Senator Rockefeller. Senator Dorgan?

## STATEMENT OF HON. BYRON L. DORGAN, U.S. SENATOR FROM NORTH DAKOTA

Senator DORGAN. Mr. Chairman, thank you very much.

I might observe, however, in my part of the country we don't have any slots. We'd be glad to make slots, if you wish and——

[Laughter.]

Senator DORGAN.—and we'd make them available, as many as you wish, free of charge.

[Laughter.]

Senator DORGAN. And, by the way, there is no congestion. So, that's one way—and the same would hold true with West Virginia, I assume.

Senator Lott. You've got more congestion up there, right?

Senator DORGAN. Well, we want more airline service up there. That's what we want.

[Laughter.]

Senator DORGAN. Let me try to understand it. I think there is something going on, and I agree with you, the problems are the weather, and the government. But I think there is another problem, and I do think a portion of these delays—the first 5 months, 26 percent delayed or canceled; Atlanta, 40 percent—60 percent ontime, the rest—so, I mean, I think there is something else going on. And, frankly, I think there is a portion of it—and I think Senator Stevens referred to it—the number of companies going into bankruptcy, coming out of bankruptcy, I think, with some pretty ragged management attention to some of these issues, and maybe that's a function of trying to move in and out of bankruptcy, I don't know. But I think the American travelers are mighty upset. And

maybe—we shouldn't be upset at the weather. I don't want anybody flying through bad weather. I don't want to do it, myself. We should be upset that we're far behind with respect to modernization. I understand that. And we have a responsibility to do something about that.

But I also think there is this other issue with respect to the carriers. And we do need better management systems to try to reduce some of those delays that exist. And I won't go through the stories, but I'm a frequent traveler, I've seen the same kind of sloppy man-

agement occasionally. And I do think it's an issue.

But let me say this. This country needs the airlines. We need them badly. And we need a system that works. All of us need to work together to try to find solutions here. And I do want to say, though, that, whether it's West Virginia or North Dakota, perhaps rural Minnesota—we just talked about corporate jets—the fact is, there are going to be coming, in the future, these very light jets, and much of that's going to be commercial, not private; it's not going to be—it's not going to be a corporation running a jet around with two people, it's going to be a commercial operation that someone uses to decide, "I can make a business out of this, serving areas that aren't served, with jet service on a four-or five-passenger plane." So, that is going to have to be integrated into this system. And the only way that can happen, I think, is with modernization and much additional capability. So, I think, while we talk about the corporate jets, at the moment, we don't have a lot of them flying around North Dakota, a lot of them fly on that eastern corridor, I understand. But, in the future, my hope is we have a lot of the very light jets in commercial operations providing air service where air service doesn't now exist.

So, Mr. Chairman, I appreciate your calling the hearing. I do think there are serious problems. I understand the weather, I understand the government piece of this. I hope the carriers also understand scheduling and other issues are a part of airline management that does, I think, need to be improved on behalf of passengers, as well.

But I thank the witnesses for their testimony. I know we have a very short time, so I will defer, and I will submit questions to the witnesses. And I have never heard witnesses talk quite as fast

as they did this morning.

[Laughter.]

Senator Rockefeller. It was awesome.

Thank you, Senator Dorgan.

Senator Klobuchar?

## STATEMENT OF HON. AMY KLOBUCHAR, U.S. SENATOR FROM MINNESOTA

Senator KLOBUCHAR. Thank you very much, Mr. Chairman.

Thank you, all of you.

I just wanted to follow up a little bit about—with you, Mr. Sturgell—about some of Senator Lautenberg's questions. I come at this as a new Senator. We had our FAA reauthorization hearing. I supported the passenger facility charge. It was a difficult decision to make because of the concerns that I had about some of the mod-

ernization that we needed to do. And I wanted to ask a few questions about that.

But my first question, to follow up on Senator Lautenberg's question—was just, are we facing a hiring crisis now with air traffic controllers, where so many are retiring? And what are your plans to address this?

Mr. Sturgell. Well, I think we've recognized, for several years, the looming retirements with the air traffic controller workforce. I mean, it's a matter of math. We hired a whole lot of controllers after the strike in the early 1980s, and they have all reached, pretty much, retirement age, or getting close to it. And so, several years ago we developed a hiring plan to address these retirements, and we've been marching to that plan ever since. And I think, if you look at the charts, we're going to be hiring, well over 1,000 controllers a year, probably for the next decade, as we replace a generation of controllers that is set to retire. Our plan lays out how we're going to do that. Last year, we updated it to include specific facilities. It talks about training levels, as well.

Senator Klobuchar. Do you think it's on track right now?

Mr. Sturgell. I think it's on track. And I think, if you look at the operations per controller today we are controlling fewer operations per controller than we were in 1999 and 2000. So, I'm confident that, overall, the system is staffed adequately. And when you look at the safety numbers, at the ops errors, at the runway incursions, at the time on position, at the overtime, they all reflect the trends positively. Now, are we going to have individual facilities, as we go through this, that might have some unexpected retirements and create some short-term problems? Sure. And we'll manage through that. But, generally, I thank we're on path, where we need to be.

Senator KLOBUCHAR. I had a question for the three from the airlines, who talked a lot about the causes for all of this delay. I think—about only 72 percent of the flights are going to be on time this year, or that's the projection. What do you think would be the best thing that we could do, as a policy matter, to fix that? Your

first priority, the three of you.

Mr. Kolshak. You know, if I could just jump in here, Senator, as I mentioned in both my oral and written testimony, there are both short-term and long-term fixes. There are short-term, immediate fixes that we can do, two of which I mentioned; one being, increase the capacity in the Northeast, which is the primary area for delays. If I look at Delta's system, most of our delays, or delays throughout the system, either originate or are caused by congestion in the Northeast. We can increase capacity through things like RNAV—area navigation. All of our aircraft—and I think all of, virtually, American's, and most of the major airlines' aircraft—have the capability to fly those procedures today. They just have to be built, designed, and programmed into the aircraft, we'll fly 'em tomorrow. That would increase capacity.

The other thing that has to happen is, the FAA needs to take a systemic view to the New York airspace, combining the three different silos, like they did in South Florida, to solve the problem, measuring the throughput of the system. If you look in the New York TRACON, the throughput of the system, year over year, is ac-

tually lower. Somebody's got to look at that. Somebody's got to question it. It's beyond just weather. And then we have to increase the flexibility of the ATC system. Most major areas have funnel points, and we need to increase the number of arrival fixes and de-

parture fixes to increase capacity.

Mr. REDING. Senator, if I may add one point, I totally agree with Joe's comment. Another point I would make, on a short-term perspective, is the incident, just a couple of days ago. Memphis Center basically losing their datastream, causing an incredible amount of trauma. We ended up canceling 89 flights, hundreds of flights were delayed by over 2 hours, just for American Airlines alone, as everybody scrambled to reroute the traffic to keep it away and keep it

out of harm's way, because of Memphis Center outage.

I would recommend that the FAA go through their facilities to make sure they have a disaster recovery plan, should there be an interruption to power, should there be an interruption in their datastream, just like we have at the airlines. We could not afford to have our Systems Operations Center be out of commission for 3 hours. So, we have disaster recovery plans that have multiple streams of data capability, multiple streams of power coming into our critical facilities. In addition, we've found that the facility technicians at the FAA have been substantially reduced. And that's why we have less outages than others.

Senator Klobuchar. Mr. Rowe, I'll get your answer later. I wanted to let my colleagues ask a question before we have to go

for the vote.

Senator Rockefeller. I'm going to interrupt an animated and important bipartisan conversation by calling on Senator Lott.

[Laughter.]

## STATEMENT OF HON. TRENT LOTT, U.S. SENATOR FROM MISSISSIPPI

Senator LOTT. Mr. Chairman, we've got a vote on. I'm going to

have to go to the floor, so I'll be brief.

Let me just say, first of all, thanks to the panel for being here. I think this is an important discussion. Obviously, a lot of the discussions have been about the congestion in the New York area, because, I guess, about a third of the flights are in that area. Is that a correct statistic?

You know, I've made the point to everybody involved in aviation in the past that this is one of the areas where Members of Congress feel the most strongly, because we have to endure the indignities of everybody else, you know, flying and being delayed and congestion and missing flights.

So, I would say, to the industry representatives here, I do think that you've got to use more common sense in some of the decisions you make. And, you know, those of us that, you know, have had our flights canceled, and delayed, and sit on the tarmac, you've got

to do a better job.

However, like so many of the things that we complain about in the Congress, we looked around, and we found the enemy, and it is us. You know, we expect magnificent service, and we expect you to deal with all this congestion, yet we have not been willing to face up to what needs to be done to deal with the problem. I do think that the congestion problem is going to continue to grow until we begin to make tougher decisions. Are we going to have an extra charge when you go into congested areas? Are we going to have to have administrative decisions to cut back flights in the congested areas? But, more importantly, are we ever going to take the steps that are necessary to have modernization? Modernization won't solve all of these problems, but it'll go a long way.

To the credit of the Chairman and this committee, we have faced it, we've made recommendations, and we're still committed to that. But, unfortunately, the wheels have come off in the Finance Committee, in the House, in trying to find a way to come together in a bipartisan, nonpartisan way, with all the different committees involved—Appropriations, Finance, Ways and Means, Commerce, House and Senate—we've got a long way to go.

But I'm still absolutely committed to it. We need your help, and we need the support of the administration. The FAA needs to do more. You know, the airlines need to do more. And, frankly, business and corporate and small aircraft have got to do their part, too.

Everybody has been at this table earlier this year and said, "Yes, we need modernization, we support modernization," but everybody says, "We ain't gonna pay for it." And so, we're going to have to do this. And everybody's going to have to bear part of the responsibility.

But, in regard to the—everybody blames the weather, and nobody wants to fly in bad weather, but can—what can FAA do better to help get around this weather problem? I just think more could be done in that area.

Mr. Sturgell, are y'all addressing that?

Mr. STURGELL. We are. We're addressing it in several ways. Our Airspace Flow Program, which we started last year, we expanded this year. We expect to continue to expand that to help us deal, today, with the weather. We also need to get better at weather forecasting, and we're investing money, both on the research side and tactically, to improve that capability, as well, trying to integrate and provide some of our weather data to the airlines, also. But, you're correct to point out, it is, one of the toughest problems we deal with. We're trying to design approaches that'll allow us to move equal amounts of aircraft during good weather, as well as bad weather.

Senator LOTT. Are you—we understand that you can, and you are, redesigning how you deal with the New York airspace. Is that process underway?

Mr. STURGELL. It is underway. We issued the Record of Decision earlier this month. We have implementation teams meeting next week, and we're going to move forward with this as quickly as we can.

Senator Lott. Thank you, Mr. Chairman, for having the hearing. We're going to go forward, trying to do our part, and we need to count on the administration, the airlines, the entire industry, to do their part. This is critical for the future of our country and transportation, and we've got to do a better job than we've been doing.

Thank you.

Senator Rockefeller. Thank you, Senator Lott.

A final question, Senator Thune?

## STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

Senator Thune. Thank you, Mr. Chairman.

And, as my colleague from Mississippi pointed out, one of the things about air travel and air service that—our constituents always want us to know and to experience what their plight is like. And this is one issue where we really do, because—at least, I am one of the members of this body that travels back and forth to my home state on a weekly basis, and I have to say that if this is the experience—my experience is the experience that a lot of my constituents have, the traveling public has, their lives kinda stink when it comes to getting to and from their destinations.

when it comes to getting to and from their destinations.

I mean, this is a big problem. Sixty-nine percent, in June and July, this summer—only 69 percent of the flights actually showed up when the airline said that they would. And this is—I realize, as has been noted, there are—you know, you don't want to take risks with weather and that sort of thing, but passengers are extremely frustrated by the experience they're having with air travel. And I sit in these airport gate areas all the time with my constituents on flights that are either canceled or delayed, and it seems to me something has to change. And I know part of that responsibility does center right here, we've got to get some things done, in terms of modernization, and that's going to take action by the Congress. But there have got to be some things, too, that the DOT, the FAA, that the airlines can do to make this system work better than it does.

And I've actually introduced legislation, some of which was included in the FAA reauthorization bill, that just requires more disclosure and more transparency. If you've got chronically delayed or canceled flights, you know, it seems, to me at least, that a passenger, a customer, ought to know about that prior to booking a ticket. And I've had pushback to some of these suggestions, from the airlines. But the fact of the matter is, if you're going to trust the market to work, you at least have to have—passengers and customers have to have information to make good choices and good decisions. Some of us fly into areas of the country where we don't have a lot of choices, and that's what makes this even more difficult.

My impression is that one of the issues that is at work here, too, is the fact that you've got smaller planes, higher frequency, therefore more operations coming into and out of these airports. And that, I expect, in a state like mine, where—but it seems to me, at least, even in the larger airports, it's creating more congestion, because you've got more RJs flying and fewer full-body-type aircraft.

And I guess I would pose that question of the airlines. Is that something that is affecting the delays, the on-time arrivals and ev-

ervthing else?

The performance just continues to go down, and people are tired—I mean, I think people in—who travel regularly just think it's a race to the bottom with air service in this country. And we can't accept that. It's just—it's costing too much, in terms of productivity and lost time.

I'm curious, I guess, to what the airlines comment is regarding the issue of having smaller planes and higher frequencies, and how that's impacting congestion in the air.

Senator ROCKEFELLER. That's—

Senator Thune. And can that be addressed?

Senator ROCKEFELLER. That's a lot of questions that you're not going to be able to answer, because we've only got 6—or 5 minutes left in the vote. So, pick your poison.

Mr. Reding. Just a couple of very short points.

Number one, under small aircraft, as far as American is concerned, most of those small aircraft have replaced turboprop aircraft, and that's because our customers demanded that. Our smaller aircraft are able to serve our small communities much more efficiently than a large aircraft can. So, we think that the reason RJs are operating in the airspace system is because of customer demand that we have that we're attempting to meet, both to smaller communities and because the customers demanded jets instead of turboprops. So, in most of our locations today, where we used to operate turboprops, we basically just operate the regional jets, at about the same size as the turboprops were.

With regards to, what can we do quickly to improve the customer experience—and we are as frustrated as anyone is to—obviously, to extended delays. Yesterday, I was delayed by a hour on an afternoon flight coming out of Dallas. Weather in Dallas, excellent. Weather in Washington was excellent. Why were we delayed? We had en route weather, and the way we are scheduling our aircraft today is, we have to stay on one highway that goes from Dallas to Washington. If we have RNAV/RNP en route, we have thousands of highways we can use that allows us to route these aircraft automatically around the weather and—reducing a substantial amount of these delays. And we can do that tomorrow, with the FAA's help.

Senator ROCKEFELLER. Senator Thune, I really apologize to you, but it's already a 7 minute time that you've used. We have 3 or 4 minutes left to get to another building to vote. So, I enormously regret this, we're going to have to actually adjourn the hearing, because we'll be voting until 1 o'clock, unless, of course, you want to sit here, and then we'll recess it.

[Laughter.]

Senator Thune. Mr. Chairman, could I then—I have a couple of additional questions that I also would like to submit——

Senator ROCKEFELLER. Could——

Senator Thune.—for the record——

Senator Rockefeller.—you submit them?

Senator Thune.—as well as a statement? But I just think—

Senator ROCKEFELLER. But—can I just finish, please? Because I've got—I'm going to go vote.

Senator THUNE. OK.

Senator ROCKEFELLER. I mean, that's—make up your own mind. Senator THUNE [presiding]. That's—I'm happy to—I'm happy to adjourn the hearing, if you want to go vote.

Senator ROCKEFELLER. All right, you do that.

Senator Thune. Let me just ask one last question, if—again, of the airlines. And I—and it has—it comes back to this issue of disclosure and transparency and having information ahead of time. I mean, don't you think that a lot of customers have a right to know which flights are chronically delayed or chronically canceled before they purchase their tickets? I mean, doesn't that—isn't that something that makes sense? Because I think it—it would be nice to know—for example, the story in *The New York Times* about this one flight, Newark to Chicago, that's late 80-some-percent of the time. I mean, I think that's information that would be really useful for consumers to know.

Mr. Kolshak. Senator, I totally agree with you, is that—I'm not sure that all of my colleagues would agree—that, in terms of making the information available via our website, we are certainly prepared to do that. Requiring our reservation agents on every single flight to disclose that information becomes very cumbersome and very expensive. However, in terms of putting on our website, making it available to the customers, we have absolutely no problem in doing that.

Senator THUNE. OK.

Mr. Reding. And from American's perspective, we agree with Delta on that, we don't want to cause an undue burden in disclosing that information. Of course, our focus also is, in eliminating those flights, we don't want to have any flights that are 80 percent late. Let's look at the root cause, and then we adjust our schedules so we can take those flights off of that list, and we focus on those flights to make sure they have improved reliability for our customers.

Mr. Rowe. And I would agree, from Continental's perspective, with the two gentlemen on my right. We have a number of initiatives that we are working on internally in the company, and we have our Customer First Commitments which are on our website today. So, we are working actively at trying to build more transparency into our operation.

Senator Thune. All right. Well, I thank you for—again, for your testimony. And I have some questions, like I said, posed for our government folks around the panel today, but I'll submit those for

the record.

And I guess, with that, the hearing is adjourned.

Thanks.

[Whereupon, at 11:30 a.m., the hearing was adjourned.]

## APPENDIX

PREPARED STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR FROM CALIFORNIA

Chairman Rockefeller, I want to thank you for holding a hearing today on such an important issue.

Anyone who has traveled recently certainly recognizes that the delays travelers are encountering at airports are a national problem that needs our immediate atten-

I was appalled, as many Americans were, to see passengers trapped in airplanes sitting on runways for sometimes as much as 11 hours without adequate food or

water, overflowing restrooms, and no opportunity to deplane.

That is why I am pleased that the Committee included provisions from the Boxer-Snowe bill to require airlines to provide necessities such as food, water and working restrooms to passengers who are stranded on planes.

Our legislation also gives passengers the option to deplane after 3 hours if deemed

safe by the pilot to do so.

Although language for mandatory deplanement after 3 hours is not included in the FAA Reauthorization bill, I strongly favor requiring a time-frame for deplanements and I look forward to working with the Committee to include an ap-

propriate timeframe.

The Department of Transportation's Inspector General Report released 2 days ago criticizes the airlines for lacking clarity in the terminology they use in their cus-

tomer service plans for extended delays.

This isn't the first time we have given the airlines the opportunity to address the situation of stranded passengers on the tarmac, and despite those efforts back in 1999, little has changed.
When it comes to the safety and convenience of travelers, now is not the time for

plans that are vague and lack consistency.

For anyone who has traveled with a small child or with parents, who may need

medical attention, this legislation is not rocket science, it is common sense.

I think I share the same sentiment as many Americans that while this hearing and the FAA Reauthorization are certainly a step in the right direction, there is much more work to be done and we need to do our part to ensure all parties are allocated the resources needed to make the system work better.

The FAA and the airlines need to work together to alleviate the delays. Right now, there is too much congestion caused by too many flights scheduled at the same

peak time.

I am counting on the parties who have joined us here today to work together to resolve this problem in a timely manner so we can all get where need to be safe and on time.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF PATRICK FORREY, PRESIDENT NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION (NATCA)

#### Introduction

The National Air Traffic Controllers Association (NATCA) is the exclusive representative of over 14,000 air traffic controllers serving the Federal Aviation Administration (FAA), Department of Defense and private sector. In addition, NATCA represents approximately 1,200 FAA engineers, 600 traffic management coordinators, 500 aircraft certification professionals, agency operational support staff, regional personnel from FAA's logistics, budget, finance and computer specialist divisions, and agency occupational health specialists, nurses and medical program specialists. NATCA's mission is to preserve, promote and improve the safety of air travel within the United States, and to serve as an advocate for air traffic controllers and other aviation safety professionals. NATCA has a long history of supporting new aviation technology, modernizing and enhancing our Nation's air traffic control system, and working to ensure that we are prepared to meet the growing demand for aviation services.

Aside from the millions of air travelers who experienced the pain and frustration of this summer's record level of flight delays first-hand, nobody had a better view of the congested runways, taxiways, gate ramps and airways than this Nation's air traffic controllers. These controllers worked record amounts of hours and overtime in a high stress work environment, where most facilities were understaffed, to try and move the system along as efficiently as possible, while keeping safety above all as our highest priority and guiding principle.

As part of our commitment to serving the flying public and watching out for air travelers' best interests, we have created a website devoted to helping travelers avoid flight delays and receive advice from the people with the front-row perspective on the National Airspace System—the air traffic controllers. NATCA launched www.avoiddelays.com in 2006 as flight delays began their ascent into record territory. Then this spring, we added some enhancements to improve the site, including the addition of tips from controllers at each of the busiest airports across the country, offering words of wisdom as to the best times to fly, and many other nuggets of useful information about the operation at those airports.

But despite NATCA's best efforts, no amount of assistance has seemed sufficient thus far in 2007. As *The Washington Post* stated in an editorial 2 weeks ago, "This summer in air travel was terrible." The delays were the worst since the Federal Government started keeping a running total in 1995.

## As New York Goes, So Goes the Nation

The problems this summer mostly revolved around the highly congested New York airspace, where one-third of all flights pass through daily. Three of the five worst airports for delays—Newark Liberty International, John F. Kennedy International and LaGuardia—all serve the New York metropolitan area. As the *Post* reported, "time and again, trouble at those airports means trouble almost everywhere else."

In her final public remarks 2 weeks ago, former FAA Administrator Marion Blakey cited New York, but she also talked about Chicago's O'Hare International Airport, where in 2004, the FAA forced the airlines to reduce the number of take-offs and landings between 7 a.m. and 8 p.m. to 88 per hour, down from a high earlier this decade of 130 or more. As a result, according to the *Post*, delays were reduced by 24.5 percent in 2005.

However, NATCA's research shows that O'Hare is still one of the most congested and overscheduled airports in the country and that is having an effect on the increasing delays. O'Hare, the three New York airports and Philadelphia International round out a "Top Five" list of the most overscheduled airports in the country, which NATCA believes is the number one reason for the surge in delays in 2007

As early as 2000 and 2001, when NATCA made regular appearances before this committee and also before various Senate committees that were working to try and solve the problem of flight delays, we talked directly, and in great detail, about the problem of ground capacity and airline over-scheduling, identifying this as a major concern. Below is from our testimony in May 2001:

"An airport's capacity to handle air traffic is a function of its size, the layout of its runways, the air traffic patterns, both arriving and departing, and the time-frame in which a surge of traffic must be dealt with due to airline scheduling. Our system is built to allow for unfettered discretion in adding demand. However, you can not add limitless demand to a finite system. Case in point is what happened at New York's LaGuardia Airport last summer (2000) when airlines filed for 600 slot exemptions within about a week. Market forces failed to limit the number of flights at LaGuardia, so the FAA and the New York/New Jersey Port Authority had to step in."

"Delays occur every day at every major U.S. airport. Schedules are made to reduce operating costs and maximize revenue without regard for other airlines, terminal airspace or airport capacity. At 'peak' times, dozens of planes are simultaneously taxiing for take-off or queuing above the airport in a finite amount of terminal airspace. This is where the laws of physics kick in. Given runway capacity, only a certain number of flights can depart and arrive within a specified time period. Therefore, scheduling during peak hours contributes to delays at busy airports even in good weather. All scheduled flights will not be able to arrive on time. Responsible scheduling of flights within airport capacity limits will go a long way toward alleviating delays."

Here we are again, more than 6 years later, and NATCA's message on this subject has not changed: Scheduling during peak hours contributes to delays at busy airports even in good weather. All scheduled flights will not be able to arrive on time. Responsible scheduling of flights within airport capacity limits will go a long way toward alleviating delays.

We were pleased to hear Administrator Blakey echo our position in her farewell speech when she told the Aero Club of Washington, "The airlines need to take a step back on scheduling practices that are at times out of line with reality. . . . I predict passengers will continue to be fed up with delays, and that's got to be taken more seriously by our airlines."

However, these comments were too little, too late, coming at the end of the summer travel season and not before, when controllers knew over-scheduling would be the reason for a surge in delays. NATCA agrees with Chairman Costello, who said the administrator waited too long to criticize airlines for over-scheduling, and said she should have made her remarks in January "when they might have had some effect on the summer travel season."

NATCA is aware that many pilots share our view that ground capacity, not air capacity, is where the problems lie in our overcrowded system. In a recent article in an aviation magazine, pilot J. Mac McClellan wrote: "The point of this—other than the obvious, that New York is a pain in the butt at rush hour—is that pavement, not airspace, is the fundamental congestion problem." (Flying Magazine, J. Mac McClellan, September 2007, "Left Seat: There Is Plenty of Airspace")

## Atlanta's New Runway Is an Example of How Capacity Can Be Increased and Delays Decreased

The best evidence that supports NATCA's position that current problems are ground-based is at Atlanta Hartsfield-Jackson International Airport.

Before the new runway was opened last year, the departure rate per hour was 96 in clear weather; what is known as "VFR" (visual flight rules) conditions.

But with the new runway—making three total for arrivals and departures—the VFR departure rate increased to 114 aircraft per hour and 104–106 aircraft per hour in less ideal weather conditions. The arrival rate now stands at 126 aircraft per hour in VFR conditions, 112 per hour in less ideal weather conditions and 96–104 in poorer weather conditions, known as "IFR" (instrument flight rules).

Additionally, Atlanta has built a taxiway (Taxiway Victor) that goes around Runway 26L/8R, a designated departure runway, virtually decreasing the possibility of runway incursions by 95 percent according to ATL controllers and ensuring a continuous flow of departures off the north side of the airport. Once again, concrete, when used correctly, can decrease delays off the airport and almost all possibilities of runway incursions and read-back/hear-back errors in communications between pilots and controllers.

The bottom-line is simple: Atlanta's fifth runway was opened on May 27, 2006. A comparison of operations and delays was run from May 27 to September 30, 2006 against the same time period in 2005. ATL had an increase 3,097 Total Operations and had 13,927 fewer delays in 2006.

## Exactly How Airline Overscheduling Is Driving the Surge in Flight Delays

The following, from an operational perspective, is a quick review of five airports facing a chronic delay situation: JFK, EWR, ORD, LGA, and PHL. All data comes from the Enhanced Traffic Management System (ETMS)—a tool used by Traffic Management staff to predict, on national and local scales, traffic surges, gaps, and volume based on current and anticipated airborne aircraft. That data allows traffic management staff to use optimal airport configurations to maximize capacity at each airport.

New York-JFK

At New York-JFK Airport, the optimum arrival configuration for runways 13L/31L means a 56 airport arrival rate (14 aircraft per quarter hour) and a 32 airport departure rate (eight aircraft per quarter hour). One of the optimum departure configurations is runway 22R/31L, which allows for a 52 airport departure rate (13 aircraft per quarter hour) and a 35 airport arrival rate (11 per quarter hour).

On a typical Tuesday in August (Aug. 7, to be exact), there were 57 flights scheduled to take off from JFK between 8 a.m. and 9 a.m.—which is more than top airport capacity, according to the FAA's Operational Evolution Plan guidelines covering capacity benchmarks for the airport in perfect weather conditions. That day, Aug. 7, only 38 of those flights took off. As reported by USA Today, "the overload cascaded into the next 2 hours."

- From 9 a.m. to 9:59 a.m. on Sept. 7, 59 flights are scheduled to depart, which is more than the FAA's listed airport capacity of 32–52 per hour.
  - o A minimum of 7 flights will automatically be delayed.
- In terms of arrivals, 35 flights are scheduled to arrive in the 30-minute block between 5:15 p.m. and 5:44 p.m. Optimum rate only allows for 28 flights to physically touch down in that timeframe.
- Another 7 flights will be instantly delayed.
- In a USA Today story focusing on JFK's problems on July 9, it was reported, "Officials at JetBlue, the seven-year-old carrier that has become JFK's leading airline, carrying 11.6 million passengers into and out of the airport, have taken the unusual step of endorsing limits on flights because they say that at peak times, airlines are scheduling more flights than JFK can handle."
- The evidence indicates there is *no* impact of general aviation or business jets on the congestion and delay problems at JFK. On April 30, 2007, there were 972 air carrier take-offs and landings, 289 air taxi (regional jets) and SIX (6) GA aircraft using JFK. On an average day in August: 1019 air carrier take-offs and landings; 317 air taxi (regional jets); 30 GA.

#### Newark

At Newark-Liberty International Airport, on the morning of Sept. 5, controllers arrived at work and discovered that they would instantly need to start issuing delay information to specific flights. The reason? Between 9–10 a.m., there were 57 flights scheduled to depart the airport. But Newark can only handle 45. That meant 12 flights right off the bat were instantly delayed before the beautiful sunny morning could even progress any further.

A more detailed look:

- o In the 3 hours from 5–8 p.m., when the airport can accept 46 arrivals per hour for a total of 138, there were 160 scheduled arrivals. Those late arrivals put a heavier burden on the "big" 8 p.m. departure hour when 51 departures were scheduled.
- Adding in all the late arrivals, there are more than 60 planes needing to depart in that hour when the airport can only support 44-45.

There are many reasons for delays that are never mentioned:

- Every arrival at EWR must eventually cross the departure runway. That's
  why the 44 rate, but, a few times each hour one of those arrivals fails to clear
  the runway, extending the wait for the next departure.
- Every so often the first plane lined up at the runway is not ready to go, or has a maintenance issue. That plane must be moved aside, extending the wait for the next departure.
- The acceptance of overflow arrivals to the crosswind runway during periods when they are not necessary. Landing 10 overflows, and 35 main runway arrivals, when we could have landed 45 on the main runway only, is unnecessary, and on a North flow it kills 10–15 departure slots.
- The bottom line is that once the airport is scheduled beyond its capacity, any operational issue will only worsen delays built into the system by airline overscheduling.

### Chicago-O'Hare

At Chicago O'Hare International Airport, for the optimum arrival configuration, the airport uses three runways: 4R, 10 and 9R. The maximum rate for arrivals is 100 per hour (25 per quarter hour). Maximum departure rate is also 100.

But on Sept. 7, for example, there were many 15-minute periods in which both the scheduled number of both arrivals and departures exceeded 25. For example, from noon to 1 p.m. CDT, in what controllers call the "noon balloon," the airlines scheduled 26 arrivals from noon-12:15 p.m., 28 from 12:16-12:30 p.m., 21 from 12:31-12:45 p.m. and 29 from 12:46-1 p.m. That's a total of 104, which is four more than the airport could handle if everything had gone perfectly.

Also on Sept. 7, the delays were scheduled to mount. And that's before any air-

Also on Sept. 7, the delays were scheduled to mount. And that's before any aircraft touched the runways. At 8:15 a.m., there were 41 departures scheduled. But the airport can only handle 25 as previously stated. This means there were 16 flights that automatically were delayed due to the laws of concrete and physics. Those 16 flights spilled into the next half hour, which already had 16 flights scheduled, bringing the total for that 15-minute block to 32, which is seven more than

the airport could handle and which spilled into the next half hour, where there were 19 flights scheduled.

- At 10 a.m., there were 39 departures scheduled, meaning that if everything went perfectly, 14 flights were late just by sheer volume delays caused by overscheduling.
- At 1 p.m., there were 50 departures scheduled, with another 28 waiting to depart at 1:15 p.m. and 26 more at 1:30 p.m. Between 1–2 p.m. CDT, the total departures scheduled were 123. The airport can only handle 100.

#### New York-LaGuardia

At New York-LaGuardia Airport, the optimum configuration for runways 13/22 means a 40–44 airport arrival rate (11–12 per quarter hour) and 40 airport departure rate (10 per quarter hour).

NATCA looked at 1 day earlier this month and went through the schedule before the traffic started. Under optimum configurations LGA will be able to depart 10 aircraft per hourly quarter, 40 per hour.

4:15-14:29L (Local Time) 17 aircraft are proposed for departure, 7 aircraft will be delayed to the next quarter creating a backlog.

 $14{:}30{-}14{:}44L$  another 10 aircraft are proposed for departure, 7  $aircraft\ remain$  in the backlog.

14:45-14:59L 11 aircraft are proposed for departure, 1 aircraft will be delayed to the next quarter, totaling 8 backlog.

15:00-15:14L 13 aircraft are proposed for departure, 3 additional aircraft are added to the backlog, totaling 11 in the backlog.

15:15–15:29L 7 aircraft are proposed for departure, 3 aircraft can be departed from the backlog, 8 aircraft remain in the backlog.

 $15{:}30{-}15{:}44L$  10 aircraft are proposed for departure, 8 aircraft remain in the backlog.

 $15:\!45\!-\!15:\!59L$  6 aircraft are proposed for departure, 4 aircraft can be departed from the backlog, 4 remain~in~the~backlog.

 $16:00-16:14L\ 14$  aircraft are proposed for departure, 4 aircraft are added to the backlog, 8 are again in the backlog.

16:15–16:29L 10 aircraft are proposed for departure, 8 remain in the backlog. 16:30–16:44L 8 aircraft are proposed for departure, 2 aircraft can be departed from the backlog, 6 aircraft remain in the backlog.

16:45-16:59L 7 aircraft are proposed for departure, 3 aircraft can be departed from the backlog, 3 aircraft remain in the backlog.

17:00-17:14L 12 aircraft are proposed for departure, 2 additional aircraft are added to the backlog, totaling 5 aircraft in the backlog.

17:15–17:29L 4 aircraft are proposed for departure, all 5 aircraft can be departed from the backlog, for the first time since the 1415–1429L timeframe, the backlog is empty.

The controllers will not recover the time for nearly 3 hours. Neither do the passengers on the delayed aircraft.

## Philadelphia

Finally, at Philadelphia International Airport, the optimum configuration for West operation, runways 27R/26/35, means a 52 airport arrival rate and airport departure rate (13 per quarter hour). For East operation, runways 9L/8/35: 48 airport arrival rate and airport departure rate (12 per quarter hour).

• Under optimum configurations PHL will be able to depart 12–13 aircraft per hourly quarter, 48–52 per hour. The following breakdown for Sept. 7 demonstrates the cascading effect over-scheduling has on delays that effectively deliver scheduled delays:

9:45-9:59L 15 aircraft are proposed for departure, depending on configuration 2-3 aircraft will be delayed to the next quarter creating a backlog.

10:00-10:14L another 15 aircraft are proposed for departure, again depending on configuration another 2–3 aircraft will be delayed to the next quarter, totaling 4-6 in the backlog.

10:15–10:29L 17 aircraft are proposed for departure, again depending on configuration another 4–5 aircraft will be delayed to the next quarter, totaling 8–11 backlog.

10:30-10:44L 8 aircraft are proposed for departure, depending on configuration 4–5 additional aircraft can be added from the backlog, 4–6 remain in the backlog.

10:45-10:59L 9 aircraft are proposed for departure, depending on configuration 3–4 additional aircraft can be added from the backlog, 1-2 remain in the backlog.

With only 3 aircraft proposed from 11:00-11:14L, the backlog of traffic is absorbed.

#### Here's the situation in the afternoon:

17:45–17:59L 19 aircraft are proposed for departure, depending on configuration 6–7 aircraft will be delayed to the next quarter creating a backlog.

18:00–18:14L an additional 18 aircraft are proposed for departure, again depending on configuration another 5–6 aircraft will be delayed to the next quarter, totaling 11–13 in the backlog.

18:15–18:29L an additional 17 aircraft are proposed for departure, again depending on configuration another 4–5 aircraft will be delayed to the next quarter, totaling 15–18 backlog.

18:30–18:44L 9 aircraft are proposed for departure, depending on configuration 3–4 additional aircraft can be added from the backlog, 11–15 remain in the backlog.

18:45–18:59L 11 aircraft are proposed for departure, depending on configuration 1–2 additional aircraft can be added from the backlog, 9–14 remain in the backlog.

19:00–19:14L 10 aircraft are proposed for departure, depending on configuration 2–3 additional aircraft can be added from the backlog, 6–12 remain in the backlog.

19:15–19:29L 3 aircraft are proposed for departure, depending on configuration 9–10 additional aircraft can be added from the backlog, 3 *remain in the backlog*. With only 3 aircraft again proposed from 19:30–19:44L, the backlog of traffic is absorbed.

The controllers will not recover the time for an hour and a half. Neither do the passengers on the delayed aircraft.

## Fewer Eyes Watching More Planes Equals Greater and Longer Delays

Understaffing remains the number one issue for this Nation's air traffic controller workforce and this year, we have witnessed its effects on the efficiency of the system and our ability to squeeze as much capacity out of the system as possible. For 8 years now, NATCA has warned the FAA and the flying public about a coming wave of retirements and the need to plan proactively to build the next generation of controllers, instead of waiting for veterans to leave to hire their replacements, as the FAA has done, because it takes 2–3 years on average to complete the thorough and arduous training process. History will show that our fears were justified.

In fact, NATCA said the following in our testimony before this committee on May 3, 2001 on the subject of flight delays and the fact that more controllers were need-

In fact, NATCA said the following in our testimony before this committee on May 3, 2001 on the subject of flight delays and the fact that more controllers were needed to avoid a staffing crisis that would worsen any delay problem: "The thousands of controllers hired during the post (1981 PATCO) strike recovery period will reach retirement eligibility in just a short period of time. Retirements will dramatically increase until 2007, when they will peak at 8.4 percent of the workforce. By 2010, cumulative retirements will exceed 50 percent of the workforce. We need to ensure that there are enough qualified and trained air traffic controllers to handle today's increasing workload and to prepare for the coming wave of controller retirements. Mandatory overtime, six-day work weeks and understaffed shifts are what air traffic controllers will be facing if something is not done now to prepare for this crisis. Currently, there are not enough controllers to fill the gap."

All of these things have occurred, including the mandatory overtime, six-day work weeks and understaffed shifts, which permeated the controller work environment this past summer.

The FAA waited until just the past 2 years to begin hiring our veteran controllers' replacements, 3 years too late in our view. In fact, in 2004, the year the FAA should have hired more than 1,000 new prospective controllers to be ready to work this summer's record number of planes and passengers, the agency instead hired 13.

As a result, there are now just 11,467 experienced and fully certified air traffic controllers on staff in our 314 facilities as of May 26, 2007, according to FAA figures. That is the lowest number in 11 years, since there were 11,355 on staff at the end of the 1996 Fiscal Year. It's also 1,113 controllers less than what we had on staff on 9/11, the day our growing and thriving system was ground to a halt by the unspeakable horror of those terrorist attacks. According to an Associated Press story from Sept. 2, the FAA is projecting 800 retirements in the 2007 Fiscal Year that ends this Sunday. This number has been revised upward not once but twice by the FAA since June 2006, with the reason being that more controllers are leaving the workforce due to the work rules and pay cuts imposed on controllers on Sept. 3, 2006. As of Aug. 1 of this year, there were already 697 retirements according to NATCA's own research. We expect that the final tally of retirements will reach or exceed 800, meaning this country is even less able than ever before to handle the growing number of flights and mitigate the resulting delays.

Nowhere is the relationship between traffic, staffing and delays more apparent than at New York's John F. Kennedy International Airport. In 2001, JFK Air Traffic Control Tower handled an average of 1,000 take-offs and landings per day. This summer, the airport has set numerous records with the tower handling an average of 1,400 take-offs and landing per day. This is a 40 percent increase. Over the same six-year span, staffing at the tower has fallen from 37 fully certified controllers down to 28, which has resulted in regular occurrences of combining two positions into one due to staffing shortages. This means fewer eyes watching record high numbers of planes. This is first and foremost a safety concern, but is also one of the secondary factors that has made JFK the poster child for flight delays in 2007,

behind over-scheduling by air carriers.

As the FAA has stated in the media on numerous occasions and also in its own controller workforce plan, its first priority is safety. Thus, the FAA has made it clear that if it does not have enough staffing, it will worsen the delay crisis by putting more space between planes as an added safety margin. On Aug. 17, FAA Spokesman Ian Gregor was quoted in the North County Times (Calif.) as saying the following: "Safety is always our top priority. In the worst-case scenario, if we did have a bunch of people call in sick (in the case of a tuberculosis outbreak, which is what this story was about), we'd reduce services. We could keep planes further apart. Normally we have them three to five miles apart. We could separate them further and slow down the volume." NATCA believes this is a sad commentary on the predicament the FAA has placed itself in by allowing a staffing crisis to develop and worsen. There should always be enough staffing to overcome its employees' needs to use accrued sick and vacation leave and still be able to keep the system running at full capacity and efficiency. Yet we are now in a situation where the FAA has staffed the system to budget, leaving no flexibility and no room to avoid falling off the razor's edge when staffing prevents them from opening up every available control position in its tower and radar facilities. Nearly every one of the 314 facilities in the country is now below the safe staffing levels agreed to by the FAA and NATCA in 1998.

Understaffing is one of the reasons why delays have worsened at the five airports discussed earlier in this testimony: New York-LaGuardia, New York-JFK, Newark, Philadelphia and Chicago O'Hare. The charts below detail this situation:

(LEGEND: "Authorized" is agreed-upon staffing levels between NATCA and the FAA before last year's FAA imposed work rules; "Funded" is what the FAA has committed to spending to staff; "CPCs" is certified professional controllers on staff; "Trainees" are developmental controllers; "TMCs" are traffic management coordinators; "Staff" are staff specialists; "Supes" are supervisors; "CPC eligible end of 07" indicates experienced controllers soon to reach retirement eligibility; and "CPC eligible end of 08" indicates experienced controllers who will reach retirement eligibility by the end of next year:

								CPC eligible	CPC eligible
Facility	Authorized	Funded	CPCs	Trainees	TMCs	Staff	Supes	end of 07	end of 08
LA GUARDIA ATCT	36	27	25	4	4	2	4	3	unk

Facility	Authorized	Funded	CPCs	Trainees	TMCs	Staff	Supes	CPC eligible end of 07	CPC eligible end of 08
JOHN F KENNEDY INTL ATCT	37	32	28	1	3	2	5	6	9

								CPC eligible	CPC eligible
Facility	Authorized	Funded	CPCs	Trainees	TMCs	Staff	Supes	end of 07	end of 08
NEWARK INTL ATCT	40	35	29	1	4	2	5	5	7

Facility	Authorized	Funded	CPCs	Trainees	TMCs	Staff	Supes	CPC eligible end of 07	CPC eligible end of 08
PHILADELPHIA INTL ATCT	109	86	63	21	5	4	12	18	20

					T. 1.5			CPC eligible	CPC eligible
Facility	Authorized	Funded	CPCs	Trainees	TMCs	Staff	Supes	end of 07	end of 08
CHICAGO O'HARE INTL ATCT	71	71	47	11	5	3	11	11	17

#### How Fewer Controllers Translates Into More Space Between Planes and, Thus, More Delays

There is a clear link between understaffing and delays. Below are some examples of what has occurred:

- Earlier this month, United Airlines Flight 169 from O'Hare to Minneapolis was
  intentionally held to an altitude of 22,000 feet due to understaffing in the North
  Area of the FAA's Chicago Air Route Traffic Control Center in Aurora, Ill. UAL
  operations called to ask why the aircraft was held down and they were told that
  it was due to staffing.
- Also earlier this month, an episode of understaffing at Kansas City Center meant that the FAA would be unable to hold inbound traffic from O'Hare due to staffing.
- In a San Francisco television news story this month about the unprecedented number of new controller resignations at Oakland Center in Fremont, Calif., it was reported that the trainees at Oakland Center need to be brought up to speed by the FAA sooner rather than later; otherwise, air travelers will be the ones who suffer. The television station's aviation consultant, Ron Wilson, said, "They're (the controllers) not going to control more planes than they can handle, and the only way to do that is (for the FAA) to lessen the flow into these airports which they will do with San Francisco, which is the main Bay Area airport, and it will result in delays."
- According to controllers at Oakland Center, there is a systemic impact of delays
  to one airport affecting the traffic flows to other airports. There is a rise in the
  complexity factor for sectors working holding and through traffic simultaneously
  without adequate staffing to have two controllers at each position. Additionally,
  inefficient flow times means airlines miss their departure windows. That causes
  airborne delays and sequencing problems that further impact the flows of traffic.
- According to controllers at Indianapolis Center, delays are being caused routinely by the following factors: Additional in-trail restrictions on internal departures from major airports, additional in-trail restrictions on adjacent centers/facilities, stopping departures during push times when traffic exceeds capacity and choosing less than optimum cruising altitudes and routes to avoid sectors/areas without adequate staffing.

The following are just a number of examples of filtered log reports and Internal Advisories generated by a Traffic Management Unit depicting the impact that staffing shortages are having on the National Airspace System. These are examples of traffic management initiatives, increased spacing between flights, being justified and caused by staffing, as well as, an incident where a manager approved the clo-

sure of an assistant controller position, [D-Side] that had previously required to be a staffed position.

```
FILTERED LOG REPORT
                      OG HEPOHT
CLT Enste via MERIL 15 Mit
1230-1330, WX:ISIMS,
DC:2TL, RSIN: APVD 1227/DCC:25/KE ESIS: CP/Bay2/STMC
CLT Dept via MERIL 15 Mit, RIC/ORF LIFC A08230 EXEMPT
1745-1830, VOL:ENRI SCIR,
DDC:2TL,CLT, RSIN: APVD 1741/DCC:25/MN - ESIS: CP,Bay2,STMC
CLT Dept via MERIL 12 Mit
2100-0200, OTHER:STAFFING,
DC:2TL,CLT, RSIN: APVD 2028/DCC:25/KH - ESIS:
Bay1,Bay2,CP,SIMC
COMPLETE. (E)

11-12 1925

NUMEROUS CPC'S HAVE EXPRESSED CONCERN ABOUT THE UNSAFE OPERATION AT NKTZ DUE TO CLOSURE AND LACK OF APPROPRIATE TRAINING/ BRIEFINGS BEFORE TAKING OVER THE AIRSPACE. (E)

11-12 1935

STILL SLOW AT R17, OM APPROVED NO MANDATORY D-SIDE, STAFFING WORLY TILL 1600, THEN D-17 WILL BE STAFFED. (E)

11-12 1947

WK: CMAIO2 VALID AND DISTRIBUTED (E)
                                                                     MINIT REST OVER SYR/ART/JOSSY DUE AREA B
          E2 TMU ADVSY....
                                                                    THIS DOE NOT CNCL THE DSP REST IN PLACE
ZBWTMU131284KW
          STAFFING ARE CNCLD
                                                                    DEPTS OVER SYR/ART/JOSSY AOA FL240 ..... 12
                                                                                                                      5 MINIT .... NOW-1215
          MINIT ... BOS DEPTS OVER MHT SYR/ART/JOSSY 5 MINIT ... DUE ZBW STAFFING .... MAKE DSP REQS WITH THIS REQ
           E2 TMU ADVSY ....
                                                                                                                              ZBWTMU131127KW
           QUESTIONS DIAL 92
                                                                DEPTS OVER SYR/ART/JOSSY AOA FL240 ..... 12
       MINIT ... BOS DEPTS OVER MHT SYR/ART/JOSSY 5 MINIT ... NOW-1215
DUE ZBW STAFFING .... MAKE DSP REQS WITH THIS REQ ....
       QUESTIONS DIAL 92
```

## Putting More Planes in the Air With Modern Technology Won't Solve the Delay Problem Without More Concrete

Without more runways, taxiways, ramps and gates—in a word, pavement—it won't matter what we do in the airspace to increase capacity to allow more aircraft to use the NAS. While NextGen and new technologies such as ADS-B are exciting, hold enormous potential for the future of our system and have NATCA's full support and pledge of participation, the key to unlocking the gridlock we are seeing in the system lies on the ground, at the airports.

Runways are under construction at only three major airports. These are Charlotte, NC; Seattle, WA; and Washington Dulles. An example of the benefits from these new runways is at Seattle where currently the space between the two runways delays traffic when weather conditions deteriorate. Once the new runway is operational it will allow a dedicated operation for departures and arrivals which is more efficient and safer.

No amount of airspace capacity-enhancing modernization will enable us to overcome the laws of physics and wake turbulence, which dictate the absolute maximum number of aircraft that can use a runway in a given amount of time.

number of aircraft that can use a runway in a given amount of time.

The FAA has tried a large-scale expansion of the airspace just recently and it did nothing to stem the rising tide of delays. In January 2005, Domestic Reduced Vertical Separation Minimum (DRVSM) was instituted nationwide. DRVSM reduced the vertical separation standard between aircraft from 2,000 feet to 1,000 feet for altitudes between 29,000 and 41,000 feet. The point is it effectively doubled the capacity between those altitudes. However, we saw no improvement in delays. Why? Because there is only so much concrete at the airports.

In a press release on Aug. 25, 2005, the FAA promoted DRVSM by saying the following: "A doubling of high-altitude airspace routes between 29,000 feet and 41,000 feet (is) an action that gives pilots and air traffic controllers additional choices by allowing aircraft to fly more direct routes at the most fuel-efficient altitudes. DRVSM saves fuel, which saves the airlines money. In addition, more efficient routes can reduce flight times. DRVSM simultaneously adds airspace routes, increases capacity, and maintains the same high level of safety. DRVSM also makes

working today's volume of traffic less complex for air traffic controllers. This reduces the potential for error and provides more options for controllers to help aircraft avoid turbulence and bad weather. In the summer of 2003, the FAA estimated that DRVSM would save airlines and other aircraft operators \$5.3 billion over 10 years, a conservative estimate considering the increase in jet fuel since 2003. The FAA estimated the cost of implementing DRVSM was about \$869 million, primarily to airlines due to re-equipping older aircraft. The first-year savings are estimated to be about \$393 million."

While controllers may have been able to help aircraft avoid turbulence and bad weather, we are certain that DRVSM did nothing to mitigate flight delays, as evidenced by the record surge the past 2 years.

Air traffic controllers support modernization and we hope the next FAA administrator will heed calls by the GAO, this Congress and others to work with controllers to build the system of tomorrow. But we must not get carried away. A modernized air traffic control system is a decade away and it will not solve delays, address the ground capacity problem at our busiest airports or keep the airlines from overscheduling these airports. NextGen won't stop bad weather or bring planes closer than they already are while about to land or take off. We could increase the amount of planes we have in the air right now with current technology but we don't have anywhere to put them on the ground. NextGen won't solve that.

Additionally, without a strong, motivated, well-staffed controller workforce, all the high tech equipment in the world counts for little. We can't wait until the next generation or beyond. People are the most important part of the air traffic infrastructure and, because of decisions by this generation of FAA leaders, we don't have enough of them controlling aircraft to support today's traffic demands, let alone tomorrow's.

#### Conclusion

America's air traffic controllers have a front-row seat to the flight delay crisis in the National Airspace System. This summer we witnessed from towers, centers and approach control facilities the highest level of flight delays in recorded history. With passenger levels expected to continue to increase, we can only anticipate the delays to continue to grow if not addressed quickly and comprehensively.

Despite years of warnings from NATCA and other industry groups, the Agency failed to properly plan for the expected rise in flight levels. In 2001, NATCA cautioned that scheduling at peak hours at busy airports, even in good weather, would contribute to increased delays. Those fears have come to fruition as more passengers have been stuck on runways and stranded at airports this year than any other on record. Instead of addressing the issue of over-scheduling and adding more runways capacity, the Agency has instead hung its hat on a technological solution that, under the best case scenario, is a minimum of 13 years from implementation.

While equipment modernization will aid in mitigating air traffic congestion, it is by no means a cure-all for the aviation delay dilemma. Air traffic controllers support modernization efforts, and we hope the next FAA Administrator will heed calls by the GAO, this Congress and others to work with controllers to build the system of tomorrow. But a modernized air traffic control system is over a decade away and it alone will not solve delays.

In the long-term, ground capacity restrictions at our busiest airports are going to continue to be a leading cause of congestion. New runway capacity must be added at our busiest airports to coincide and compliment the airway capacity expansions that are expected to be provided by NextGen. The amount of airspace in the sky is irrelevant if we have no place to land the planes on the ground.

In the near-term, we must ensure that as we plan for NextGen we do not lose sight of the NowGen. The chronic over-scheduling by airlines at the Nation's busiest airports will intensify the runways capacity limitations. Steps can be put into place to ensure that the busiest facilities are not overwhelmed, causing bottlenecks that ripple throughout the system.

Meanwhile, understaffing of air traffic control facilities will continue to exacerbate the inefficiencies of the current system. As the NTSB warned earlier this year, we cannot continue to push our controller workforce beyond its limits. Controller fatigue rates are increasing at frighteningly high levels as air traffic continues to grow at unsustainable rates.

The U.S. National Airspace System is the safest and most efficient in the world, but as evidenced by this hearing, it may soon lose that distinction. Eleven-hundred fewer certified controllers currently watch the skies then on 9/11, when 5,200 aircraft were landed safely in 90 minutes. An additional 70 percent of the current workforce is soon facing retirement. Efforts are going to have to be made to stabilize

our controller workforce and allow the segment of the U.S. economy that is increas-

NATCA is taking a proactive role in trying to help the flying public avoid delays to the greatest extent possible. We have launched a public information campaign which includes our website, www.avoiddelays.com. We encourage Members of this Committee and the flying public to which the state of the state Committee and the flying public to visit the site and to provide their input.

We appreciate the opportunity to submit testimony before the Committee to prowe appreciate the opportunity we stability assume the commence of the vide our input on the aviation congestion crisis. We also welcome opportunities to work with the FAA in a collaborative manner to help fulfill the promises of NextGen

and to address the delay problems of the NowGen.

#### PREPARED STATEMENT OF RAYMOND M. FLYNT, PRESIDENT AND CEO, TRAVELERS AID INTERNATIONAL

Chairman Rockefeller, Senator Lott, Members of the Subcommittee:

Thank you for the opportunity to submit a statement for the record regarding the important issue of Congestion and Delays: The Impact on Travelers and Possible So-

With its mission to assist people who are in transition—or crisis—and disconnected from their support systems, *Travelers Aid* has provided "A Helping Hand Along the Way" to travelers for more than 155 years. In addition to inner-city locations that assist stranded persons, Travelers Aid has a network of programs at twenty-five North American airports. At those airport locations, Travelers Aid, using over sixteen hundred volunteers, assisted more than six and one-quarter million people last year with information, directions, and problem solving during the course of their travels. Travelers Aid is a leader in airport customer service, and the focus of this testimony relates to the traveling consumer and the changes they have endured in recent years.

We recall that today's headlines regarding air traffic delays first surfaced in the summer of 2001, when the media was filled with stories of an air travel system straining with record numbers of travelers. The need to modernize the Nation's air traffic control system and increase runway capacity (requiring many years of planning) were cited as the long-term fix. Then came September 11, 2001, after which the Nation's airlines were no longer operating at record capacity. Airline survival became the story in the summer of 2002.

After airplanes were used to attack the World Trade Center, many people avoided air travel completely, and there was a steep decline for several years in foreign visitors to the United States. New security requirements at airports, including the guidance for passengers to arrive an hour and a half to 2 hours before flying (even longer for international travel) have prompted consumers to change their traveling habits as witnessed by the growing number of passengers on Amtrak's northeast corridor. Anecdotal evidence suggests that because of the requirement for earlier arrival at airports, many passengers have opted to drive instead of flying for trips that could be accomplished in four or 5 hours.

In an effort to remain profitable, airlines have reduced their personnel at airports. Automated check-in kiosks have permitted fewer customer service agents, and reductions in the number of baggage handlers has slowed the process of getting checked luggage to travelers at the end of their trip. (Note: When liquids were first banned on flights in August, 2006, this had an impact on the number of people who decided to check baggage rather than surrender liquid items during the TSA security screening.) Our experience during the last 6 years is that consumers are savvy and it doesn't take long for them to adapt their behavior to new regulations and

In 2007, we are seeing record numbers of airline passengers, and the problems observed earlier are with us once again—only this time within an environment that has changed significantly over the past several years. In their groundbreaking book MEGATRENDS, authors Naisbett and Aburdene noted that in an increasingly technological world, hi-touch would be the antidote to high tech. Travelers Aid's experience with travelers suggests that this is true. As the air travel experience becomes more complicated and more stressful (increased security, new regulations, fewer airline customer service personnel, growing delays, overbooked flights, and lost luggage), more and more travelers are turning to Travelers Aid. With air travel this year expected to top the 737 million passengers handled in 2006, on any given day an airport is like a small city; teeming with people who are traveling out of business necessity, enjoying a vacation, or traveling for a multitude of specific reasons (e.g., funerals, family illness, job searches). Like every city, the population includes those who are anxious or inexperienced about their travels; elderly or people with disabilities; people on medication; and those trying to cope with an unexpected change in their itinerary. Every day, Travelers Aid sees people with travel-related problems:

- Missed a connecting flight and have to reschedule.
- · Forgot medication or their medication remains in checked luggage.
- · Need extra assistance finding their way.
- Arrive expecting to be picked up, but a flight delay creates a disconnect with their ride.
- Need assistance in mailing back a precious item that TSA would ask them to surrender.
- Those who arrive at the wrong airport (Yes, it happens! e.g., Dallas when they wanted to go to Dulles).

The Internet has transformed the way people plan their travels, and has also helped keep costs competitive while providing more consumer choices. Not that many years ago a person would normally contact an airline to arrange their trip from, for example, New York to Los Angeles. Now after researching a variety of options on the Internet, a person may reserve airline "A" from New York to Chicago, while scheduling airline "B" from Chicago to Los Angeles. If the first flight is delayed sufficient to cause the person to miss the connecting flight, then the traveler confronts additional challenges of re-booking fees, etc. from the second airline (which has no investment in the earlier leg of the passenger's trip). This is another example of the type of traveler assisted by Travelers Aid.

Our volunteers are knowledgeable and experienced in common travel problems, and know how to assist frustrated and sometimes angry travelers. Through person-to-person interaction, Travelers Aid provides up-to-date information to help people make decisions, shares our expertise of how other travelers have handled similar situations, and acts as an ombudsman to assist the traveler with airline or airport

Travelers Aid—once a fixture at rail stations when trains were the most common source for interstate travel—has been a part of the country's major airports for more than four decades (LAX, SFO, DCA, IAD, JFK, ORD, DTW). Travelers Aid is a critical customer component, and because of our use of volunteers, a cost-effective way to help travelers. With the post 9/11 security measures consuming much more of traveler's time, many people now refer to the "hassle" of air travel. Add in the growing numbers of delays for flights and/or passenger luggage, and the stress levels are higher than ever at airports. We at Travelers Aid are there to help reduce the stress of modern travel. In addition to services provided at each of the airports that Travelers Aid serves, we maintain an active network to keep those airport programs connected. Because a passenger's journey encompasses a minimum of two airports—and often a third with connecting flights—a Travelers Aid volunteer at Dallas/Fort Worth Airport, for example, can contact the Travelers Aid program at the destination airport to alert them regarding a passenger who (because of age, infirmity, or other factors) may require the services of Travelers Aid upon their arrival.

As a result of this networking capacity, we believe that we can do much more at airport locations that currently do not have a Travelers Aid presence. As a matter of public policy, airports should be encouraged to incorporate Travelers Aid programs that can assist air passengers by providing up-to-date information, directions, and problem-solving in order to make their journey go a little smoother. The result for the airport is a more pleasant and stress-reduced travel experience.

We are always happy to serve as a resource for the Subcommittee on Aviation Operations, Safety, and Security regarding issues affecting air passengers.

## Response to Written Questions Submitted by Hon. Barbara Boxer to Robert A. Sturgell

Question 1. What do you believe is an acceptable time-frame for keeping passengers on a plane?

Question 2. What is the minimum amount of service that should be provided to passengers for food, water, and lavatory facilities for passengers stranded on a flight for 4 hours?

Answer. In response to both your questions, the Department is seriously concerned about the treatment of airline consumers, particularly those involved in lengthy on-ground delays. Clearly, stranding passengers aboard aircraft for hours on end simply is not acceptable, nor is failing to have sufficient food, water, and lavatory facilities for them when delays are lengthy.

That is why Secretary Peters asked the Department's Inspector General to investigate the issue and provide her a report, along with specific recommendations for dealing with the problem. The Inspector General's report was issued September 25, 2007, and the Secretary directed DOT staff to carefully consider the recommenda-

tions in his report.

Rulemakings are needed in order to implement a number of the recommendations in the Inspector General's report. On November 20, the Department published three rulemakings in the Federal Register to address the Inspector General's recommendations. In an advanced notice of proposed rulemaking (ANPRM), we set forth a number of proposals, including requirements that airlines create legally binding contingency plans for extended tarmac delays, respond to all consumer complaints within 30 days, publish complaint information online, and provide on-time performance information for their international flights in addition to their domestic flights.

The Department also issued a notice of proposed rulemaking (NPRM) that would

require airlines to include all canceled flights and tarmac delays in their monthly delay reports, something they are not currently required to do. The Department also has issued an NPRM (as follow-up to a previously published ANPRM) to increase the required financial compensation for passengers involuntarily "bumped" from

their flights.

Question 3. Are airlines currently required to track baggage?

Answer. Although there is no government requirement for airlines to track baggage, under contract law, airlines must pay passengers damages for which they are responsible, associated with lost, pilfered, damaged, and delayed luggage. Accordingly, it is the Department's experience that all major airlines have in place a baggage tracking system, some of them apparently sophisticated. In addition, pursuant to 14 CFR 234.6, DOT currently requires each of the largest airlines (those accounting for 1 percent or more of domestic scheduled passenger revenue) to keep track of and report monthly to the Department the number of baggage reports they receive involving lost baggage, pilfered baggage, damaged baggage, and delayed baggage. Carriers must include in their reports to DOT all reports made to the carrier, whether or not the report results in a claim for compensation.

Question 4. What steps should be taken by the airlines to reduce the number of

baggage claims filed?

Answer. Although the Department is considering several initiatives to improve protections for airline consumers, it has not yet studied baggage claim issues and would first need to examine them to determine what steps airlines could take to reduce baggage claims from current levels. The Department does regularly increase its minimum baggage liability limits, currently set at \$3,000 per passenger, which provides an incentive for carriers to avoid baggage problems and to provide increased protection for consumers who do experience problems. DOT's Aviation Consumer Protection Division also meets monthly with most major airlines and, as necessary, uses that forum to emphasize to carriers the need to do everything they can to reduce baggage claims as much as possible.

Question 5. Would the FAA consider requiring airlines to track the nature of bag-

gage claims filed?

Answer. In any examination of the baggage issue, including a reexamination of the reporting of baggage claims with DOT by carriers, the Department would consider the need for carriers to report the nature of baggage claims they receive.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO ROBERT A. STURGELL AND HON. D.J. GRIBBIN

Question 1. Is the Administration considering requiring so-called "HOT Lanes" at

Answer. The New York Aviation Rulemaking Committee (ARC) is considering all options for the airports in the New York region. The ARC is still meeting weekly and exploring options to address air congestion in the New York area. The ARC has five working groups to focus on the details of various congestion mitigation ap-Proceedings on of which is looking at eliminating the current "First-Come, First-Served" air traffic policy.

Aviation "HOT lanes" would involve giving priority to aircraft for which a fee has been paid during peak times and/or place priority on commercial flights, priority on

flights equipped with avionics, larger aircraft etc.

Question 2. Does the FAA's "Aviation System Performance Metric" program provide reasonable guidance for maximum operations at each airport? If you set limits on the number of operations at Newark Liberty International Airport or JFK Inter-

national Airport, what would you base such limits on? Answer. Actual operational numbers are maintained in the Aviation System Performance Metric (ASPM) database. The database includes information on reported runway throughput, air traffic control-determined airport arrival and departure

rates, aircraft taxi-in and taxi-out times, on-time performance relative to schedule, and similar data to allow us to review various performance indicators.

Limiting the operations at a particular airport would be based on a review of ASPM data, coordination with air traffic control facilities to establish any local operational issues or expectations of capacity enhancements or delay reduction measures, an assessment of actual airport capacity compared to theoretical capacity, and delay reduction goals. Although the FAA establishes the final operational or scheduling targets, there is an opportunity for customer input.

The number of operations that can be accommodated at an airport depends on

many factors including:

- 1. Meteorological conditions.
- 2. Airport runway layout (intersecting vs. parallel runways).
- 3. Dual purpose runways (shared arrivals and departures).
- 4. Taxiway layout to include the availability of high-speed turnoff taxiways.
- 5. Procedural and/or airspace limitations.
- 6. Fleet mix.
- 7. Airline scheduling practices.

Question 3. How many airline consumer complaints has the Department received since 2000 (please list by year, and by type of complaint-general categories are fine, as reported)?

Answer. A list of airline consumer complaints received by the Department, by

year and general type of complaint is attached.

Question 4. How many airline consumer complaints has the Department investigated (please list by year, and by type of complaint-general categories are fine, as reported)?

Question 5. How many airline consumer complaints have resulted in DOT taking enforcement action (please list by year, and by type of complaint-general categories are fine, as reported)?

Question 6. How many airline consumer complaints have resulted in an offender agreeing to either a civil penalty or other action (please list by year, and by type of complaint—general categories are fine, as reported)?

Answer. In response to your questions regarding consumer complaints leading to investigations, enforcement actions, and civil penalties (questions 4–6), the Department's Aviation Enforcement Office does not maintain its records in that manner. However, we can inform you that, with respect to recent investigations, DOT's Aviation Enforcement office began 20 investigations in early 2007 concerning chronically delayed flights and it received more than 2,000 consumer complaints during 2006 in its "Flight Problem" category, many of which involved or were prompted by delayed flights. Similarly, in late 2006 that office began investigations of 20 airlines for compliance with DOT's on-time performance notice rule and during 2006 that office received more than 1,000 consumer complaints in the category "Reservations/Ticketing/Boarding" and more than 1,000 more in the category "Customer Service," some of which could include on-time notice issues.

 $Question\ 7.$  How much money in civil penalties has the Department collected from airline enforcement activities since 2000 (please list by year, and by type of complaint—general categories are fine, as reported)?

Answer. A list of assessed civil penalties arising out of enforcement actions by DOT's Aviation Enforcement Office, by year and general type of case is attached.

## ATTACHMENT

# Airline Consumer Complaints Filed With DOT [2000-September 2007]

All Airlines—Calendar Year 2000						
Complaint category	Total complaints	Pct. of total complaints				
Flight Problems	9,242	39.5				
Customer Service	4,461	19.1				
Baggage	3,470	14.8				
Reservations/Ticketing/Boarding	1,713	7.3				
Refunds	1,076	4.6				
Oversales	888	3.8				
Miscellaneous (includes Frequent Flyer)	872	3.7				
Fares	864	3.7				
Disability	676	2.9				
Discrimination (Except Disability)	76	0.3				
Advertising	56	0.2				
Animals	1	0.0				
Total	23,395	100.0				

All Airlines—Calendar Year 2001 Complaint category Total complaints Pct. of total complaints Flight Problems 5,480 33.2 17.3 Customer Service 2,862 Baggage 2,490 15.1 Reservations/Ticketing/Boarding 1,611 9.8 Refunds 8.2 1,347 4.0 3.9 3.9 Fares 666 Miscellaneous (includes Frequent Flyer) 651 Oversales 639 3.1 1.1 Disability 508 Discrimination (Except Disability) 184 Advertising 61 0.4 Animals 6 0.0 Total 16,505 100.0

The following totals are in addition to the total complaints:

Opinions: 1,305 Compliments: 79 Info Requests: 826

All Airlines—Calendar Year 2002						
Complaint category	Total complaints	Pct. of total complaints				
Flight Problems	2,031	21.5				
Customer Service	1,712	18.1				
Baggage	1,422	15.0				
Reservations/Ticketing/Boarding	1,160	12.3				
Refunds	1,107	11.7				
Fares	523	5.5				
Disability	475	5.0				
Oversales	455	4.8				
Miscellaneous (includes Frequent Flyer)	317	3.3				
Discrimination (Except Disability)	193	2.0				
Advertising	68	0.7				
Animals	0	0.0				
Total	9,463	100.0				

The following totals are in addition to the total complaints:

Opinions: 963 Compliments: 51 Info Requests: 889

All Airlines—Calendar Year 2003 Complaint category Total complaints Pct. of total complaints Flight Problems 1,260 21.1 Baggage Reservations/Ticketing/Boarding Refunds 1,081 18.1 881 14.7 719 12.0 Customer Service 695 11.6 Disability 375 6.3 Fares 305 5.1 Oversales 288 4.8 Miscellaneous (includes Frequent Flyer)
Discrimination (Except Disability) 257 85 4.3 1.4 37 Advertising 0.6 Animals 2 0.0 Total 5,985 100.0

The following totals are in addition to the total complaints: Opinions: 912 Compliments: 23 Info Requests: 1,302

All Airlines—Calendar Year 2004						
Complaint category	Total complaints	Pct. of total complaints				
Flight Problems	1,730	23.2				
Baggage	1,425	19.1				
Reservations/Ticketing/Boarding	929	12.5				
Customer Service	881	11.8				
Refunds	659	8.8				
Miscellaneous (includes Frequent Flyer)	540	7.2				
Disability	525	7.0				
Oversales	346	4.6				
Fares	226	3.0				
Discrimination (Except Disability)	119	1.6				
Advertising	71	1.0				
Animals	3	0.0				
Total	7,454	100.0				

All Airlines—Calendar Year 2005 Complaint category Total complaints Pct. of total complaints 2,234 2,035 989 Flight Problems 25.623.3 11.3 10.8 9.6 5.8 4.3 3.7 3.4 1.5 0.7 Baggage Reservations/Ticketing/Boarding Customer Service 942Refunds 840 511 375 325 299 129 58 Disability Oversales Miscellaneous (includes Frequent Flyer) Fares
Discrimination (Except Disability) Advertising Animals 4 0.0 Total 8,741 100.0

The following totals are in addition to the total complaints: Opinions: 885 Compliments: 44 Info Requests: 2,053

All Airlines—Calendar Year 2006							
Complaint category	Total complaints	Pct. of total complaints					
Flight Problems	2,162	26.0					
Baggage	1,936	23.3					
Customer Service	1,019	12.2					
Reservations/Ticketing/Boarding	1,007	12.1					
Refunds	774	9.3					
Disability	430	5.2					
Oversales	341	4.1					
Fares	252	3.0					
Miscellaneous (includes Frequent Flyer)	247	3.0					
Discrimination (Except Disability)	114	1.4					
Advertising	40	0.5					
Animals	3	0.0					
Total	8,325	100.0					

The following totals are in addition to the total complaints:

Opinions: 1,003 Compliments: 41 Info Requests: 1,852

All Airlines—January–September 2007							
Complaint category	Total complaints	Pct. of total complaints					
Flight Problems	3,581	34.4					
Baggage	2,303	22.1					
Reservations/Ticketing/Boarding	1,115	10.7					
Customer Service	1,075	10.3					
Refunds	798	7.7					
Oversales	403	3.9					
Disability	360	3.5					
Miscellaneous (includes Frequent Flyer)	347	3.3					
Fares	301	2.9					
Discrimination (Except Disability)	82	0.8					
Advertising	33	0.3					
Animals	8	0.1					
Total	10,406	100.0					

The following totals are in addition to the total complaints: Opinions: 699 Compliments: 48 Info Requests: 1,683

### U.S. Department of Transportation Aviation Enforcement Office

[Assessed Civil Penalties: 2000 to 2007]

	Ü	Unauthorized operations	Civil rights	Other con- sumer	Reporting	Totals
2000	0	75,000	100,000	0	90,000	265,000
2001	354,000	30,000	30,000	30,000	0	444,000
2002	315,000	1,127,500	700,000	30,000	0	2,172,500
2003	385,000	348,000	5,775,000	60,000	40,000	6,608,000
2004	175,000	1,132,500	4,095,000	105,000	120,000	5,627,500
2005	334,500	2,078,000	205,000	1,370,000	0	3,987,500
2006	349,000	762,500	295,000	770,000	60,000	2,236,500
$2007^{1}$	310,000	620,000	145,000	155,000	0	1,230,000

<sup>&</sup>lt;sup>1</sup>Data for 2007 is based on civil penalties assessed from January 1 to October 26, 2007.

## RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK PRYOR TO ROBERT A. STURGELL AND HON. D.J. GRIBBIN

Question 1. On Tuesday of this week, the Memphis TRACON lost certain communications and radar for a period of approximately 3 hours. During this time, certain airports across the country were affected by this system failure and planes were canceled or severely delayed throughout the day. This also left many planes full of people on the tarmac for multiple hours. What was the systematic failure?

Answer. On September 25, 2007 at 11:25 a.m. CDT the Memphis Air Route Traf-

Answer. On September 25, 2007 at 11:25 a.m. CDT the Memphis Air Route Traffic Control Center experienced a major telecommunications infrastructure failure that interrupted radar, voice communications data, and backup emergency services. At the time of the outage, there were approximately 220 aircraft in Memphis Center airspace.

Question 1a. What contingency plans do you have for such failures?

Answer. The FAA has a contingency plan at each air traffic control (ATC) facility, known as an Operational Contingency Plan (OCP). Our Automated Contingency Tool 2 (ACT2) enables all ATC facilities to share their OCPs with one another in real time throughout the National Airspace System (NAS). The OCP developed by each ATC facility outlines the roles and responsibilities and instructions for executing an OCP for the parent and supporting facility or facilities. FAA Order 1900.47B Air Traffic Organization Operational Contingency Plan describes the responsibility for development and execution of the OCP by all ATC facilities that are supported by the ACT2.

Operational contingency planning is designed to facilitate an orderly transfer of ATC services and airspace from a facility experiencing a loss of service capability during an emergency. The resulting continuity helps mitigate the impact to the NAS and ensures ATC services are minimally interrupted or not at all. The Air Traffic Control System Command Center (ATCSCC) serves as the central authority and focal point for the maintenance and implementation of OCPs for the NAS.

OCPs can be triggered by natural disasters, major system failures, or other events, that directly affect personnel, the safe delivery of operational ATC services, or other technical capabilities. To the maximum extent possible, when a facility such as the Memphis Air Route Traffic Control Center becomes incapacitated or unusable, all affected airspace should be assumed by their pre-designated Support Facilities.

OCPs are constantly updated in the ACT2 as administrative, operational requirements, and lessons learned change. OCP tabletop exercises at all levels are conducted at least yearly. Lessons learned and recommendations from these exercises are documented in the ACT2.

Question 1b. How were you able to handle all the traffic in the air and on the ground at Memphis and other airports across the country (LIT)?

Answer. Following facility contingency procedures contained in FAA Order 1900.47B, Memphis Center declared "ATC-0," the condition that activates emergency transfer of air traffic control responsibilities to surrounding facilities.

The outage did not disable all communications and surveillance (radar) facilities at Memphis ARTCC. Air traffic control specialists at Memphis Center and the Command Center, initiated coordination with surrounding and underlying air traffic control facilities to initiate reroutes around the center's airspace for aircraft that were already in the air and approaching Memphis Center. These facilities included Atlanta, Kansas City, Indianapolis, Houston and Fort Worth Centers, Memphis Tower,

Nashville Tower, Fort Campbell Army Air Field, Huntsville Tower, Columbus Air Force Base, Springfield Approach Control, Jackson Tower, Little Rock Tower, Meridian Approach Control, Razorback (Fayetteville) Approach Control and Fort Smith Tower.

Memphis Center controllers also used transmissions relayed through other aircraft to reach those aircraft on the lost frequencies. In addition, air traffic control specialists at the Nashville, TN Airport Traffic Control Tower used tunable radios to contact aircraft stranded on inoperable Memphis Center frequencies. As aircraft were contacted they were switched to adjacent and underlying air traffic control facilities.

Clearing of the airspace and divestiture of Memphis ARTCC airspace were completed approximately 1 hour after the Memphis ARTCC declared ATC-0. The Air Traffic Control Systems Command Center convened telecons with the surrounding facilities and aircraft operators to provide information on the status of Memphis ARTCC. As Memphis ARTCC operational capabilities were restored, plans for resumption of air traffic service were developed and coordinated.

At 2 p.m., ZME canceled ATC-0 and by 2:25 p.m. CDT, operations were normal.

There were 582 delayed aircraft with no operational errors or deviations reported.

Question 2. I also understand that the FAA has been discussing plans to consolidate much of the ATC responsibilities across the country. One such plan is to move certain operations, equipment, and staff from Little Rock National to Memphis. Can you explain some of the ATC consolidation planning being done at the FAA

Answer. Facility consolidation enables the FAA to modernize more quickly, thus providing air traffic controllers and technicians a better working environment and more up-to-date technology. If FAA is unable to modernize and draw down its excess and aging infrastructure, its long term fiscal viability will be in jeopardy. By taking advantage of opportunities to consolidate facilities, the FAA expects to save money in reduced infrastructure, reduced facility operating costs, and reduced staffing costs, and take advantage of the advanced automation capabilities that we now have in our facilities

FAA is faced with a significant backlog of terminal ATC facility replacement rojects. It is FAA's policy to consider relocating or consolidating functions anytime the construction of a new ATCT is considered. Since 1993, FAA has safely consolidated approach control services at 22 airports and 3 military bases, including Los Angeles International Airport, into one Southern California TRACON. TRACON consolidations have already been successful in high-traffic regions across the country, including in New York, Washington, D.C., and in both Southern and Northern California FAA towers and en route centers average 27 and 43 years old, respectively. The average replacement cost for tower/TRACON projects is \$30 million.

Question 2a. If you go forward with consolidation, and one of these consolidation facilities suffers a systematic failure comparable to Memphis, how would a consolidated FAA ATC system react?

Answer. A consolidated FAA ATC system would react just as Memphis Center did during the telecommunications infrastructure failure on September 25, 2007. FAA Order 1900.47B, Air Traffic Organization Operational Contingency Plan, establishes the ATO procedures, requirements, and responsibilities to develop, coordinate, support, maintain, revise, test, train, document, and implement OCPs for FAA air traffic control (ATC) facilities, Federal contract towers (FCT), FAA flight service stations (FSS), and contract automated flight service stations (AFSS)

Question 2b. Has the DOT IG considered this type of consequence in FAA's planning?

Answer. In 2004, the FAA received a report from the DOT OIG documenting the results of an OIG audit on FAA's OCPs for its air route traffic control centers (ARTCCs). The audit found that the FAA's OCPs did not accommodate prolonged/ catastrophic disruptions at ARTCCs and recommended an analysis of a full range of alternatives for quickly restoring air traffic control services during a prolonged service disruption at ARTCCs.

In response, the FAA conducted an in-depth trade study and engineering analysis and has developed a plan to ensure the continuity of air traffic services. FAA's Business Continuity Plan (BCP) designates selected areas of the William J. Hughes Technical Center as the backup en route center. FAA has worked closely with the DOT OIG in the development of the BCP, which is our interim response to contin-

The Technical Center is well-equipped to serve as the backup en route center. The resident laboratories can be quickly configured to emulate an operational en route facility including automation, surveillance, and voice and data communications. Live data feeds ensure that controllers have up-to-the minute air traffic information for safe and efficient operations. The "spare" center will provide a rapid, long-duration solution to restore normal air traffic services for an inoperative facility. This strategy would be enacted as the next step following a contingency operation and would remain in effect until the facility is reconstructed or repaired and full en route services can be restored. This plan ensures a state of readiness so that FAA can con-

tinue to deliver essential air traffic services.

In the future, the Next Generation Air Transportation System (NextGen) will have continuity built in so that operations can transfer seamlessly from facility to facility when there is an outage. Foundational NextGen programs such as System Wide Information Management (SWIM), Data Communications and National Voice

Switch will enable this capability.

Question 3. I have an amendment to S. 1300, the FAA reauthorization bill that would require the FAA to conduct a needs assessment prior to consolidation into would require the FAA to conduct a needs assessment prior to consonuation may Memphis. It would also allow for a public comment period and publicly published criteria for consolidation as well as an independent study by the ATC Modernization Board to study consolidation recommendations from the Secretary and report them to Congress and the President. What type of assessments and studies are currently taking place to support a consolidation plan?

Answer. FAA's future planning studies analyze the NAS in a myriad of different and the find emperaturities for advancing the overall system. There are currently

ways in order to find opportunities for advancing the overall system. There are currently studies of the NAS in its entirety, and studies that examine the detailed elements and components, including realignment plans, which help support and allow

system growth as transition plans to NextGen are developed.

Question 3a. Do you believe you should conduct thorough studies on any and all

plans to consolidate?

Answer. Yes, the FAA's future planning studies are and should be conducted using rigorous and definitive processes for the evaluation of facility realignment or consolidation. FAA analysis ensures safety and existing services are maintained or enhanced. In most cases, the services are improved by realignment due to the availability of enhanced tools and surroundings for the controllers.

Question 3b. Why would the FAA invest \$30 million into state-of-the-art equipment (STARS and other new equipment) in Little Rock in 2000 and propose to dispose of it in less than 4 years?

Answer. At this time, the FAA does not have any plans to move Little Rock (LIT) operations, equipment, or staff to Memphis and there are no plans to dispose of the STARS or other new equipment currently used at Little Rock.

Question 4. A lot of your plans for modernizing the FAA and NextGen not only call for consolidation and new technologies, but also privatization. Was a private/non-governmental company at all responsible for the Memphis incident?

Answer. The outage at Memphis was attributable to a failed component within

AT&T's network. The FAA, like all Federal agencies, relies on the commercial telecommunications infrastructure, but the FAA takes measures to mitigate the risk of a failure sustained by single telecommunications carrier. In this case, the mitigations were not sufficient to overcome the combination of factors that led to the serious outage. As a result, the FAA is reviewing configurations and available infra-structure at all major facilities to determine if additional options are available to improve the diverse routing of critical services.

Question 4a. What are the identified risks of moving Air Traffic Control functions outside of the FAA?

Answer. The question of the risks of moving Air Traffic Control functions outside the FAA can be best answered by looking around the world where such a movement has already occurred. The question is no longer whether or not such a movement can be successful, but rather what is needed to best ensure success.

The separation of the "Provision" of air navigation services (the air traffic control functions) from the "Regulator," the government entity that regulates it, is a well established practice around the world. The International Civil Aviation Organization (ICAO), a body of the United Nations, includes in its guidance materials that the Air Navigation Service Provider (ANSP) function be separate from the Regulator function. Furthermore, European Commission legislation mandates the separation of the ANSP from its Regulator. This separation can be achieved by placing the ANSP and Regulator in different organizations, or by making the two functions separate and distinct in the same organization, as is currently the case here in the United States with the Air Traffic Organization and the Office of Aviation Safety being distinct groups within the FAA.

There are several examples where the Provision of air navigation services (the air traffic control functions) have been separated from those of the government Regulator (the rest of the FAA). In such cases, the ANSP organization has either:

- 1. remained part of the government as a "corporate" entity, or
- 2. become a public-private partnership with the government retaining partial ownership, or
- 3. separated completely from the government and been totally privatized.

Regardless of the nature of the new ANSP organization, the factor that has been most crucial to its success has been ensuring that the relationship between the Regulator and ANSP is crafted appropriately. This is referred to as the Governance of the Provider by the Regulator.

International experience has shown that if the Governance is well established, there would be little risk involved with moving air traffic control functions out of the FAA. However, if the Governance of the ANSP is *not* well established there are several risks:

- 1. The Provider's performance in the areas of safety and security may suffer unless strong regulation and oversight are in place. Measures to ensure compliance with standards are essential.
- 2. Efficiency and economy of the service Provider could suffer without the proper economic regulations in place. Proper governance would include financial incentives to improve efficiency.
- 3. Public confidence in the air transportation system can erode if there is not a sharp distinction between the Provider and the Regulator, negatively impacting the industry's overall well-being.

Question 4b. What are the identified safety and security risks associated with consolidation?

Answer. The FAA recently embarked on a comprehensive study of the risks to our staffed air traffic control facilities. This study will address all forms of risk to our current facilities including the previous collocations at the large TRACON Facilities. This will allow a comparison between the relative risk to our current facilities and the facilities where functions have been collocated. The study will be complete in March of 2008.

Question 5. What does the FAA currently have available on their website for consumers to find real-time and historical information and statistics for airports, flights and airlines?

Question 6. Would it be beneficial for the FAA, airports, airlines and consumers to know exact details on all delays and cancellations (real-time and historical)?

Question 7. Would determining this information help identify flaws and assist in correcting?

Answer. In response to Questions 5, 6, and 7, the Department has always felt that information is essential to ensure that consumers are able to make reasonable choices in air transportation and also to assist it in making decisions in the public interest. The Department already collects and makes available to the public a vast amount of information regarding airlines, airports, and their performance, through Federal Aviation Administration activities, the Aviation Enforcement Office, and the Bureau of Transportation Statistics. For example, the FAA currently provides, via the web, information covering. The Department also makes available on the web its monthly Air Travel Consumer Report, which contains, among other things, on-time performance data and statistics covering complaints, baggage reports, and denied boarding. That information can be found at the following site: <a href="http://airconsumer.ost.dot.gov/reports/index.htm">http://airconsumer.ost.dot.gov/reports/index.htm</a>. In addition, the Department's Bureau of Transportation Statistics (BTS) maintains extensive summary and detailed information on its website for the public about flight delays from 1987 to the most recent month available. Examples of that information, along with the website where it may be found is as follows:

- Users can find on BTS' website summary tables that compare on-time performance by year, by month nationally and for major airports. <a href="http://www.bts.gov/programs/airline\_information/airline\_ontime\_tables/">http://www.bts.gov/programs/airline\_information/airline\_ontime\_tables/</a>.
- A more detailed web application, Flight Delays at-a-Glance, allows users to look
  at annual and monthly performance nationally, for all airports and for all reporting airlines. It also provides the user with information by individual airline
  at specific airports. <a href="http://www.transtats.bts.gov/HomeDrillChart.asp">http://www.transtats.bts.gov/HomeDrillChart.asp</a>.
- BTS maintains a webpage dedicated to causes of delays, which provides users
  with monthly cause of delay reports since June 2003 nationally and by airport
  and by airline. It also provides calculations to help the user find weather's
  share of delays and the breakdown of delays attributed to the National Aviation
  System. http://www.transtats.bts.gov/OT\_Delay/OT\_DelayCause1.asp.

- A user is able to search for on-time performance by day, including minutes of delay, by flight number, airline, airport or route. The detailed statistics portion of this search application provides even more detailed information including tail numbers. <a href="http://www.bts.gov/programs/airlineine\_information/airline\_on time\_statistics/">http://www.bts.gov/programs/airlineine\_information/airline\_on time\_statistics/</a>.
- The on-time performance database on BTS' TranStats application allows users
  to perform more complex analysis and sorting of monthly, year-to-date and annual data since 1987. http://www.transtats.bts.gov/Fields.asp?Table\_ID=236.

The FAA provides real-time status information on general airport arrival or departure delays on fly.faa.gov. This same information can be accessed from a cell phone or personal digital assistant (PDA) at www.faa.gov/wireless/. Consumers can receive specific airport updates by e-mail to a cell phone, PDA, or e-mail address. This information is not stored for historical review.

# Response to Written Questions Submitted by Hon. Ted Stevens to Hon. D.J. Gribbin

Question 1. While nearly full aircraft are good for the airline business, they can cause problems when trying to rebook passengers after flight cancellations. What role does your Department believe passenger load factors played in the summer travel season and how do 2007 load factors compare to previous years across the airline industry?

Answer. Load factors in July 2007 reached an all-time high for combined domestic and international system flights. The July system load factor for domestic and international flights was 86.0 percent, topping the previous high of 85.8 percent in June. The July load factor for domestic flights was 86.4 percent, matching the previous high of 86.4 percent in June.

Load factors have been steadily increasing in recent years. The record load factors in July of this year were up from July 2006 when the system load factor was 85.0 percent and the domestic load factor was 84.9 percent. They are up considerably from July 2000, the worst previous year for delays, when the system load factor was 78.1 percent and the domestic load factor was 77.2 percent.

Higher load factors mean that there are fewer available seats for delayed or

Higher load factors mean that there are fewer available seats for delayed or bumped passengers. It is more difficult to re-accommodate passengers on other flights when planes are full or nearly full.

Question 2. This summer, a 15-year-old Alaskan girl from Juneau boarded a plane and flew to Seattle without her parents' permission in an effort to meet someone she met over the Internet. The incident exposed what I would consider a potential loophole concerning air travel and children between the ages of 13 and 17. Does the Department of Transportation have the authority to bring industry stakeholders and other interested parties together to discuss voluntary steps the industry could take to curb or eliminate unsupervised teenage air travel? What steps does the Department believe could be taken by the industry, as a whole, to address unsupervised teenage air travel and ticket purchase?

Answer. The Department has the authority to communicate with our carriers with respect to any air transportation issues. Individual air carriers have the authority to establish contract of carriage rules precluding the sale of tickets to, or the transport of, unaccompanied minors of whatever age they should choose. Starting at age 12 on most carriers (age 15 on some carriers), a child can travel alone and the airline does not require unaccompanied-minor procedures. An unaccompanied-minor procedure is a process that typically requires a parent to fill out a form, the airlines to have employees chaperone the minor, and an adult, known to the parent and identified on the form that the parent filled out, to show identification when picking up the minor.

# Response to Written Questions Submitted by Hon. Barbara Boxer to Hon. Calvin L. Scovel III

 $Question\ 1.$  What improvements did you see on the part of the airlines and the DOT since 2001, when you issued your last report on extended airline delays on the tarmac?

Answer. There are certain areas where the airlines' Customer Service Commitment provisions are working well, but greatest progress is not directly associated with whether a flight is delayed or canceled. These areas are: quoting the lowest fare, holding non-refundable reservations without penalty, responding in a timely manner to complaints, and paying larger sums for lost luggage. However, as we

found in our 2006 review 1 of selected Commitment provisions, the airlines must refocus their efforts on airline customer service by resuming efforts to self audit their customer service plans, emphasizing to their customer service employees the importance of providing timely and adequate flight information, disclosing to customers chronically delayed flights, and focusing on the training for personnel who assist passengers with disabilities.

Question 2. What do you believe is an acceptable time-frame for keeping pas-

sengers on a plane?

Answer. We believe that there should be a requirement that airlines set a time limit on delay durations before returning to a gate or, when a gate is not available, deplaning passengers using mobile air stairs, loading them onto buses, and returning to the terminal. However, we realize that a "one-size-fits-all" time limit may not be practical or reasonable and that certain procedures may need to be tailored to individual airlines and airports and will heavily depend on the situation. There may be situations or conditions that make it difficult to bring passengers back to a gate during long, on-board delays. Some of the main obstacles to this are the physical layouts of the airports. Some airports, by virtue of their design and modern facilities, may be able to safely accommodate aircraft movement. Other airports, because

of their layout design (narrow taxiways), may not be able to accommodate aircraft moving about and off-loading passengers safely.

Also, weather factors can limit off-loading options. For example, deplaning passengers onto metal mobile stairs is not feasible during a lightning storm. Likewise, it may not be necessary to deplane passengers at JFK after 2 hours, since typical Friday afternoon delays there normally last that long. However, a 2 hour, onboard delay at Austin might require deplaning activities to commence. Airlines and airports need to work together to determine the various situations that can occur and

devise plans for handling those occurrences.

Question 3. What additional steps do you think Congress should take to help al-

leviate delays for passengers?

Answer. Congress may want to consider making the Airline Customer Service Commitment mandatory for all airlines. Many of the provisions of the Airline Customer Service Commitment are already governed under existing Federal regulations, such as baggage liability limits, proper accommodations for passengers with disabilities and special needs, prompt ticket refunds, and denied boarding compensation. There are also provisions that Federal regulations require to be in the airlines' contracts of carriage, such as disclosing policies for flight cancellations and ticket refunds.

We are not opposed to a legislative mandate that would require airlines to: (1) define what constitutes a long, on-board delay; (2) set a time limit on delay durations before deplaning passengers; (3) incorporate such policies in their contracts of carriage and post them on their websites; and (4) work with airports to minimize long, on-board delays. With regard to other issues, such as the provision of meeting passengers' essential needs, a consistent policy across the industry would certainly be helpful to customers. We would certainly endorse that.

#### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO HON. CALVIN L. SCOVEL III

Question 1. I authored section 412 of the Committee-reported version of S. 1300 to require the Secretary of Transportation to better enforce airline consumer protections. Do you have suggestions for improving the requirements of this legislation, or other recommendations for how the Department can make passenger/consumer rights more of a priority?

Answer. Section 412 expands the Department's authority to investigate consumer complaints regarding, among other things, flight cancellations, problems in obtaining refunds for unused tickets or lost tickets or fare adjustments, and deceptive or

misleading advertising.

The Office of the Secretary has such authority, through the Office of General Counsel, to initiate investigations based on airline passenger complaints and shall, by law, investigate all complaints it receives from air travelers with disabilities. In our 2006 review on airline customer service issues, we found that the Department oversees and enforces air travel consumer protection requirements with a focus on investigation and enforcement of civil rights issues, including complaints from pas-

<sup>&</sup>lt;sup>1</sup>OIG Report Number AV-2007-012, "Follow-Up Review: Performance of U.S. Airlines in Implementing Selected Provisions of the Airline Customer Service Commitment." November 21, 2006.

sengers with disabilities. Investigations based on other airline passenger complaints, such as availability of advertised fares and consumers' ability to redeem frequent flyer award, are limited and the Department can only take enforcement action when violations occur.

We have made other suggestions for how the Department can make passenger/consumer rights a higher priority. In our November 2006 report, we recommended that the Department, among other things:

- revisit its current position on chronic delays and cancellations and take enforcement actions against air carriers that consistently advertise flight schedules that are unrealistic, regardless of the reason.
- determine whether (a) the maximum denied boarding compensation amount needs to be increased and (b) denied boarding compensation needs to be expanded to cover aircraft with 31 to 60 seats.
- examine through rulemaking proceedings the need to standardize the reporting
  of airline data on frequent flyer redemptions so that customers can make a
  more meaningful comparison of the benefits of each airline's frequent flyer program.

In our September 2007 report,<sup>2</sup> we made another series of recommendations to the Department to improve the accountability, enforcement, and protection afforded air travelers. Three such recommendations address the airlines' on-time performance and require all airlines that report on-time performance to the Department pursuant 14 CFR Part 234 to:

- establish specific targets for reducing chronically delayed or canceled flights.
- post on-time flight performance information on their Internet sites.
- disclose to customers at the time of booking, without being asked, the prior month's on-time performance rate for those flights that have been delayed (i.e., for 30 minutes or longer) or canceled 40 percent or more of the time.

Question 2. At my request the Senate included \$2.5 million in its FY 2008 Transportation Appropriations bill to enhance the resources of the DOT Office of Aviation Enforcement and Proceedings. In what ways could this office use this funding to be more effective? And what more will DOT be able to accomplish with this level of funding?

Answer. In our 2006 review of selected airline customer service areas, we found that the Department's Office of Aviation Enforcement and Proceedings had not conducted onsite compliance primarily because travel funds—especially those for enforcement and compliance purposes—have declined significantly since 2003. Between 2003 and 2005, travel funding for compliance and enforcement purposes declined from \$51,000 to \$3,500.

In the absence of on-site reviews, the Office must rely on self certification by the air carriers and other providers of air services. Certifications may be appropriate in some cases but should not supplant physical verification, especially in cases resulting from severe consumer harm (e.g., a pattern of civil rights violations). To the extent possible, the Department should make enforcement a priority and direct sufficient resources for staff to conduct onsite compliance verification.

## RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK PRYOR TO HON. CALVIN L. SCOVEL III

Question 1. On Tuesday of this week, the Memphis TRACON lost certain communications and radar for a period of approximately 3 hours. During this time, certain airports across the country were affected by this system failure and planes were canceled or severely delayed throughout the day. This also left many planes full of people on the tarmac for multiple hours. What was the systematic failure?

Answer. According to the Federal Aviation Administration's (FAA) internal report, a circuit card in a telecommunications component at a telephone company central office in Oakdale, Tennessee, failed. When the failure occurred, 60 telecommunications lines, including the primary and alternate FAA Telecommunications Infrastructure (FTI) service connections to the Memphis Air Traffic Control (ATC) and surrounding ATC facilities, were lost. This affected flight data, radar, and communications and resulted in 566 flight delays. The failure could occur at other locations

 $<sup>^2\,\</sup>mathrm{OIG}$ Report Number AV–2007–077, "Actions Needed To Minimize Long, On-Board Delays," September 25, 2007.

because the FTI design for Memphis is in use at other critical FAA facilities, such as the Atlanta and Jacksonville ATC centers.

Question 1a. What contingency plans do you have for such failures? Answer. FAA has standardized contingency plans for such failures. Basically, when all ATC capability is lost at an FAA facility, all aircraft waiting to depart are grounded, while all aircraft flying in the facility's airspace are instructed to contact an adjacent facility for ATC instructions. This contingency plan has been used successfully in response to a number of FTI-related ATC outages. The Memphis outage was the largest FTI-related outage so far. These contingency plans maximize safety but do so at the expense of scheduling and can lead to massive numbers of delays.

Question 1b. How were you able to handle all the traffic in the air and on the

ground at Memphis and other airports across the country (LIT)?

Answer. The Memphis outage caused 566 flight delays. FAA handled the affected air traffic via contingency planning. During the outage, controllers diverted traffic to other centers and used the assistance of terminal and command center operations to help with aircraft in flight.

Question 2. I also understand that the FAA has been discussing plans to consolidate much of the ATC responsibilities across the country. One such plan is to move certain operations, equipment, and staff from Little Rock National to Memphis. Can you explain some of the ATC consolidation planning being done at the FAA

Answer. To date, FAA has not released a formal plan for consolidating ATC facilities. Approximately 2 years ago we met with FAA officials and learned that the Agency was looking at several options to consolidate facilities, most notably the terminal radar approach control (TRACON) functions. This included co-locating the Little Rock TRACON into the Memphis TRACON. We also understand that Congress was briefed on this issue last year after concerns were raised that consolidation efforts were ongoing without congressional notification. Since then, we are not aware of any additional activities regarding consolidating ATC facilities.

Question 2a. If you go forward with consolidation, and one of these consolidation facilities suffers a systematic failure comparable to Memphis, how would a consoli-

dated FAA ATC system react?

Answer. A consolidated ATC facility functions in the same way as the smaller facilities that it replaces. Therefore, the same type of contingency plan would be implemented for a systemic outage at a consolidated facility as at a smaller facility. That being said, because a consolidated facility is responsible for a greater amount of airspace and a larger number of airports, the impact of an outage at a consolidated facility would be larger than at a smaller facility that controlled just one airport and a smaller airspace.

Question 2b. Has the DOT IG considered this type of consequence in FAA's plan-

Answer. No. The Office of Inspector General has not reviewed the consequences of a systematic failure at a consolidated air traffic control facility.

Question 3. I have an amendment to S. 1300, the FAA reauthorization bill that would require the FAA to conduct a needs assessment prior to consolidation into Memphis. It would also allow for a public comment period and publicly published criteria for consolidation as well as an independent study by the ATC Modernization Board to study consolidation recommendations from the Secretary and report them to Congress and the President. What type of assessments and studies are currently taking place to support a consolidation plan?

Answer. We are unaware of any current assessments or studies to support a consolidation plan. However, we note that the Agency's reauthorization proposal includes a provision setting up a process for consolidating air traffic facilities. The process includes the Administrator recommending facilities and services that could be realigned or consolidated to a Base Realignment and Closure Commission or -style commission, which would then make a decision on those recommendations. Both the President and the Congress would have the opportunity to review and approve or disapprove the recommendations.

Question 3a. Do you believe you should conduct thorough studies on any and all plans to consolidate?

Answer. We believe that FAA and the proposed ATC Modernization Board should conduct a complete analysis of any potential ATC facility consolidations to ensure they are cost effective.

Question 3b. Why would the FAA invest \$30 million into state-of-the-art equipment (STARS and other new equipment) in Little Rock in 2000 and propose to dispose of it in less than 4 years?

Answer. Consolidating Little Rock into FAA's Memphis area facility was not envisioned when Standard Terminal Automation Replacement System (STARS) was procured. In fact, FAA does not use STARS at its large consolidated facilities; a more capable system, Common Automated Radar Terminal System, is used at facilities such as Potomac or Southern California. It is not yet clear to us whether STARS is capable of handling requirements of a large consolidated facility.

Question 4. A lot of your plans for modernizing the FAA and NextGen not only call for consolidation and new technologies, but also privatization. Was a private/non-governmental company at all responsible for the Memphis incident?

Answer. Yes, the telecommunications equipment that failed and caused the Memphis outage was owned and maintained by the local telecommunications provider in the Memphis area (Bell South).

Question 4a. What are the identified risks of moving Air Traffic Control functions outside of the FAA?

Answer. We have not examined the risk of moving air traffic control facilities outside of FAA. We do think a primary risk in moving ATC functions outside of the FAA would be the loss of direct, governmental oversight of the readiness of the ATC equipment. Today, FAA personnel certify, inspect, and maintain ATC equipment on a daily basis. Moving functions outside the control of FAA places the equipment in the hands of third-party providers, such as local telephone companies that control the functioning of the FTI network. An extraordinary level of oversight is required.

 $Question\ 4b.$  What are the identified safety and security risks associated with consolidation?

Answer. One risk associated with consolidating FAA air traffic control facilities, and one which warrants FAA's attention, is that consolidation could increase vulnerability to a catastrophic failure. If an air traffic control facility suffers a total failure; whether it is equipment, software, or access by unauthorized personnel; air traffic control services are interrupted in the covered airspace. Since these services are now provided at separate locations, a single facility failure does not interrupt all air traffic services, as was the case with Memphis. However, if a consolidated facility were to go down, then a larger geographical area would be affected, increasing the likelihood of delays rippling through the air traffic control system.

Another area that warrants attention is how air traffic control facility consolidation changes FAA's current approach for developing and fielding technology and whether a new approach will be required. Although the ATC system is not unique in the aggregate, each en-route domain requires some site-specific modifications (i.e., site customization) due to such things as weather, traffic flows, and terrain differences. This requires some enhancement and additional testing once systems are fielded. Currently, testing and fielding practices are limited to requirements of that specific airspace. However, in a consolidated environment the system development and fielding of software or hardware would increase in complexity since a failure would impact a larger ATC area. FAA will have to develop and institutionalize quality assurance practices (for both hardware and software) to ensure that facilities can effectively and safely manage additional airspace should the need arise.

Question 5. What does the FAA currently have available on their website for consumers to find real-time and historical information and statistics for airports, flights and airlines?

Answer. The most current delay information posted on FAA's Internet site is the Real-Time Airport Status provided by the FAA's Air Traffic Control System Command Center (http://www.fly.faa.gov/flyfaa/usmap.jsp). The status information provided on this site indicates general airport conditions: it is not flight-specific.

provided on this site indicates general airport conditions; it is not flight-specific. The Department's Bureau of Transportation Statistics (BTS) provides historical information and statistics on delays, cancellations, and diversions (http://www.bts.gov/programs/airline\_information/airline\_ontime\_tables). Air carriers that account for at least 1 percent of domestic scheduled passenger revenues submit monthly reports to the BTS. These reports are used, among other

Air carriers that account for at least 1 percent of domestic scheduled passenger revenues submit monthly reports to the BTS. These reports are used, among other things, to determine the percentage of (1) flights departing and arriving on time by airport; (2) flights delayed, canceled, and diverted; and (3) the flights delayed by cause. BTS posts the flight performance statistics it receives from the air carriers on its Internet site, by month and year to date, and has been doing so since July 2003. The Department also incorporates these statistics in its monthly Air Travel Consumer Report.

On-time performance for a specific flight is also available (http://www.bts.gov/programs/airline\_information/airline\_ontime\_statistics/), but the data is for the preceding month and is not real-time data. Two of the three largest independent online travel agencies also provide on-time percentages for flights that are being

booked, even for airlines that do not report that information on their own Internet sites.

The only real-time information for specific delays and cancellations is available, through querying, on airlines' Internet sites. Consumers can query by flight number to find out if a flight is on-time, delayed, or canceled.

Question 6. Would it be beneficial for the FAA, airports, airlines and consumers to know exact details on all delays and cancellations (real-time and historical)?

to know exact details on all delays and cancellations (real-time and historical)?

Answer. We have not examined the benefits of providing aviation industry stakeholders, including consumers, with exact details on all delays and cancellations, real-time or historical. Determining the exact details can be very difficult, and there may be multiple causes. There may also be technical limitations that make this difficult or expensive to implement.

Question 7. Would determining this information help identify flaws and assist in correcting?

Answer. Again, determining the exact details on delays and cancellations can be very difficult, and there may be multiple causes. We note that historical data on delays and cancellations are available on the BTS' Internet site and are used by BTS and the Department to do trend analysis and to find patterns of chronically delayed and canceled flights—by airport, by carrier, and by flight number. These data are reported in the Department's monthly Air Travel Consumer Report.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BARBARA BOXER TO ROBERT W. REDING

Question 1. Do you believe the actions of American Airlines on December 29, 2006, when passengers were confined on a plane for as much as 9 hours with the Airline Customer Service commitment to "Meet Customers' essential needs" during long, on-aircraft delays?

Answer. We did meet the essential needs of providing food, water, lavatories, and medical assistance for customers on the flight to which you refer during its long delay, and we are particularly proud of the patience and professionalism of the flight crew that day under exceptionally trying circumstances. But we readily acknowledge that we should have made better efforts to deplane the passengers earlier than we did, and we have vowed not to repeat such lengthy delays in the future.

The details of what happened with this flight have been reviewed extensively by the Inspector General of the Department of Transportation. That review included a debriefing of the event by a member of our in-flight crew correcting much of the misinformation reported in the media. Never in the history of our company have we had such unique and catastrophic weather conditions as we did on the day in question. In retrospect, we did not handle it well in some instances. But we have learned a great deal from that experience and have implemented policies and procedures, and deployed newly developed technology, to assure that such long onboard delays will not happen again.

With that said, it is critical to emphasize that all of our decisions that day were made with maximum emphasis on the safety of our passengers and crews. We have a conservative policy about operating in adverse weather conditions. We have not and will not change that policy. While we deeply regret the discomfort that was experienced by many of our customers on those flights, we will never do anything to compromise safety.

Question 2. Please define what "essential needs for food, water, lavatory facilities, and medical attention" are as mentioned in your testimony.

Answer. We have developed detailed contingency plans at every domestic airport to address aircraft with lengthy tarmac delays. This means providing adequate water, snacks, working restroom facilities, and basic medical assistance. In each case, the airport team has an operational contingency plan that is unique for that location and includes coordination with the local airport authorities and other airlines serving the airport when appropriate. Each plan designates a local control person to coordinate activities of the local team and communicate with our central operations team at headquarters.

Response to Written Questions Submitted by Hon. Frank R. Lautenberg to Robert W. Reding

Question 1. What is your company doing to address flights that are regularly delayed (more than 50 percent of the time)?

Answer. We review our most delayed flights on a regular basis and either adjust schedules or cancel operations in response. On a daily basis, we coordinate with the FAA Air Traffic Command Center to address ad hoc operational issues and attempt to maximize air space capacity efficiencies.

Question 2. Do you currently inform customers before purchase of a fare whether any leg of their itinerary is regularly delayed (more than 50 percent of the time)? Answer. We inform customers speaking with our Reservations agents about flight dependability when requested. In addition, we are in the process of adding this information to our website so that customers making reservations on aa.com will be able to see the dependability data for the flight they are planning to purchase.

Question 3. Does your company schedule below the maximum number of operations provided by the FAA's Aviation System Performance Metric at each airport

where your company operates?

Answer. Yes. The FAA's Aviation System Performance Metric applies to all operations at a given airport. We are not aware of any airport in which American's schedules exceed the maximum operations for that facility. In some circumstances, however, the total number of all airline operations at a given airport may exceed the maximum. When such a situation arose at Chicago O'Hare a few years ago, the FAA convened a meeting of the carriers to discuss the situation. As a result of that process, both American and United made significant and voluntary schedule reductions during the most congested hours. Unfortunately, several airlines decided to add flights to ORD AFTER we canceled or moved our flights out of those critical time periods and the FAA had no way to prevent them from doing so.

Question 4. Given the complex logistics of commercial airline operations, do you believe that after a certain amount of time, passengers should be given the option to deplane a departing flight that has backed away from the gate but has not yet taken off? If so, what is an appropriate time limit? Should this be a Federal standard or guideline or should carriers be allowed to set and publish their own policies?

If not, why not?

Answer. Yes. We have a self-imposed standard that requires us to allow our passengers the opportunity to deplane or we return to a gate after a 4-hour delay unless there is a high likelihood that the flight is about to depart or there is a safety concern such as lightning, etc. We do not object to a Federal rule requiring each airline to have a well-defined policy about departing flights, but we believe that each carrier should be allowed to define its own guidelines and never compromise safety or a Captain's ultimate authority.

#### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK PRYOR TO ROBERT W. REDING

Question 1. What impact did the September 25, 2007 shutdown of Memphis Air Traffic Control systems have on your business?

Answer. It had a major operational and cost impact on American and American

Eagle. As a result of the shut down, the two carriers canceled 148 flights and took substantial delays on hundreds of others. The cost to the carriers was in the millions of dollars.

Question 2. How did your airline react to meet the needs of your customers during the Memphis shutdown?

Answer. We implemented the Customer Service Plan and local contingency plans discussed above. This resulted in the cancellations that we took. We are not aware of any flights in which we failed to provide essential amenities or services.

#### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED STEVENS TO CAPTAIN JOE KOLSHAK

Question 1. Delays that occur in New York can have a severe impact and ripple effect on traffic across the entire national system; including flights to Alaska through lower 48 hub airports. One solution that has been promoted by several economists is the concept of "congestion pricing" at capacity constrained airports. What are your thoughts on using congestion pricing as a "demand management" tool at airports that are capacity constrained, such as LaGuardia in New York?

Answer. Delta agrees that delays experienced in New York this year simply cannot be repeated again next summer. To that end, we adjusted our schedule for summer 2008 to smooth out our operations, operate fewer flights during the peak congestion period and increase the average number of seats per aircraft flying to and from JFK. On your specific question, theoretical approaches like congestion pricing

fail to recognize the realities of the marketplace, the complexities of international airline networks, and the fact that there are no good substitutes at an international hub like JFK for peak afternoon operations. Congestion pricing is ultimately a tax that will force U.S. carriers to cut flights and increase fares. It will drive out service to small communities and reduce the frequency of flights U.S. carriers offer to JFK. The ripple effect of those cuts in service would be felt throughout Delta's system, both domestically and internationally. Small community service provides a full 25 percent of the feed to support Delta's unique international flights. Reducing feed reduces the economic sustainability of much of Delta's international service and will force U.S. passengers to use foreign flag carriers connecting over Europe to reach destinations Delta offers on a direct basis from JFK like Kiev, Accra, Nice and Budapest. This flies in the face of the Administration's efforts to liberalize aviation agreements and provide new opportunities for U.S. passengers to reach international destinations on U.S. carriers. The fact is that there are 15 commercial and non-commercial airports in the NY Terminal Radar Control area (TRACON), and commercial airline operations represent only 53 percent of the total operations. Each of the commercial airports in the New York region is operating significantly below both its FAA-published design capacity and the capacity rates "called" by the FAA each day based on factors like weather, turbulence, etc., for each airport. The root problem is *not* a lack of runway space or over-scheduling. There is ample concrete for commercial airlines to operate their existing schedules. The problem is ineffec-tive management of this complex airspace, and we believe there are a number of steps the FAA can take immediately to help improve its management of the New York airspace and reduce delays.

Question 2. This summer, a 15-year-old Alaskan girl from Juneau boarded a plane and flew to Seattle without her parents' permission in an effort to meet someone she met over the Internet. The incident exposed what I would consider a potential loophole concerning air travel and children between the ages of 13 and 17. What is Delta Airlines' policy on allowing teenagers between the ages of 13 and 17 to travel and purchase tickets without parental consent? What specific policies does Delta have in place to deter unsupervised teenage travel and ticket purchase? What steps do you believe could be taken by the industry, as a whole, to address unsupervised teenage air travel and ticket purchase?

Answer. Delta defines an unaccompanied minor as a child between the ages of 5 and 14 and publishes our policies with regard to travel by unaccompanied minors on our website and will provide the information during the phone reservation process upon request. Children ages 5–7 years can only fly on nonstop or direct flights with no change of planes. Children ages 8–14 years can fly on nonstop or connecting flights, and children 15–17 are not required to have unaccompanied service but we will provide it when requested. An unaccompanied child may not be booked on the last connecting flight of the evening in order to prevent the need for an overnight stay in a hotel. Delta personnel are trained on our policies for accepting children traveling alone and are also trained to use their judgment to question the age of young passengers traveling alone to ensure that they are traveling consistently with our unaccompanied minor procedures. Delta only allows minors between the ages of 514 to travel alone if the adult responsible for the child complies with our unaccompanied minor policy and attendant procedures. Application of this policy and procedures is mandatory if a child does not travel in the same compartment with an adult at least 18 years old or the child's parent/legal guardian. Our unaccompanied minor policy requires identification of a responsible adult who will bring the child to the airport and the adult responsible for meeting the child at his or her destination. A Delta flight attendant will keep tickets and other travel documents throughout the flight, and children under the age of 15 will not be seated in an exit row. An unaccompanied minor will not be released to anyone other than the person previously designated by the parent or guardian to pick the minor up, and the adult designated must show identification and sign an acceptance of responsibility form.

In this electronic age, deterring unsupervised travel by teenagers poses a tremendous challenge as we have to strike the right balance between customer convenience provided through on-line ticketing and kiosk check-in, and the safety and security of our passengers including children and teenagers. We rely on the good judgment of our front-line personnel to question the age of any customer who appears to be too young to travel unaccompanied, and, as outlined above, have training procedures in place to ensure that our front-line personnel are equipped with the tools they need to prevent travel by an unauthorized unaccompanied minor.

Question 3. In 2007, at Delta Airlines, how many flight delays and cancellations were caused by airline crew problems including, but not limited to, duty time requirements? How does this data compare to historical crew duty time related dis-

ruptions? What is Delta doing to improve crew member related flight delays and cancellations?

Answer. While it is difficult to measure precisely the number of delays we can attribute directly to crew rest requirements, and while those that we can attribute directly comprise a very small percentage of the total number of delays we sustained (between 6-9 percent of the total), it does appear that we experienced a slightly higher number of delays directly attributable to pilot rest requirements this year than last. Flight attendant delays directly attributable to crew rest issues appear to have stayed the same (approx. 2 percent). As for cancellations due to crews timing out, in the New York area airports results were mixed—crew-related cancellations were slightly higher in July of 2007 vs. July of 2006, but were actually lower in August and September of 2007 than they were in August and September 2006. Ultimately, passenger delays and cancellations experienced across the Delta system of the second control of the second cancel of the second cancel

tem in the New York area this year were mostly attributable to weather, inefficient management of very congested airspace, and inaccurate forecasting from the FAA—not inefficient scheduling of crews. On a daily basis, the FAA reported throughput rates to our operations control center for the New York region's airports that were much higher than the agency was able to execute, making it very difficult to predict which flights would operate on time and which would not. Ultimately, given the number of systemic delays we experienced in the New York area this summer, it is not surprising that we saw a slight increase in the number of delays related to crew rest issues over last year. Regardless, those increases are symptoms of the larger airspace management failure, not the cause.

We work very hard to ensure that crew rest issues do not lead to delays or canwe work very find to entait the tree test issues to not lead to delays of car-cellations for our passengers, but it is very difficult to schedule flight crews to ac-count for systemic delays. Ultimately, if a crew cannot legally complete the leg it is scheduled to fly it must be removed from a flight for FAA-required rest. We are taking steps we can to mitigate the impact of crew rest issues by hiring additional pilots and flight attendants to ensure we are adequately staffed, but ultimately until the airspace management issue is fixed we will not be able to plan with a high de-gree of accuracy to account for systemic ATC delays that will extend the crew duty

dav.

Question 4. While nearly full aircraft are good for the airline business, they can cause problems when trying to rebook passengers after flight cancellations. What role did passenger load factors play in the summer travel season and how do 2007

load factors compare to previous years at Delta?

Answer. Delta's load factors were between 3 percent and 5 percent higher in 2007 than they were in 2006, with the New York area airports seeing the greatest increase. However, this is not an unanticipated issue—nor was it the cause of delays and cancellations we saw over the summer. For over 10 years the FAA and others in the aviation industry have been projecting a steady increase of passengers desiring to fly, and yet the Nation's air traffic control infrastructure is still operated with analog communications and radar-based navigation that has not permitted a commensurate expansion of airspace capacity. This means that to meet passenger demand, we have to operate our flights with more people onboard, and it also means that when we face delays and cancellations it is more difficult to recover and rebook inconvenienced passengers. Ultimately, with the dramatic increase of non-commercial high performance jet traffic in New York we have seen (a full 47 percent of New York TRACON activity is noncommercial) an ineffective FAA management of the New York airspace, and delays and congestion have been inevitable and recovery from such delays is much more challenging. Delta is doing its part to reduce the causes for delay and congestion that we can control, especially in the New York airspace, including reducing the number of our operations at JFK during the peak afternoon travel period and increasing the size of aircraft we operate in the New York market. But, there is only so much we can do. The FAA must address the core issues of antiquated air traffic control infrastructure and ineffective airspace management so that passenger demand can be met and delays and congestion can be significantly reduced.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BARBARA BOXER TO Captain Joe Kolshak

Question 1. According to the Inspector General's report, Delta Air Lines has not provided a time to deplane passengers stranded on departures or arrivals, why? Answer. Several factors generally contribute to the instances in which passengers face extended tarmac delays. Those include unusual or severe weather patterns, Air Traffic Control (ATC) delays and resulting directives, localized ATC system failures

and related airport and airspace capacity challenges. These are usually beyond the control of individual airlines, they change rapidly and continuously, and they are exacerbated by the fact that our national airspace ATC system is built on outdated technology that was deployed decades ago, artificially restricts airspace capacity, and is in desperate need of replacement. In order to respond to these factors in a manner that serves our passengers and our operations most effectively, air carriers currently have and must maintain the operational flexibility to respond to each of

these situations on a case by case basis.

Delta has developed and implemented a two-pronged strategy for dealing with extended tarmac delays. Our Operations Control Center (OCC) conducts extensive morning, afternoon, and evening operational planning sessions to identify potential weather systems, reroute aircraft, and selectively reduce or cancel flights and rebook affected passengers to ensure the greatest number of passengers arrives at their final destinations. This generally results in loss significant investor. Delta's their final destinations. This generally results in less significant impact on Delta's passengers when extreme weather events occur. For example, during the 2007 Valentines' Day ice event that hit New York City we canceled nearly 81 percent of the 167 operations scheduled, rather than seeking to operate those flights and leaving passengers stranded on the tarmac. Of the small fraction we operated that took lengthy tarmac delays, the majority of those were international flights whose passengers would have been even more inconvenienced had the flights been canceled and had they had to wait for days to be able to board other flights to their overseas destinations.

We proactively notify passengers of any schedule changes, provide additional onboard provisioning, continuously update passengers on the status of delays, and automatically re-accommodate them on other flights as quickly as possible when necessary. Operationally, we track each of our aircraft to determine if, despite our proactive planning efforts, any flights experience significant delay after departing a gate or landing. Our OCC seeks accelerated resolution of delays that last for an hour or more on arrival or 2 hours on departure, and alerts Delta's senior management to any delay that exceeds 2 hours in order to identify additional steps that may be taken to resolve the delay, including communication with other carriers, the

FAA, or the relevant airport's senior management.

Especially in the case of unexpected delays, the dynamics of each flight's situation change rapidly. Delays that are originally expected to be thirty minutes can often turn into an hour or longer. For example, after the June 8 localized FAA ATC computer system shut-down, multiple Delta flights bound for New York's JFK airport experienced delays upon landing over 2 hours because of the ATC-induced gridlock at the airport—there simply were no available gates in which to deplane those passengers. Similar results occur during unexpected severe weather events, congestion-

related ATC delays, and responses to security incidents, where the FAA permits in-bound aircraft to land but does not permit outbound aircraft to take off.

In those cases, we are faced with deciding whether to hold outbound aircraft at their gates and prevent inbound passengers from deplaning; allowing passengers to board and depart from their gates with increased fuel and provisions and informing them that tarmac delays are likely; or canceling outbound flights. Because in 98 per-cent of the instances where the FAA institutes Ground Delay or Stop Programs they are amended or canceled early, the least disruptive operational decision is usually to allow passengers to board and the aircraft to depart, and to keep passengers updated as to the status of their flights. However, because these situations are so fluid, we must have the operational flexibility to respond to each situation individually so that we can ensure that the greatest number of passengers, crews, and equipment arrive safely at their destinations.

Question 2. What length of time does Delta Air Lines feel is reasonable to keep

passengers on a plane without the option to deplane?

Answer. Delta's Operations Control Center (OCC) monitors the status of every Delta flight that experiences an extended on-board delay and notifies Delta officials of any delay lasting longer than an hour upon arrival, or 2 hours upon departure, to accelerate a resolution. As I mentioned before, we undertake extensive pre-cautions to prevent the occurrence of long on-board delays, but in the instances where they do occur, they are often caused by a number of factors such as severe weather, ATC delays or stops, or system outages, that are outside of our control. In light of this variety of factors and the priority we place on our passengers' and crews' safety, we firmly believe that we need to retain the operational flexibility to make decisions about when to de-plane passengers on a case by case basis. Every Delta station has developed clear and consistent procedures to ensure safety and limit inconvenience during extensive on-board delays. This includes gate and ramp sharing with other airlines and making essential services available inside the air-port. When necessary and operationally safe to do so, we will de-plane customers remotely via stairs and guide them to the terminal. We will also ensure that the essential needs of passengers, such as food, water, restroom facilities, and access to medical treatment, is provided during such extended on-board delays.

Question 3. Since Delta has not defined a time-frame appropriate for deplanement, do you feel it is up to Congress to set a time-frame for deplanement? Answer. As I stated previously, Delta takes a variety of steps to prevent on-board delays from occurring in the first place. However, in the instances where they do occur, they are often caused by a number of factors such as severe weather, ATC delays or stops, or system outages that are outside of our control and change frequently. An arbitrary deadline for deplaning passengers would likely result in significantly greater inconvenience for those passengers than permitting carriers to retain the operational flexibility to decide to deplane passengers on a case by case basis, and should not be established by Congress or by regulation.

## Response to Written Questions Submitted by Hon. Frank R. Lautenberg to Captain Joe Kolshak

Question 1. What is your company doing to address flights that are regularly delayed (more than 50 percent of the time)?

Answer. Delta invests considerable resources in monitoring its schedules and operational performance, and in making timely adjustments as necessary to ensure that its published schedules reflect, as accurately as possible, the most likely actual performance of every flight the carrier offers for sale. Delta encourages all of our employees to work toward achieving the best on-time record in the industry by offering financial incentives for both management and front line employees tied specifically to the on-time performance of the network. It is a constant focus of attention for senior management. When the Network Systems group identifies flights that are not delivering consistent on-time performance in its daily data analysis, it tries to identify the source of the problem so that the proper operational group within Delta can address it. For example, if a flight consistently departs on time but frequently arrives late, that indicates that the block time estimate may be too short. The proper solution may be to expand it accordingly. On the other hand, if the block time estimate accurately reflects the actual block time performance of the flight but the flight is regularly failing to depart on time, that indicates there may be operational issues to resolve—for example, there may not be enough time allowed in the schedule for aircraft turns, or there may be some problem at a prior station resulting in delayed arrivals of aircraft or crew. Sometimes, these issues can be addressed on an operational level; sometimes they require adjustments to the schedule to reflect a later departure time. Each flight must be addressed based upon the specific factual context of the individual flight. Often, the problem is a combination of these factors, and may take time to resolve. It is a major operational priority for Delta to diagnose and solve these problems as promptly as reasonably possible, and we are actively working toward that end for any flight identified as regularly consistently delayed. I must note, however, that this summer's significant increase in delays, specifically in the New York area, were directly attributable to weather and inefficient management of the New York airspace, over which carriers had very little if any control and for which consistent planning and execution of reliable block time was nearly impossible. Because of the airspace management issues, the actual operational capacity of each of the three major commercial airports in the New York area (EWR, JFK, LGA) was significantly below the FAA's published capacity levels.

Further, only 53 percent of the operations in the New York TRACON were comprised of commercial traffic. We are certainly doing everything we can to reduce the number of flights subject to chronic delays, including all of the steps I outlined. However, it is incumbent on the FAA and DOT to eliminate the airspace management inefficiencies and return the airports' capacity to their historic and very attainable levels, otherwise it will be very difficult to meet passenger demand for the New York area airports without seeing these sorts of delays repeated—which is unacceptable from our standpoint.

Question 2. Do you currently inform customers before purchase of a fare whether any leg of their itinerary is regularly delayed (more than 50 percent of the time)? Answer. Upon request, Delta provides customers with the on-time performance of any flight about which the information is sought.

Question 3. Does your company schedule below the maximum number of operations provided by the FAA's Aviation System Performance Metric at each airport where your company operates?

Answer. Yes, although the FAA's published performance metrics were significantly out of alignment during certain times of the day and year in certain regions of the country (New York's airports, in particular) with the agency's actual throughput. As I think I mentioned in my testimony, the FAA publishes a 100 operations per hour target for JFK, during our daily calls tells the Delta Operations Control Center on average that the airport can handle 84 operations per hour, and yet the agency only produces 68 operations per hour on average. This reduction in actual throughput resulted in the significant increase in delay and congestion we and our customers experienced this year.

Question 4. Given the complex logistics of commercial airline operations, do you believe that after a certain amount of time, passengers should be given the option to deplane a departing flight that has backed away from the gate but has not yet taken off? If so, what is an appropriate time limit? Should this be a Federal standard or guideline or should carriers be allowed to set and publish their own policies?

If not, why not?

Answer. Delta takes a variety of steps to prevent on-board delays from occurring in the first place. In the instances where they do occur, they are often caused by a number of external factors. These include severe weather, ATC delays or stops, or system outages that are outside of our control and change frequently, and our flight crews and OCC dispatchers work continuously to mitigate such uncontrollable delays. In a delay situation where a safety or medical issue requires passengers or flight crews to deplane, we will do everything we can to facilitate their getting off the aircraft safely. Although going back to the gate to allow a passenger to deplane puts the remainder of passengers on the plane at the back of the line behind other delayed aircraft, if a passenger absolutely demands to get off the aircraft in the absence of a safety or medical issue, we will also do everything we can to accommodate his or her request. However, setting an arbitrary deadline for deplaning passengers would likely result in significantly greater inconvenience for those passengers than permitting carriers to retain the operational flexibility to decide to deplane passengers on a case by case basis, and should not be established by Congress or by regulation.

#### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK PRYOR TO CAPTAIN JOE KOLSHAK

Question 1. What impact did the September 25, 2007 shutdown of Memphis Air

Traffic Control systems have on your business?

Answer. The Memphis ATC shutdown impacted our operation minimally, but it did have an impact and highlights the importance of modernizing our ATC system as quickly as possible. Our overall on-time arrival rate was down slightly as a result of the shut-down, but we took very few diversions (two) or cancellations (eight). Although we were able to route around the impacted area successfully in order to bring our flights to their destinations, we burned more fuel as a result making the operation more costly to us than it otherwise would have been. Only fourteen flights were delayed longer than 2 hours.

Question 2. How did your airline react to meet the needs of your customers during the Memphis shutdown?

Answer. Again, the impact to our operation was minimal. To the extent that passengers were impacted by delays or diversions, Delta professionals at airports, in the OCC, and in our Reservation Sales department worked hard to ensure they were re-accommodated and their travel needs were met quickly and consistently with our Customer Service Commitment. Since the shutdown occurred without any advance notice, most customers were already at the airport or onboard airplanes when the delays, cancellations, and diversions occurred. At all locations, Delta made timely announcements regarding the status of impacted flights to keep everyone informed with the most current information available. In cases where customers' flights were canceled or if customers missed their connecting flights due to a flight delay, we rebooked them on the first available Delta flights to their destinations. In these situations we were also able to identify any disabled customers, customers with special needs, or children traveling alone to ensure their needs were met.

#### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED STEVENS TO Zane Rowe

Question 1. This summer, a 15-year-old Alaskan girl from Juneau boarded a plane and flew to Seattle without her parents' permission in an effort to meet someone she met over the Internet. The incident exposed what I would consider a potential loophole concerning air travel and children between the ages of 13 and 17.

What is Continental Airlines policy on allowing teenagers between the ages of 13

and 17 to travel and purchase tickets without parental consent? What specific policies does Continental have in place to deter unsupervised teenage travel and ticket purchase? What steps do you believe could be taken by the industry, as a whole, to address unsupervised teenage air travel and ticket purchase?

Answer. In light of the situation that happened this summer Continental is re-

viewing how it could provide more protections for unaccompanied minor passengers. Having said that, Continental believes there are safeguards already in place that help prevent unaccompanied minors from traveling without the consent of an adult. First off, Continental requires a valid form of payment which most often is a credit card including the credit card number, expiration date and the card's three digit customer identification number. Generally speaking, Continental believes that parents and/or legal guardians have the responsibility of safeguarding credit card and other financial documents such that a young person does not have ready access to this payment option. For Continental, 94 percent of all domestic sales are made with a credit card and 98 percent of all domestic Internet sales (continental.com and other on-line distribution channels) are made with a credit card.

Secondly, Continental ticketing agents require a valid form of identification in the form of a driver's license, identification card or passport prior to checking in a passsenger. At this point, the agent can flag an unaccompanied minor and unless the minor has their legal guardian present to fill out required documentation, Continental will not accept a young minor for travel. This secondary identification check can also occur at the TSA security checkpoint where passenger identification is being metabold to information on the printed beauting pass.

being matched to information on the printed boarding pass.

Continental considers an unaccompanied minor to be any passenger between the Continental considers an unaccompanied minor to be any passenger between the ages of 5 and 14 (Continental does not accept passengers under the age of 5 without legal guardian) traveling alone. So, when a passenger has shown their form of identification and is younger than 15 years old, Continental's policy requires parental/legal guardian consent and proper documentation before the passenger can travel. In addition, Continental policy states that unaccompanied minors will be in the presence of a Continental employee at all times of travel at the origin airport, on the aircraft, when making connections at the hub and at the destination airport. Continental requires that a child's legal guardian supply the name, address and telephone number of the adults accompanying the minor to the departure airport and those individuals that will be meeting the minor at the destination airport. A Continental employee will not release an unaccompanied minor to the meeting party until an identification match is made with the meeting party. Unaccompanied minor information is documented in the minor's itinerary and on paperwork that remains with the child through the journey.

Presumably the restrictions placed around the financial transaction of the ticket and the check-in/identification check at the airport are such that minors traveling without the consent of a legal guardian are the very rare and extreme cases.

Question 2. In 2007, at Continental Airlines, how many flight delays and cancellations were caused by airline crew problems including, but not limited to, duty time requirements? How does this data compare to historical crew duty time-related disruptions? What is Continental doing to improve crew member related flight delays and cancellations?

Answer. Typically Continental reports delays and/or cancellations per DOT guidelines which classify delays into five categories that include air carrier delays (delays that an airline is responsible for), security delays (holding flights for passengers delayed in processing through TSA security check-points), extreme weather delays, national aviation systems delays (delays due to FAA air traffic control management) and the final category is delays due to late arriving aircraft, either due to a previous delay under the airline's control or not.

For the period January through August 2007, DOT statistics show the category of delays specifically due to airline management total only 29 percent of all delays. For DOT Continental data, delays under the airline's control represent 18 percent

of total Continental delays.

Continental's internal reports for January through September 2007 show that Continental experienced a total of 15,675 flight delays due to crew problems. These delays represent only 5.0 percent of Continental scheduled flights and are down from 2006 where crew delays were 5.3 percent of Continental scheduled flights. In 2007 the average crew delay was approximately 24 minutes in duration. During FAA's JFK schedule reduction meetings occurring the week of October 22, 2007, the carriers were informed that FAA modeling shows JFK taxi-out delays due to congestion average 22 minutes, or basically the same duration of a Continental delay due

to crew problems. Crew scheduling problems account for a small percentage of delays under Continental's control and the delay incurred by crew delays is generally no longer than a delay incurred due to air traffic management in the most congested airspace in the country—New York/New Jersey. While Continental, as noted below, continues to take measures to reduce delays under the airline's control—crew scheduling or otherwise—real and meaningful efforts should be made by the U.S. Government to address New York/New Jersey air space congestion to im-

the U.S. Government to address New York/New Jersey air space congestion to improve delays due to ATC management.

As for cancellations, Continental experienced just 215 cancellations due to crew problems for the first 9 months of 2007. These cancellations represent less than 1.0 percent of all Continental scheduled flights. Said another way, only one of 1,445 flights has been canceled this year due to crew problems which is less than one flight per day. These numbers are flat as compared to 2006.

Continental is constantly adjusting its policies and operational practices in an effort to improve schedule reliability. Continental has made adjustments to its crew scheduling policy so that pilots and flight attendants are kept on the same schedule to avoid downline connecting crew delays. In the past, if a flight from Houston to Tulsa was to be serviced by a cockpit crew arriving into Houston from one city and the cabin crew was arriving into Houston from a different city, the Tulsa bound the cabin crew was arriving into Houston from a different city, the Tulsa bound the cabin crew was arriving into Houston from a different city, the Tulsa bound the cabin crew was arriving into Houston from a different city, the Tulsa bound the cabin crew was arriving into Houston from a different city, the Tulsa bound the cabin crew was arriving into Houston from the cabin crew was arrived to the flight would be held for both crew types arriving at the hub on two different flights from two different cities.

Today, once the crew (all together) arrives into Houston they can be expedited to the Tulsa flight and the aircraft can depart. And while having the Tulsa flight be delayed is not preferable, knowing where the flights' entire crew is located allows for Continental to better estimate the crew's arrival into Houston and their departure to Tulsa. This better scheduling also allows for better departure estimates for the Tulsa flight which translates into greater transparency for the consumer. Also, scheduling crews together allows for a full compliment to be in one city at the same time, thus if a set of crew members arrived into Houston for a later flight they could possibly be rescheduled to operate the Tulsa bound aircraft (potentially reducing the delay of that flight) and then the late arriving crew could operate the other crew's flight, thus reducing the delay of the Tulsa flight and maintaining the on-time performance of the second flight. Keeping all crews on the same schedule allows for improved tracking, scheduling, rescheduling, on-time performance and transparency for the consumer.

Continental, to the extent possible, schedules pilots and flight attendants with the same aircraft throughout their workday. When it is possible to do so, having the crew and aircraft together in the same location improves schedule reliability by reducing the need to coordinate crew on the one hand and aircraft on the other hand. Tying crews to aircraft is not always possible given unique situations that may come about in the network. For example, a 737 and crew arriving into Houston from Tulsa might be split apart as the 737 is the right aircraft to accommodate consumer demand to fly to Mexico City but the inbound cabin crew from Tulsa does not have a Spanish speaking translator among them. Given Continental provides foreign language speaking cabin crews on international flights, the aircraft in Houston going to Mexico City will get a different crew that has a translator. This is just one example of why it is not always possible to coordinate crew and aircraft 100 percent of the time.

In certain "trouble spots" around the Continental system, such as at Newark, Continental has increased crew scheduling buffers for late night flights, which while reducing productivity and increasing layover time, reduces crew rest delays for the next morning's flights. Continental has found that the costs associated with increasing down time for overnight stays is offset by the benefit of not having to delay early morning flights the next day, which would be the outcome otherwise when crews arrive late and need mandatory rest periods.

Finally, Continental works hard to ensure an appropriate number of "reserve" pilots and flight attendants are "on-call" to compensate for known and unknown absences. Continental also attempts to prepare cockpit crews with needed information, such as flight release documents, weight and balance measurements and fuel loading instructions well in advance of departure such that the crew can be prepared ahead of time and can spot potential problems and get corrections made before ac-

tual departure time.

In answering your question about crew related delays Continental would be remiss if we did not highlight the main problem of flight delays and cancellations which is poor management of the Nation's air traffic control system, particularly New York/New Jersey airspace management. Continental firmly believes a well funded FAA that has a steady and reliable flow of funding based upon an approximation of use of the system will allow for ATC technology and management improvements. Smarter use of the ATC system leads to greater efficiency for the operators in the system and better schedule reliability for the users of the system—the

Continental continues to be concerned with attempts to derail New York City air-space redesign, which the FAA estimates will drive a 20 percent improvement in the region's flight delays. And what is good for the New York/New Jersey region is ultimately beneficial to the entire aviation system from the northeast to the northwest given the demand for air travel to/from the region and the corresponding number of aircraft operating in and out of New York City area airports.

west given the demand for air travel to/from the region and the corresponding number of aircraft operating in and out of New York City area airports.

Of equal concern to Continental are "cosmetic" NY/NJ delay/congestion fixes currently under consideration by the Administration including congestion pricing. Congestion pricing only adds unnecessary taxation to the passenger who uses NY/NJ area airports. Basically congestion pricing says the Administration has failed to meet the challenge of managing air space effectively to meet market demand. Instead, the Government is saying it wants to try to impact consumer demand, take away consumer choices and competition and threaten true market economics.

Question 3. While nearly full aircraft are good for the airline business, they can cause problems when trying to rebook passengers after flight cancellations. What role did passenger load factors play in the summer travel season and how do 2007 load factors compare to previous years at Continental?

Answer. Continental just recently announced a record summer (July, August, and September) 2007 mainline load factor (LF) of 84.3 percent. Record load factors are not a bad thing—they are testimony to the fact that Continental is appropriately allocating its assets in such a manner that the traveling consumer is able to take advantage of safe, reliable and quality air service. Full airplanes are a sign that our passengers like our service and that the Nation's travel needs are being met.

While summer 2007 load factors were a record for the airline, it should be noted 2007 was only 1.6 percentage points above the same period in 2006 whose load factor was 82.7 percent. For 2005, 2004 and 2003 Continental's mainline load factors were 81.7 percent, 81.5 percent and 80.0 percent respectively. Over a 5-year period of time Continental's load factor has grown 4.3 percentage points or just under 1 percentage point per year. Looking at load factor on a year to year to year basis the increases have not caused insurmountable challenges in reaccommodating passengers when conditions dictate such practice. Rather, Continental's customer load is increasing at a manageable rate.

Continental's load factor has not increased on flat capacity. The airline has been growing and adding more seats in the marketplace, which allows for new passengers to fly on Continental and the growing capacity helps when room is needed to rebook passengers off of a previously capacity flight.

passengers off of a previously canceled flight.

During the summer of 2007 Continental operated 27.1 billion available seat miles (ASM). An ASM is a measure of airline capacity and it is a factor of the number of seats flown and the distance the seats are flown. The 2007 number is a 5.4 percent increase over 2006 at 25.7 billion ASM. The year over year increases in ASM from 2006 to 2005, 2005 to 2004 and 2004 to 2003 respectively are 8.6 percent, 7.9 percent and 7.0 percent which shows capacity continues to be added in the market.

One of Continental's "best practices", as recently noted by the DOT IG audit in its report on "Actions Needed To Minimize Long, Onboard Flight Delays", is to precancel flights such that the airline is not going into a known major weather or ATC event operating a schedule that in all practical terms could not be operated. Continental precancels flights to thin operations during thunderstorm activity, heavy snow/rain, fog, icing events or when the FAA has or will be taking steps to reduce ATC capabilities. These pre-cancellation events start happening at the point Continental is sure an event such as weather or ATC slow downs are going to impact the airline's operation, be it days in advance of an event or hours prior to a flight departure as Continental does not cancel flights without good reason

departure, as Continental does not cancel flights without good reason. While there is an inconvenience of canceling a passenger's flight and re-accommodating the passenger for future travel, it is the right thing to do when considering the other option is a full aircraft backing off the gate, or arriving at an impacted airport, that is operating at a level of efficiency far below normal only to have the plane sit for hours while waiting for a potential take off slot or free gate to taxi into. And practically speaking, airports close on their own due to weather or other major events and the FAA or other governments can shut down airspace such that airlines are forced to cancel flights.

Pre-canceling flights gives Continental additional time to reaccommodate passengers ahead of a major weather event, it gives the airline and consumer more time to look for other travel options and precancellations prevent customers from having to make the frustrating trip to the airport only to have their flight canceled

having to make the frustrating trip to the airport only to have their flight canceled. Continental will try to avoid canceling the last flights of the day in any particular market which allows the airline opportunities to re-book passengers on later flights during the same day and Continental will try to avoid canceling flights in markets that only have one flight. Continental will not "bump" a passenger on a future flight to re-book a passenger from a previously canceled flight as this would cause additional customers to be inconvenienced.

Continentals' pre-cancellation practice works because of the coordination that occurs with Continental's operations centers, customer service and reservations groups. As soon as a decision is made to cancel a flight, Continental's reservations and customer service groups immediately begin their service recovery efforts by contacting passengers at home and through the passenger's preferred means of contact

to reaccommodate for future travel.

Just like it has a strategy for pinpointing which flights to cancel, Continental also has a series of "steps" it works by when rebooking passengers regardless of the reason the flight was canceled or when it was canceled. Continental will first attempt to reaccommodate passengers on Continental flights to the passenger's intended destination point, or when possible and per the customer's approval, to another point within the same metropolitan area the passenger was originally traveling to. For example, should a future flight to Los Angeles LAX be full on a particular day the passenger would like to travel (when being re-booked) and should there be availability on a flight to Orange County which is in the Los Angeles Metropolitan area, the passenger may be reaccommodated to Orange County pending the passenger's approval.

Continental will make every best effort to reaccommodate passengers on Continental flights, but should another airline have availability that meets the immediate needs of the passenger, Continental may rebook the passenger on another airline per the passenger's request. Continental has provided evidence of re-booking passengers to other airlines in recent communications with the DOT IG's audit of events that occurred during extreme weather in Texas in December 2006. Also, Continental's Customer First Commitments indicate the airline will reaccommodate passengers to other airlines pending circumstances and ticketing rules. Finally, Continental may waive ticket change fees when reaccommodating passengers due to cancellations and may also give passengers the opportunity to receive a full refund

should the passenger not want to travel at a later date.

As Continental did during the Denver December 2006 blizzards and at Cancun during the evacuation of passengers post Hurricane Wilma, Continental, and pending aircraft availability and other operational constraints, will add additional frequencies in markets and/or upgauge existing aircraft to help transport passengers that have been affected by continuous cancellations. It is important to note, however, that upgauging and additional flights may not always be possible as Continental at any given point is utilizing nearly its entire fleet to operate the flight schedules passengers demand.

Response to Written Questions Submitted by Hon. Frank R. Lautenberg to Zane Rowe

Question 1. What is your company doing to address flights that are regularly delayed (more than 50 percent of the time)?

Answer. DOT defines chronically delayed flights as flights which operate at least 45 times in a 90 day period within a 15 minute departure range and which arrived more than 15 minutes later than published arrival time for 70 percent of the 90 day period.

Airlines report delays and/or cancellations per DOT guidelines which classify delays into five categories that include air carrier delays (delays that an airline is responsible for), security delays (holding flights for passengers delayed in processing through TSA security check-points), extreme weather delays, national aviation systems delays (delays due to FAA air traffic control management) and the final category is delays due to late arriving aircraft, either due to a previous delay under the airline's control or not. For flights that fit the DOT definition and/or for flights that are delayed less frequently (you ask about 50 percent of the time), Continental is taking different actions to improve schedule reliability regardless of whether the delay is under the airline's control or not.

In cases where airline management has caused a delay, such as crew scheduling, Continental has taken steps to address delay causing problems. For example, Continental has adjusted crew scheduling policies so that pilots and flight attendants are kept on the same daily schedule which helps to avoid downline connecting crew delays—having to hold a flight while the cockpit crew arrives from one city and the cabin crew arrives from another city. When possible Continental will also tie crews

to aircraft for an entire operational day which eliminates delays resulting from an aircraft being located in one city and crew in another city and the customers having to wait for the airline to pair up crew and aircraft. In certain "trouble spots" around the Continental system, such as at Newark, Continental has increased crew scheduling buffers for late night flights, which while reducing productivity and increasing layover time, reduces crew rest delays for the next morning's flights. Finally, Continental works hard to ensure an appropriate number of "reserve" pilots and flight attendants are "on-call" to compensate for known and unknown absences.

Continental is also taking measures to improve flight on-time performance, to the extent possible, when flight delays are caused by external factors such as FAA Air Traffic Control (ATC) management. Airports in the New York/New Jersey region are the most delayed airports in the country, with Newark (Continental's hub airport) being the No. 1 most delayed airport. Continental is therefore an active participant in DOT's New York Aviation Rule Making Committee (NYARC) process and advocates for operational and technical fixes for the region's delay problems. Some of these fixes can be implemented immediately such as using both runways at Newark for arrivals (using a procedure called RNAV) when airport conditions permit such operations. Another operational enhancement that would generate near term results includes utilizing new technology that helps controllers line up incoming aircraft so that they can safely land on converging runways at NYC airports, thus reducing inbound delays. This software and equipment is in use at other airports around the country and could be used at NYC as well. (Continental provided a full list of operational enhancements for addressing New York/New Jersey delays with our written testimony previously submitted to the Committee).

The issue at New York/New Jersey is an airspace management problem, and therefore cosmetic fixes being considered by the Administration that only work to artificially suppress consumer demand (and do not address underlying airspace management problems) such as congestion pricing, slots or caps won't work. Continental continues to urge the FAA to treat delay problems as a regional issue, to make sure any solution applied at JFK be equally applied at Newark and to proceed immediately with operational enhancements and NYC Airspace Redesign which

FAA itself estimates will improve regional delays by 20 percent.

Having said all of this, Continental is not standing by waiting for policy changes to take effect. Continental has done a number of things and has spent millions of dollars to improve Newark on-time performance which ultimately has positive affects across the airline's entire network. Continental has historically scheduled its Newark hub below FAA recommended flight levels (including other airline schedules), Continental depeaked the Newark hub years ago to allow for a more even flow of flights throughout the day as opposed to scheduling groups of flights at specific times, Continental has hired additional specialists at the airline's operations center and Newark ATC tower to better coordinate activity between the airline and the FAA and Continental has pioneered off shore departure routings that allow aircraft to depart on time over the Atlantic and then circle around congested NYC airspace to the south and west. These offshore routings are more expensive considering their increased crew time and fuel requirements, but overall provide the benefit of schedule integrity and getting customers where they need to go as expeditiously as possible. Continental has also increased flight times (which again allows for greater schedule integrity despite the additional costs of increased flight times) and Continental has retimed delay-proned arrivals into Newark to arrive later at night when there are less flights in the region.

Question 2. Do you currently inform customers before purchase of a fare whether any leg of their itinerary is regularly delayed (more than 50 percent of the time)? Answer. As noted in Continental's Customer Service Commitment No. 2, Continental will inform customers of flight on-time performance when the customer calls Continental reservations and inquires as to flight performance. Customers can also find current days, previous days and next day's flight on-time status via continental.com.

Continental notes the DOT Inspector General's recent recommendation that carriers should provide historical flight on-time performance on carrier websites and Continental is currently considering this recommendation and how best Continental could provide such information on our website.

With the potential capability to view historical flight information on the airline's website and the fact Continental currently discloses flight information when prompted by the consumer via airline reservations, Continental does not believe providing flight on-time performance via telephone reservations without being prompted by the consumer would be necessary.

Question 3. Does your company schedule below the maximum number of operations provided by the FAA's Aviation System Performance Metric at each airport where your company operates?

Answer. Where Continental has a large share of total airport operations, which is at our hubs at New York/Newark, Cleveland and Houston, the airline generally

schedules at or below FAA's management capabilities.

As noted in Question 1, Continental has historically scheduled the airline's Newark hub below FAA operational capabilities and has considered other airline operations in setting its schedule for Newark. There is no doubt Continental has been a good policing agent in ensuring Newark does not experience uncontrolled growth while other carriers have pursued irrational scheduling at New York JFK. There is also no doubt that unless the Administration takes a regional approach to New York/New Jersey delays and treats Newark like JFK by either capping or slotting Newark, then Continental's capability to control Newark operations will be lost due to a flood of flights from airlines that have been restricted at JFK. Governing officials simply must not push the JFK delay problem to Newark and the only way to do so is to manage the situation at the regional level and implement measures at all three New York/New Jersey airports and Teeterboro.

In Cleveland and Houston, Continental's schedules for both airports are below the

benchmark capacity.

Question 4. Given the complex logistics of commercial airline operations, do you believe that after a certain amount of time, passengers should be given the option to deplane a departing flight that has backed away from the gate but has not yet taken off? If so, what is an appropriate time limit? Should this be a Federal standard or guideline or should carriers be allowed to set and publish their own policies? If not, why not?

Answer. Continental is committed to accommodating the needs of customers on aircraft that are experiencing unusually long delays on the ground without access to the terminal. Specifically, Continental commits to undertake every reasonable effort, without ever sacrificing the safety of our passengers and crew, to provide food, water, restroom facilities and access to medical treatment for passengers onboard an aircraft that is on the ground for an extended period of time without access to

the terminal.

Continental has committed to the process and procedures of its Customer Service Commitment No. 8—"Essential Needs Onboard the Aircraft During Long Delays" when aircraft are being delayed beyond 2 hours or, in some cases, before the 2-hour mark. The decision to implement the processes and procedures in Commitment No. 8, as further outlined below, is made across many internal work groups and many levels of station and headquarters management, including the most senior airport services and operational corporate officers. Such decisions are made in conjunction with Continental's System Operations Coordination Center (SOCC), the local Continental airport management, Continental Airlines corporate office management, the pilot in command of the aircraft and potentially FAA/ATC control.

When a ground delay event occurs Continental's SOCC will initiate a number of steps to protect our customers. As noted above and documented in the Customer Service Commitments, at the 2-hour mark, or potentially earlier, SOCC will contact the pilot and local station management to determine if take-off is imminent and if not, then decisions will be made to provide passengers the provisions we commit to and/or to safely deplane passengers at a remote parking spot or at the terminal. Continental has a plan in place that says even at the 2-hour mark, we will evaluate each specific situation and commence deplaning if appropriate rather than holding

passengers on the aircraft.

If the ground delay is expected to exceed 3 hours, the communication process is elevated to the senior management level. This is done by a pre-established system of communication between operational managers and senior officers such that when delays hit 3 hours, messages are sent to internal e-mail group boxes that are regudecreasing. At this three-hour point, a coordinated decision is made whether to continue with the flight as "live" or to begin safely deplaning passengers at a remote parking spot or at the terminal.

When the ground delay is expected to hit 4 hours, and unless take-off is deemed imminent, actions will be taken to deplane the passengers at a remote parking spot or at the terminal as soon as practicable. As the policy indicates, when a flight's ground delay reaches 3:45 the SOCC operations director will issue a message that advises "delay approaching 4 hours" and will communicate with all necessary stakeholders to determine if departure is imminent, and if not, how to proceed with deplaning the customers. So in other words, unless the plane is expected to depart within a reasonable period of time of the fourth hour of delay, Continental will make every best effort to deplane passengers remotely or to return the aircraft to the terminal as soon as practicable.

Continental also tailors its plan to accommodate for arriving aircraft versus de-

parting aircraft.

Continental is in the business of flying customers safely and securely from one point to the next, on time and as scheduled. It is unfortunate that external events such as an inefficient air traffic control system can sometimes impact all airlines' ability to operate on schedule but Continental works to limit the burden to the pas-

senger as much as possible.

Because it is difficult to predict the impact of external events (like weather and air traffic control volume) and because each flight is unique in its destination and duration, Continental believes it would be a bad decision to cancel a flight that has been delayed for two, three or 4 hours when that flight is very likely to depart within a reasonable period of time. The result of a hard limit (or premature cancellation) would be that an entire plane load of passengers would be stuck in the location where they boarded the plane which is inevitably worse than the decision to hold for a departure that is expected shortly. Continental is concerned that a "one policy for a departure that is expected shortly. Continental is concerned that a one policy fixes all circumstances" or a rigid policy that requires an airline to deplane passengers at a remote parking spot or to return to the terminal after a pre-determined delay interval could be more customer un-friendly with severe negative impacts (e.g., families and into) iduals caught in remote locations with no or limited overnight accommodations) than if the flight were able to sit for a short period longer and the passengers were flown to their intended destination.

#### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK PRYOR TO ZANE ROWE

Question 1. What impact did the September 25, 2007 shutdown of Memphis Air Traffic Control systems have on your business?

Answer. The impact to Continental was minor, relative to other airlines who have

greater volumes at Memphis, or who have hubs closer to the Memphis ATC.

That said, several of our airborne flights took en route delays as FAA routed aircraft around the affected air space. Continental also took some pre-departure delays to board additional fuel for aircraft whose flying time was increased due to the reroutes. Finally, we had approximately five aircraft in the process of taxiing before departure when the Memphis shutdown occurred, and these aircraft had to return to the gate to board more fuel.

The shut down of Memphis ATC operations is illustrative of the precarious state of the Nation's air traffic control system and the need for modernization of the FAA ATC system. Continental firmly believes a well funded FAA that has a steady and reliable flow of funding based upon an approximation of use of the system will allow

for ATC facility, technology and management improvements.

Question 2. How did your airline react to meet the needs of your customers during the Memphis shutdown?

Answer. As noted in responses above, Continental has a number of customer service commitments and operational policies that provide protections to the consumer

during delay events, despite the cause of the delay.

Continental will provide real time flight status information to consumers via our website or through Continental reservations for passengers not already at the airport. Continental airport agents are trained to provide flight status updates approximately every 20 minutes in gate boarding areas to keep passengers at the airport updated as to the status of their flights and the reasons for delays. Continental also has a series of processes it will follow to provide essential services to passengers onboard aircraft that are experiencing long ground delays and Continental will take action at the 4-hour mark, unless departure is deemed imminent, to deplane passengers as soon as practicable.

Depending upon the nature and duration of the delay event (and time of day of the delay), Continental may provide meal vouchers and hotel accommodations to

passengers whose flights are delayed.

Continental may also rebook delayed passengers on later Continental flights that meet the customer's travel needs and depending upon the situation Continental may rebook passengers on other airlines.

While unfortunate, the Memphis shut down was treated like any other delay event/situation which Continental is well prepared to handle.

 $\bigcirc$