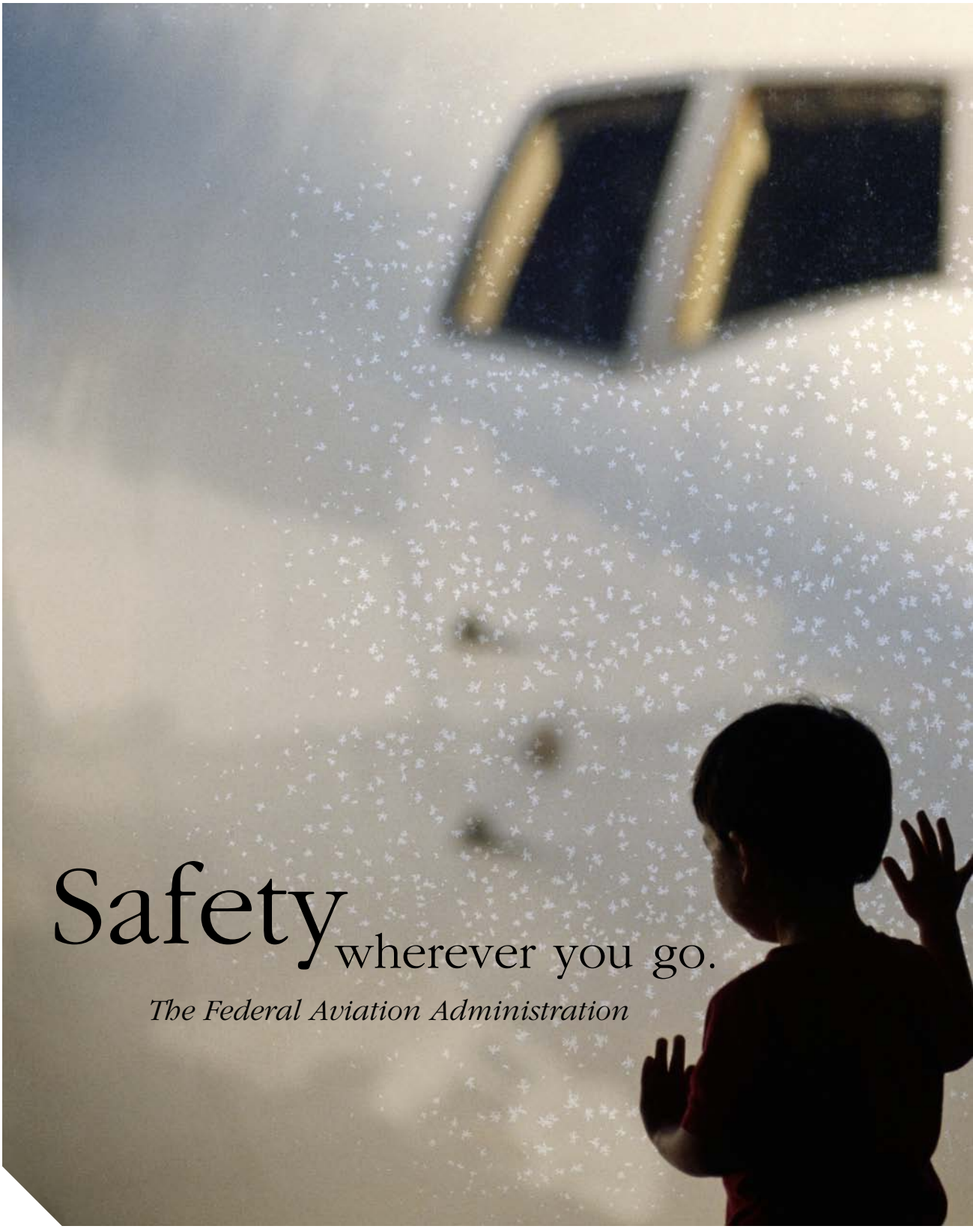
Federal Aviation Administration

2008-2012

FAA Flight Plan

Charting the Path for the Next Generation


Safety wherever you go.
The Federal Aviation Administration

We make America fly

The FAA provides the safest, most efficient aerospace system in the world. We set our sights on safe and efficient transportation, spreading the net of safety to the four corners of the globe. This is our strategy to make it happen.

TABLE OF CONTENTS

Photo by Laurie Zaleski / FAA William J. Hughes Technical Center

© Blend Images / Alamy

INTRODUCTION

Aviation's Second Century Begins with an Eye Toward the Future.

These are basic truths: aviation is safer than ever, capacity must expand to meet demand, and we must be good environmental stewards. The FAA's plan to redesign America's aviation system supports each of these in a way that will keep things running smoothly to 2025 and beyond. We must continue the productive relationships we have forged with our international partners. And we must continue to provide all Americans the best possible value for their investment. The tax dollars we spend must benefit everyone.

Our skies are safe. They are so safe that we now monitor incidents and accidents that *didn't* happen. Working in partnership with the aviation industry, we have achieved an incredibly low rate of commercial fatal accidents. In the last 10 years, the commercial fatal accident rate has dropped 57 percent. No other mode of transportation has a safety record that meets our high standard, domestically or abroad. We have also achieved significant reductions in general aviation accidents across the country.

Even so, the bottom line is that the status quo — regardless of the fact that we're in an era of unprecedented safety — will not meet the needs of the future. As passengers continue to fly in ever-increasing numbers, and as more planes continue to fill the skies, we have to be ready and able to handle that growth safely and efficiently. Our aviation system must continue to change to meet the growing needs of our country, engaging the brightest minds in the industry, encouraging our employees to reach for excellence in all they do, and taking advantage of new technologies. Our biggest challenge today and in the future is meeting capacity needs.

The technology and procedures in NextGen — shorthand for the Next Generation Air Transportation System — can handle all of this and more. As the current system has grown to handle over 2 million enplanements a day, it's clear that our capacity is now stretched thin. With new developments, such as Very Light Jets and Unmanned Aircraft Systems, and the increasing growth of low-cost carriers, the challenge to increase capacity will only intensify in the years ahead.

We need to act now to meet this challenge. Simply put, we need to overhaul our aviation system. NextGen does that, and the plan is well under way. NextGen transforms our 40-year-old technology into state-of-the-art operations.

The transformation is already happening on multiple fronts. This Flight Plan is our guide to NextGen over the next five years. For example, we've implemented new performance-based navigation procedures to increase departures at Dallas/Fort Worth by up to 20 additional operations per hour. Automatic Dependent Surveillance — Broadcast (ADS-B) transforms radar and voice-based air traffic control into digital and satellite-based surveillance enabling air traffic separation services and aircraft-to-aircraft situational awareness. The number of accidents in Alaska by aircraft using ADS-B has decreased sharply. We are expanding the program for use in the Gulf of Mexico based on this success. We are also testing a prototype Continuous Descent Arrival (CDA) at Atlanta Hartsfield Airport, which projects immediate savings in fuel while also decreasing noise.

Photo by Jon Ross / FAA

In short, with NextGen we're boosting capacity, increasing safety, and diminishing our impact on the environment while doing so. Aviation accounts for less than three percent of greenhouse gases. In conjunction with plans for alternative, cleaner burning fuels, new procedures and technology are lowering the harmful emissions that are already the lowest of any mode of transportation.

We recognize that we are not alone in our efforts. In the spirit of partnership and cooperation, we work both at home with our own aviation industry and customers, and internationally with other countries and international organizations to ensure seamless aviation systems around the world. Canada, China, Europe, India, Japan, Mexico and others are moving forward with their own modernization programs, including satellite-based navigation technology, and we will be in step with them.

In all that we do, we are using America's resources responsibly. We're responding to the call by the taxpayer and Congress to

KEVIN CHAMNESS *Oceanic Service Improvements, Air Traffic Organization, Washington Headquarters* ✈ Kevin, you commented that we needed to clarify ADS-B as a surveillance application within a satellite-based system to avoid confusion among our readers and industry. As the cornerstone of NextGen, we agree we need to be as clear as possible. Because of your comment, we've changed the narrative in the Flight Plan on ADS-B.

operate with cost efficiencies in mind. We continue to consolidate facilities and administrative staffs where appropriate. Our cost control measures continue to reap savings, and all of our major capital projects are on time and on budget. The FAA also continues to outperform many other Federal agencies in awarding procurements to small businesses. In FY 2007, the FAA awarded approximately $1 billion — 30 percent of its direct procurement dollars — to small businesses.

We continue to push for a cost-based financing system for the FAA with dedicated funding for NextGen capital projects. Our financing system should be balanced, fair, and provide predictability, reliability, and stakeholder involvement. In February, we sent legislation to Congress that accomplishes these goals and fully funds NextGen. With this proposal, the factors that drive our costs — such as how many flights users make and how far they fly — would also drive our revenues. With a cost-based structure, users would also understand the impact of their actions and see a direct relationship between investments we make and the costs they pay. Our legislation proposed to link revenues and spending through cost-based fuel taxes and user fees to both encourage the most efficient use of the airspace and to invest more robustly in the transformation to NextGen.

We know that NextGen is a system that will take many years to fully implement, but we will have key accomplishments in the next five years as well. The following chart shows some of our key near-term deliverables within the NextGen framework, as well as brief explanations of the key programs and established targets.

NEXTGEN TRANSFORMATIONAL PROGRAMS 2008-2012

DESCRIPTION	ACTIVITIES
ADS-B *Automatic Dependent Surveillance Broadcast* ADS-B is the future of air traffic management. ADS-B uses GPS technology to provide controllers and pilots with more accurate aircraft position information. Provide Flight Information Services and Traffic Information Services to the cockpit along with ADS-B data.	**2008** • Achieve Initial Operating Capability (IOC) for Broadcast Services [Traffic Information Services — Broadcast / Flight Information Services — Broadcast (TIS-B / FIS-B)] **2009** • Obtain Approval of Terminal (CARTS) and En Route (Host / ERAM) Separation Standards **2010** • Issue Final Rule • Obtain Approval of Terminal (STARS) and En Route (MEARTS) Separation Standards • Achieve Initial Operating Capability (IOC) at key sites (Louisville, Gulf of Mexico, Philadelphia, and Juneau)* • Exercise Option for Segment 2 (remainder of NAS)*
Surface Management Safety Enhancements Surveillance provides position information on the airport surface that is displayed to service providers and to pilots in appropriately equipped aircraft.	**2008** • Develop advanced applications including Conflict Detection in the Cockpit and Air to Air Applications through Human in the Loop Simulations and completion of Initial Safety Hazard Analysis and documentation.
DATA COMM *NextGen Data Communications* Using internet-like communications, pilots and controllers can exchange routine messages and clearances via data link.	**2008** • Determine FAA's initial investment strategy for the data communications program and the concomitant rulemaking strategy for airborne equipment.
CDA *Continuous Descent Arrivals* CDA procedures provide for lower noise and emissions and increased fuel efficiency.	**2008** • CDA used during very low traffic situations at Louisville and Los Angeles.

* Note: These activities are currently planned for the end of Fiscal Year 2010.

DESCRIPTION	ACTIVITIES
NextGen Demonstrations and Infrastructure Development Demonstrations help define operational concepts and the supporting technologies. Infrastructure improvements allow controllers to maintain capacity services despite increased complexity of traffic.	**2008** • Conduct Oceanic Trajectory Based Operations demonstration **2009** • Conduct High-Density Airport Time-based RNAV/RNP Flight Demonstration **2008-2011** • Carry Out Infrastructure Engineering for Trajectory Based Operations
Addressing Environmental Issues Provide necessary scientific knowledge, accelerate improvements in aircraft engine and airframe technologies, explore use of alternative fuels, and enhance use of air traffic management procedures to reduce significant aviation noise and emissions impacts.	**2011** • Develop and demonstrate the feasibility of use of alternative fuels in aircraft systems, including successful demonstration and quantification of benefits. • Establish, develop, and implement metrics to better assess climate impacts from commercial aircraft operations. **2012** • Develop science-based understanding of impacts of aircraft noise and aviation emissions on human health and welfare. • Develop reliable, inexpensive methods to measure PM and HAPs emissions that will be used to populate analysis databases.
SWIM *System Wide Information Management* SWIM provides high quality, timely, network approach to simultaneous data exchange between many users and data sources.	**2009** • Identify initial set of SWIM standards and make available to both internal users and external users such as DoD, DHS and airline operations centers to govern their access to FAA's traffic flow and flight management **2012** • Achieve initial standardized SWIM segment 1 capability in traffic flow and flight management between the traffic flow management system (TFMS) and en-route automation modernization (ERAM).

Meeting the Needs of the Future
The Flight Plan is all about keeping our eye on the future. It has proven to be a tool of enormous strategic and tactical significance. In the past, the FAA's to-do list had literally thousands of items on it. The Flight Plan focuses that list to the top 30 agency targets that position us to meet the future successfully.

Here is our report card on what we've already accomplished. We continue to make strides to implement our current Flight Plan, including NextGen and the major technologies that will form its underlying structure. Our progress includes:

Automatic Dependent Surveillance-Broadcast (ADS-B)
ADS-B is a satellite-based technology that broadcasts aircraft identification, position and speed with once-per-second updates. It is the backbone of NextGen. The Capstone program in Alaska, using a combination of ADS-B, multi-function display (moving maps, terrain proximity, weather and flight information, other aircraft), flight monitoring and expanded IFR operating areas, along with other safety programs, contributed to a 40 percent drop in aviation accidents among participants. UPS partnered with the FAA in an ADS-B pilot program and expects a 30 percent reduction in noise and a 34 percent decline in emissions for ADS-B-equipped aircraft below 10,000 feet. A partnership with the helicopter industry will bring ADS-B to the Gulf of Mexico in December 2009.

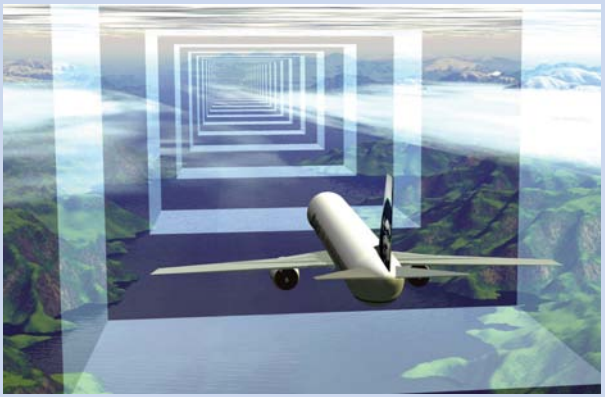
Required Navigation Performance (RNP)
Substantial progress with RNP has been made to date, and a total of at least 250 RNP Special Aircraft and Aircrew Authorization Required (SAAAR) approach procedures are expected by 2012. This program will result in increased navigational precision by aircraft and can reduce spacing — and thus increase airspace capacity — without compromising safety.

Continuous Descent Arrival (CDA)
CDA is a procedure that optimizes the aircraft approach from the beginning of its descent to touchdown. With CDA, noise and emission levels are substantially reduced. A CDA procedure was designed and successfully instituted at Los Angeles International Airport. It will go into operation after the completion of a runway upgrade in 2007. Also, a CDA procedure was demonstrated for Atlanta Hartsfield Airport in April 2007.

© Cessna Aircraft Company

Breaking Ground at LaGuardia
In February 2007, we broke ground on a new control tower at New York's LaGuardia Airport. It is one of 22 new tower facilities planned for the national airspace system that will increase safety and improve efficiency.

The 233-foot-high tower is scheduled to be commissioned by June 2010.



Alaska RNP © 1995-2007 Alaska Air Group Inc.

Modernizing Air Traffic Services

We completed the deployment of User Request Evaluation Tool (URET), which automatically detects and advises air traffic controllers of predicted traffic conflicts and changing weather situations in the immediate area and adjoining airspace. The tool also helps controllers create alternative routes and reduce the number of changes required. In addition to increasing safety, the tool is proving to have significant cost savings as well. With URET, controllers can more frequently assign pilots direct routings, allowing aircraft to fly at more fuel-efficient altitudes and wind-optimal routes.

Improving Runway Safety

Relative position on runways and taxiways is critical information for aircrews. That knowledge is especially important at night, in poor weather, or when the crew is unfamiliar with the airport layout. Pilots will continue to look out their windshields and follow Air Traffic Control guidance, but with a lot more help. In March 2007, the FAA approved an invaluable electronic tool in the cockpit called the Electronic Flight Bag — a moving map with "own ship position" display.

Creating Capacity with Reliever Airports

The FAA continues to place great emphasis in providing additional capacity at the 35 Operational Evolution Partnership (OEP) airports. In addition to the OEP airports, there is an initiative under the Capacity Goal area to direct Airport Improvement Program (AIP) funding to reduce capacity constraints at secondary commercial service and general aviation/reliever airports located within the congested metropolitan areas. AIP funding is directed to projects such as new runways, taxiways, aprons, lighting, marking, navigation aids, and signage.

GLORIA VANBRAKLE *Employee Safety Specialist, Office of Human Resource Management, Washington Headquarters* ✈ Gloria, you pointed out the importance of our employee safety programs. We agree. We're proud of our accomplishments in employee safety and thanks to your suggestion, we've added this in our accomplishments section to highlight our efforts and improvement in this area.

STEVE SILVERS *Service Operations Center Manager, Air Traffic Organization, Great Lakes Region* ✈ Steve, you suggested that we look at the number of runways at existing airports around the country to see if they could be utilized in relieving some of the congestion at larger airports. Because of your comment, we've highlighted our efforts in providing additional capacity with reliever airports, including an additional initiative to direct Airport Improvement Program (AIP) funding to reduce capacity constraints.

Further, the OEP Airport Development Domain has been revised to include these same airports and will track high visibility projects that reduce capacity constraints.

© Firefly Productions / Corbis

Improving Safety Requirements for Long-Range Flights

In light of the dramatic increases in long-distance flights and extraordinary reliability of today's aircraft engines, we issued a new rule designed to minimize mechanical problems through enhanced maintenance procedures and to protect passengers and flight crews in the rare event of an emergency diversion over remote areas. Since airplanes occasionally divert for reasons unrelated to engine problems — such as mechanical problems or passenger medical emergencies — the rule requires that airplane systems be able to support lengthy diversions in remote and sometimes harsh environments. It also requires proactive flight planning, crew training, and awareness of appropriate facilities at or close to diversion airports that may protect passengers and crew from the elements.

Enhancing Air Security

The FAA is responsible for protecting the nation and U.S. interests in aviation by conducting a broad range of activities. FAA plans and implements diverse air traffic and airspace management-related measures to support national defense, homeland security, law enforcement, national response efforts, and ensures the operational availability of the National Airspace System (NAS) by protecting the facilities that constitute the systems that in turn provide air traffic services.

© Boeing

Photo by Julio Gandara / FAA

Enhancing Air Tour Safety

In February 2007, we issued new regulations that require air tour operators to meet the safety requirements in the expanded National Air Tour Safety Standards of the Federal Aviation Regulations. The new regulations include requirements for enhanced passenger briefings before takeoff, life preservers and helicopter floats for specific over water operations, and helicopter performance plans.

Making Air Travel More Accessible

In December 2006, we certified the double-decker Airbus A380 jet — the world's largest commercial airliner — to fly passengers and cargo. FAA jointly issued type certificates with the European Aviation Safety Agency (EASA) as a result of international collaboration. With the ability to carry up to 800 people, this jet may help increase capacity and reduce congestion.

In July 2007, Boeing rolled out the 787 Dreamliner, which will carry up to 330 passengers, use 20 percent less fuel than airplanes its size, significantly reduce emissions, and allow quieter takeoffs and landings. We're working with Boeing to certificate the Dreamliner by 2008.

Furthering International Aviation

The FAA signed a new Memorandum of Agreement with the Ministry of Civil Aviation of the Government of India on November 13, 2006. This provides the foundation for increased FAA assistance to India for the development and modernization of its aviation infrastructure. India is the third fastest growing domestic aviation market in the world and is an important partner in global efforts to create a seamless global navigation satellite system.

REDUCE COMMERCIAL AIR CARRIER FATAL ACCIDENT RATE

In 1997, the White House Commission on Aviation Safety and Security issued a challenge to the FAA and the aviation industry — to reduce the air carrier fatal accident rate by 80 percent in ten years. This year marks the end of that ten-year period. Although we did not achieve that ambitious target set ten years ago, system safety has still increased dramatically. Aviation has achieved a rate of 0.022 fatal accidents per 100,000 departures — a 57 percent drop.

Through the continuing effort and cooperation of the aviation industry and the FAA, we have achieved the safest period in aviation history. For this reason, we are unveiling a new performance metric for commercial air carrier safety — fatalities per 100 million persons on board. The old metric has value and we will continue to track it, but this new metric is more relevant to the flying public, and is a better measure of individual risk. It is also a metric that will allow us to track infinitesimal safety improvements as we drive our accident rate lower and lower. And the long-term target is no less audacious — we aim to cut this risk in half by 2025. We will continue to work in partnership with industry to make this vision a reality.

Cost Savings

We implemented the FAA Telecommunications Infrastructure Program to upgrade our legacy telecommunication systems with an integrated system. This program decreases costs and increases productivity while responding to increased security needs. It allows the FAA to match cost to performance at multiple locations today, and support the future needs of NextGen.

As this Flight Plan is focused on the FAA's top 30 performance targets, we know there are often questions about the details of these targets. Each of these targets has a specific performance metric for implementation, called our Portfolio of Goals, and we invite you to visit our website at *www.faa.gov* to see those profiles and delve into the details. These profiles describe how we create each of our metrics, why we chose a specific metric, where our data comes from, any statistical issues surrounding the metrics, and the completeness and reliability of our measures. Additionally, each FAA line of business and staff office posts its annual business plan on our website. These business plans include our core business programs which also support the targets in our Flight Plan's four Goal Areas.

© David Sailors / Corbis

INCREASED SAFETY

Our goal is to achieve the lowest possible accident rate and constantly improve safety.

Bottom line upfront: Safety is our North Star. Even though our system is the world's safest, we will always head toward improvement.

When the White House Commission on Aviation Safety and Security challenged the FAA and the aviation industry to reduce the air carrier fatal accident rate by 80 percent in ten years, we initiated a joint government-industry analysis of causal factors most frequently involved in aviation accidents. This formed the basis for joint government-industry efforts to reduce the number of accidents in both the commercial and general aviation areas.

This year marks the end of that ten-year period. We have achieved a 57 percent drop in aviation accidents. While we did not achieve the full target set ten years ago, we continue to work towards its accomplishment. In the three years prior to setting this goal, the United States averaged about six commercial fatal accidents and 266 deaths per year.

Today, thanks to new technology, revised rules and procedures, and increased training, not only are there fewer commercial fatal accidents each year, but the chances of survival have increased significantly. In the past three years, the United States averaged approximately two fatal accidents per year and 28 deaths per year.

The Flight Plan continues to help us focus on areas that will boost a record that's already the safest in history. General aviation accidents are down. The fatal accident trend for commuters, rotorcraft and on-demand aircraft all continue to drop as well. Pilot training and education are paying immediate dividends. Runway incursions are down. Air traffic control errors are occurring at a rate lower than in the previous two years.

We've worked to increase the level of safety by implementing new technology and procedures. Required Navigational Performance approaches enable pilots to fly much more precise routes into airports. We put 40 in place this year including ten at Atlanta and another three in Dallas/Fort Worth. Precision and safety go hand in hand.

The FAA, with other federal agencies and operators in the NAS, is adopting a Safety Management System (SMS) that relies on developing standardized language, processes, and tools used to manage safety risk. SMS relies on four "pillars" to manage risk: Safety Policy, Safety Risk

Management, Safety Assurance, and Safety Promotion.

The newest frontier — commercial space — continues its sterling safety record. We've had 44 licensed launches in the last five fiscal years. Since FY 2006, there have been eight permitted launches. We have never had a licensed or permitted commercial space launch resulting in a public injury or fatality.

Photo by Jon Ross / FAA

The section that follows lists our 2008-2012 initiatives, and unveils our new safety metric — fatalities per 100 million persons on board in 2008. This is a metric that has meaning for the flying public and measures an individual's risk to fly. It includes all passengers and crew of any scheduled air carrier, including cargo flights. We are currently at a rate of 8.8828 fatalities per 100 million persons on board in FY 2007. We will target a continual improvement each year, moving to a rate of 7.6490 in FY 2012. As low as this metric is today, our goal is to cut it in half by 2025 and reach the rate of 4.4414 per 100 million persons on board.

Safety is our bottom line. It's non-negotiable.

NEW OPERATIONAL ERROR PROCESS

We've spent the last year improving how we measure the severity of operational errors. Unlike the previous method, which relied on factors such as flight paths or the subjective measure of whether the aircraft was under air traffic control, our new measurement process, referred to as the "Separation Conformance," is objective. It determines the severity of an operational error based on the closest proximity of the two aircraft and the percent of required separation that was maintained.

The Separation Conformance measure creates a reliable, rate-based measure of safety that complements the rate-based measures of capacity. Such objective measures will help us better understand the level of risk in the National Airspace System (NAS) and will allow us to critically assess the effects of changes to the NAS.

Photo by Laurie Zaleski
FAA William J. Hughes Technical Center

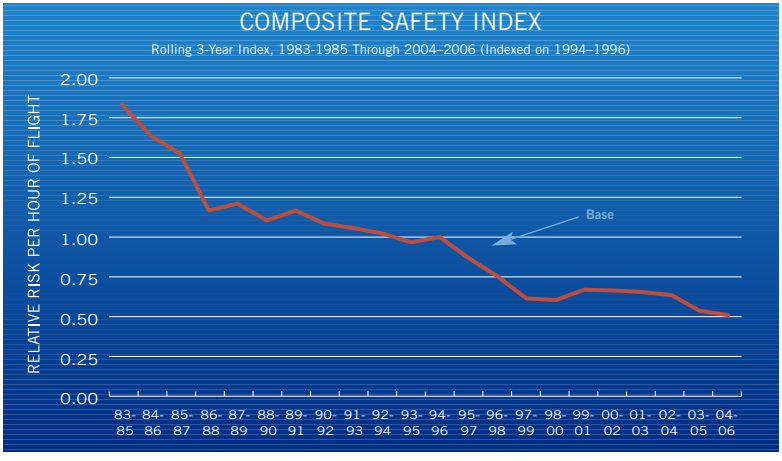
TOP **SAFETY** ACCOMPLISHMENTS FOR FY 2007

Reduced General Aviation Fatal Accidents. As a result of a variety of factors, including FAA's and industry's cooperation to increase training and education, we continue to meet our goals of reducing general aviation fatal accidents. To date, we have experienced 254 fatal accidents, versus a target not-to-exceed ceiling of 264. We remain on track to be under our ceiling of 331 fatal accidents for the year. Personal and Commuter/On Demand fatal accidents continue to decrease, and we are recording the lowest ever number of rotorcraft accidents since we began measuring.

Significant Reduction in Alaska Accidents. Alaska experienced a significant decrease in aviation accidents in the state during FY 2007. With 56 accidents year-to-date, the number remains well below the current target not-to-exceed ceiling of 75.

Commercial Space Launch Target Maintained. To date, there has never been a licensed commercial space launch resulting in a public fatality or injury, and we strive to maintain this unblemished safety record. Two successful licensed launches occurred this year, as did the first launches conducted under FAA-issued experimental permits. None of these eight permitted launches had fatalities or injuries suffered by the public.

Significant Reductions in Operational Errors. During the first half of the fiscal year, system performance has improved over last fiscal year by 25 percent and is operating 26 percent better (3.15 per million activities) than the performance target (3.15 per million) of 4.27 per million activities. Through March 2007, operational errors were occurring at a rate lower than the previous two fiscal years and each Service Area is performing better than their respective performance targets.



OBJECTIVE 1

Reduce commercial air carrier fatalities.

Strategy

Continue the evolution toward a performance-based NAS by using a satellite-based navigation system and onboard technologies. These improvements allow aircraft greater flexibility to navigate airspace more safely, efficiently, and in a more environmentally sound way than the current ground-based navigation system.

Initiative

- Develop and implement Required Navigation Performance (RNP) approach procedures. Through FY 2012, we will publish at least 250 RNP Special Aircraft and Aircrew Authorization Required (SAAAR) approach procedures.

- Provide third parties the ability to design, flight check, and implement RNP approach procedures with FAA providing safety oversight.

© Alamy

Strategy

Address safety concerns and issues, expand cost-effective safety oversight and surveillance, and continue research into the causal factors of accidents.

Initiatives

- Send critical safety rules to the Office of the Secretary of Transportation within 90 days of the planned date.

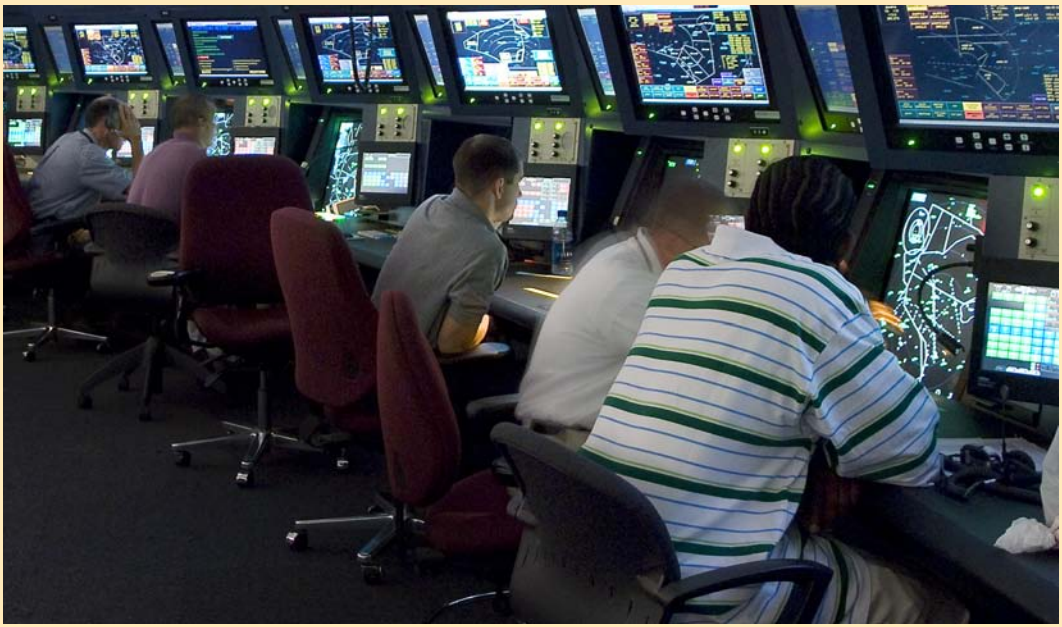
- Address the National Transportation Safety Board's identified safety issues.

- Maintain ISO:9001 registration to certify that FAA's Aviation Safety Organization meets the same standards expected of those we regulate in the aviation industry.

- Continue research to identify human factors that may contribute to accidents. Develop and implement strategies, methods, and technologies that reduce safety risk.

LEWIS FISHER *Air Traffic Organization, Washington Headquarters* ✈ Lewis, you suggested that we include that the FAA will perform safety oversight of the design, flight check and RNP approach procedures. In response to your comment, we've rewritten the initiative to include this as a priority in our plan to make it happen. Thank you for helping to keep safety our top priority.

Photo by Laurie Camilien-Pietrak / FAA



- Identify and implement activities designed to streamline and improve the Notice to Airmen process.

- Where practical, upgrade Runway Safety Areas to meet standards.

Strategy

Promote and expand safety information sharing efforts, including FAA-industry partnerships and data-driven safety programs that identify, prioritize, and address risks before they lead to accidents.

Initiatives

- Promote national data sharing and analysis programs, such as the Aviation Safety Information Analysis System (ASIAS).

- Complete implementation of the Air Transportation Oversight System by December 2007.

- Continue implementing Commercial Aviation Safety Team (CAST) initiatives.

- Improve the safety of transporting hazardous materials by air.

Performance Target

- Cut the rate of fatalities per 100 million persons on board in half by FY 2025.

OBJECTIVE 2

Reduce the number of fatal accidents in general aviation.

Strategy

Implement technologies and systems that will help pilots operate aircraft as safely as possible.

A pilot waits for departure clearance from an Air Traffic Controller during Sun 'n Fun 2007. © Jon Ross / FAA

WARREN FOSTER *Supervisory Air Traffic Control Specialist, Air Traffic Organization, Western-Pacific Region* ✈ Warren, you suggested that we provide oversight on the quality of service on the Automated Flight Service Stations (AFSS), and your comment helped generate discussion with our senior executives. We agree with your suggestion and have added a new initiative to help us improve the quality of service. We will set quality standards and measure service received against these standards.

Initiatives

- Continue delivery of dependent surveillance to key sites. Provide text and graphical data through programs such as Automatic Dependent Surveillance-Broadcast/Traffic Information Service-Broadcast, and Flight Information Service Broadcast to the cockpit through flight information services. Increase situational awareness by improving the capabilities of small aircraft with integrated displays, data link, and traffic information.
- Develop and publish Wide Area Augmentation System (WAAS) approaches. In FY 2008, we will publish 300 WAAS approaches.
- Manage the Automated Flight Service Station (AFSS) contract to provide quality flight services to the contiguous United States, Puerto Rico, and Hawaii.

Strategy

Update and improve standard procedures and guidelines for general aviation operators.

Initiatives

- Continue research to identify human factors that may contribute to accidents. Develop and implement strategies, methods, and technologies that reduce safety risk.

- Develop policies, procedures, and approval processes to enable operation of unmanned aircraft systems (UAS).

- Working with industry, by FY 2009, develop and baseline a target rate for general aviation fatal accidents to replace the current performance measure.

Strategy

Expand and accelerate implementing safety and air navigation improvement programs in Alaska.

Initiatives

- Achieve full operational capability of WAAS.

- Expand the Capstone Program as part of the NAS through a phased approach starting with Bethel and Southeast Alaska with the goal of statewide implementation.

- Continue to optimize weather camera benefits and explore alternative technologies.

- Support the Medallion, Circle of Safety, and Alaska Flight Service Safety programs.

- Improve rural airports to permit 24-hour Visual Flight Rules (VFR) access.

  By FY 2009, establish an improved statewide public RNP/RNAV WAAS enabled route structure.

- Provide high quality flight services to our customers in Alaska.

Performance Targets

- By FY 2009, reduce the number of general aviation and nonscheduled Part 135 fatal accidents from the 1996-1998 average of 385 per year to no more than 319 accidents per year. This measure will be converted from a number to a rate in FY 2009. The targets for FY 2009-2012 are under development.

- By FY 2009, reduce accidents in Alaska for general aviation and all Part 135 operations from the 2000-2002 average of 130 accidents per year to no more than 99 accidents per year. This measure will be converted from a number to a rate after FY 2009. The targets for FY 2010-2012 are under development.

OBJECTIVE 3

Reduce the risk of runway incursions.

Strategy

Identify and reduce runway incursion collision risks.

Initiative

- Improve training, procedures, evaluation, analysis, testing, and certification to reduce the risk of runway incursions resulting from errors by pilots, air traffic controllers, pedestrians, vehicle operators, tug operators, and individuals conducting aircraft taxi operations.

Courtesy Sea Launch

Strategy

Modify and improve existing surface movement infrastructure.

Initiatives

- Install Airport Surface Detection Equipment-Model X (ASDE-X) and retrofit ASDE-X equipment capability into selected Airport Movement Area Safety System (AMASS) installations, such as Chicago O'Hare and Atlanta Hartsfield Airports.

- Continue developing, testing, evaluating, and deploying runway status lights at AMASS and ASDE-X airports.

Performance Target

- By FY 2010, limit Category A and B (most serious) runway incursions to a rate of no more than 0.450 per million operations, and maintain or improve through FY 2012.

OBJECTIVE 4

Ensure the safety of commercial space launches.

Strategy

Continue developing tools, guidance, and regulations for reducing the safety risks for commercial space launch and reentry operations, including those involving human space flight.

Initiatives

- Ensure that safety oversight keeps pace with changes in the commercial space transportation environment.

- Partner with National Aeronautics and Space Administration (NASA) and Department of Defense (DOD) to manage the integration of space transportation operations.

- Work with the Commercial Space Transportation Advisory Committee (COMSTAC) to determine appropriate Human Space Flight safety performance targets.

Performance Target

- No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.

OBJECTIVE 5

Enhance the safety of FAA's air traffic systems.

Strategy

Identify and reduce operational error collision risks and influence their reduction.

Initiatives

- Modify evaluations to help reduce operational errors.

© Aviation Image Management / Alamy

- Improve measurement and analysis of safety performance by implementing automated tools (Traffic Analysis and Review Program) and developing enhanced safety metrics and more efficient performance reporting processes.
- Provide pilots with safe access to the NAS by analyzing and disseminating aeronautical and meteorological information to pilots and controllers through innovative systems.

Performance Target

- Limit Category A and B (most serious) operational errors to a rate of no more than 1.95 per million activities by FY 2012.

OBJECTIVE 6

Implement a Safety Management System (SMS) for the FAA.

Strategy

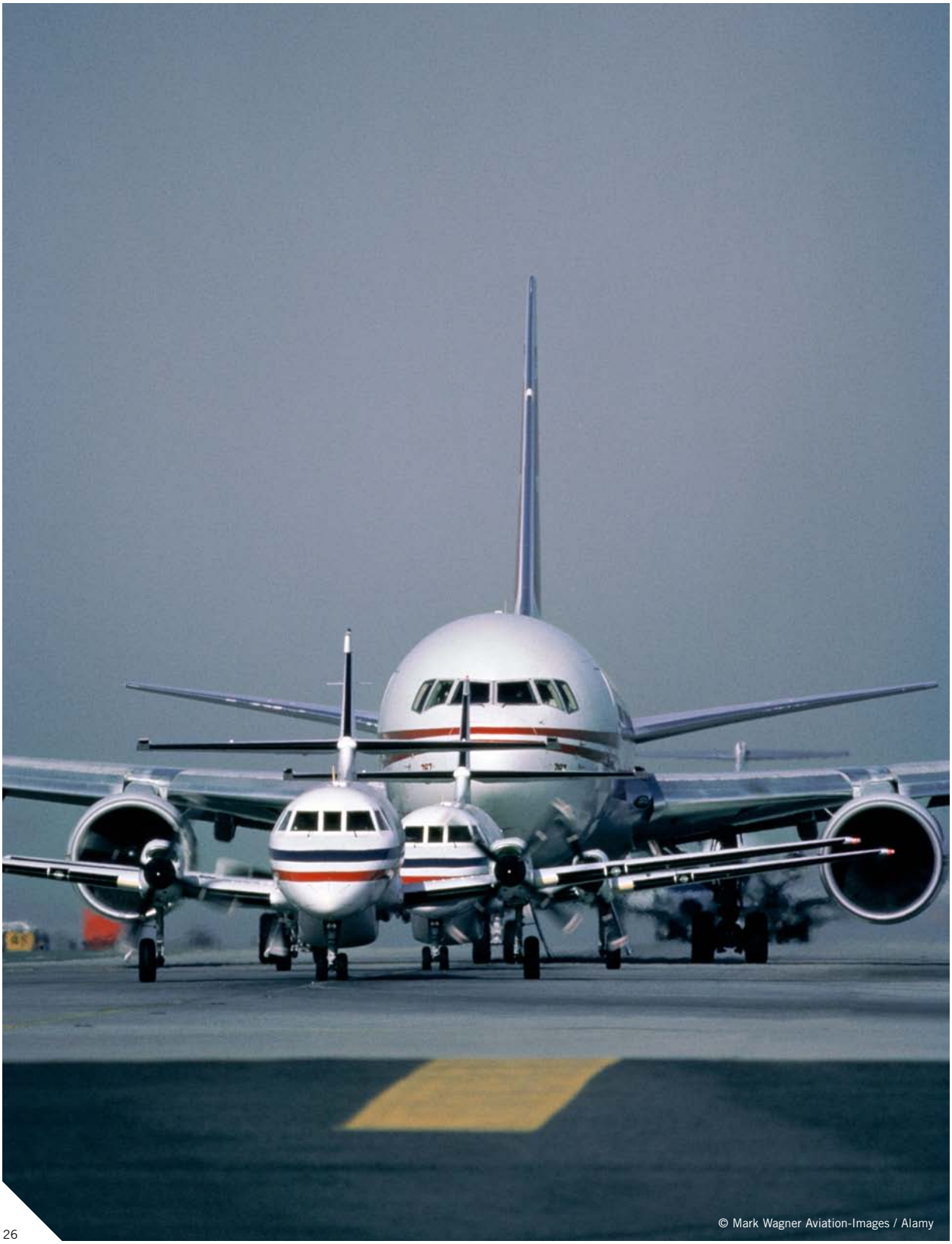
Design, develop, and implement a Safety Management System (SMS) for the FAA.

Initiatives

- Develop and implement agency-wide SMS guidance.
- Design and implement SMS for the delivery of air traffic services.
- Design and implement SMS for safety regulation and certification.
- Design and implement SMS for airport regulation and certification.

Performance Targets

- By FY 2010, implement SMS in the Air Traffic Organization, Office of Aviation Safety, and Office of Airports. By FY 2012, implement Safety Management System (SMS) policy in all appropriate FAA organizations.



© Mark Wagner Aviation-Images / Alamy

GREATER CAPACITY

Our goal is to work with local governments and airspace users to provide increased capacity in the United States airspace system that reduces congestion and meets projected demand in an environmentally sound manner.

While our system is safer than ever, there's little question that it's rapidly reaching critical mass in its capacity. Eighteen of our nation's biggest airports have resumed their highest pre-9/11 commercial passenger levels. The capacity of our airports, our runways and our skies are stretched thin. 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. We project that by 2014, without any changes to our system, we will see the system with delays 62 percent higher than they are today.

The FAA is taking steps right now to prevent these future delays. One of the key components of NextGen will be a space-based air traffic control and surveillance system called Automatic Dependent Surveillance-Broadcast (ADS-B). It's designed to increase real-time situational awareness in the cockpit, freeing the system of much of the ground-based hardware and procedures that were created 50 years ago. ADS-B will allow planes to fly closer together with the same margin of safety, resulting in significant increases in airspace capacity.

Over the last seven fiscal years, the FAA and local communities have commissioned 13 new runways at the 35 Operational Evolution Partnership (OEP) airports, providing them with means to accommodate 1.6 million more annual operations. Currently, eight OEP airports have airfield projects under construction (3 new runways, 2 airfield reconfigurations, 1 runway extension, 1 end around taxiway and 1 centerfield taxiway). When complete, these airports will enable about 400,000 more annual operations and significantly reduce runway crossings at these airports.

Additionally, we are committed to advancing aviation's environmental stewardship even as we increase capacity. Through it all, each of these efforts to boost capacity must be green. The FAA just launched an institute in partnership with other government agencies and industry to research alternative fuels. Our ultimate aim is a carbon-neutral aircraft. It's a bold statement, but taking care of the planet is an issue that requires action today.

WHY WE INCLUDE ENVIRONMENT IN CAPACITY

Environmental performance targets in the FAA Flight Plan are linked to the Capacity goal, reflecting the FAA commitment to increasing the capacity of the National Airspace System (NAS) in an environmentally sound manner.

The ability to achieve the needed capacity of the NAS is closely linked to environmental performance of the NAS. The by-products of aviation — primarily noise and emissions — are major constraints to continued growth. Preliminary analysis by the Joint Planning Development Office (JPDO) shows that noise and emissions could increase between 140-200 percent over the next 20 years, becoming a significant constraint on planned capacity increases. The FAA is committed to managing aviation growth in an environmentally sound manner and has an aggressive plan to accomplish this through mitigation, operational measures, measurements and standards, and research and development. In addition, energy issues have significantly gained more attention in the last few years due to sustained price rises and renewed interest in alternative fuels.

The agency expects environmental issues will continue to create challenges over the five years of this Flight Plan. Continuing efforts to reduce aircraft noise exposure and mitigate aviation emissions will be critical to ensuring the necessary capacity growth in the NAS. In addition, the need to limit or reduce aviation greenhouse gas emissions is an increasingly important issue, especially in the international aviation system.

TOP **GREATER CAPACITY** ACCOMPLISHMENTS FOR FY 2007

Research & Development. The new Airport Cooperative Research Program (ACRP), in cooperation with the National Academy of Sciences and its Transportation Research Board, provided $10 million per year. More than 60 airport research studies are currently underway. The ACRP Board of Governors initiated a quick response research study as a follow-on to publication of the FAA's study on "Capacity Needs in the National Airspace System 2007-2025" (referred to as FACT 2). The study will examine innovative approaches to addressing aviation capacity issues in coastal mega-regions, and will develop integrated strategic actions to address the constrained capacity and growing travel demand on the east and west coasts.

Updated Future Airport Capacity Task (FACT) Report. This study shows that by 2025, 14 airports and eight metropolitan areas will require additional capacity, even if currently planned improvements are built at airports throughout the system. The FACT 2 study recommends capacity improvements be progressed to include new runways and airports. Specifically, Atlanta, Chicago, Las Vegas and San Diego were identified as cities needing supplemental airports. In addition, the study recommends innovative approaches to reduce congestion and improve capacity to include enhanced planning in metropolitan regions, congestion management at the busiest and most constrained airports, and the development and implementation of NextGen

Support Airport Integrated Product Team curb-to-curb Concept of Operations (ConOps). The ConOps and the Enterprise Architecture were completed in May 2007. Specific transformational issues are those affecting airports, security, environment, and air traffic management.

Noise Compatibility. For FY 2007, approximately 20,000 people (residents and school students) in noise impacted areas will receive benefits from noise compatibility projects funded under the Airport Improvement Program (AIP).

Commission three runways/taxiways. We opened Runway 14/32 at Boston-Logan International Airport in November 2006, which already has shown delay reduction benefits in its first several months of operation. Los Angeles International Airport Runway 7R/25L opened in March 2007. With the opening of the end-around taxiway at Atlanta Hartsfield Airport in April 2007, about 612 runway crossings per day were eliminated at the busiest airport in the U.S., significantly improving safety and efficiency.

Area Navigation (RNAV) routes, Standard Instrument Departures (SIDs) and Standard Terminal Arrival Routes (STARs). We've implemented 155 Area Navigation (RNAV) arrivals and departures to date at 38 airports, with 42 more to be published by the end of FY 2007. RNAV is saving operators millions of dollars per year in fuel savings due to more efficient routes. We are also beginning to realize capacity benefits: at Dallas/Fort Worth Airport, RNAV enables twenty additional departures per hour; at Atlanta Hartsfield Airport, RNAV enables ten additional departures per hour.

OBJECTIVE 1

Increase capacity to meet projected demand and reduce congestion.

Strategy

Meet the new and growing demands for air transportation services through 2025 through the interagency effort of the Joint Planning and Development Office (JPDO).

Initiatives

- Expand FAA's existing Operational Evolution Partnership (OEP) to incorporate critical NextGen operational concepts and changes, and detailed milestones of key NAS modernization programs through FY 2025.
- By FY 2010, operationally implement Automatic Dependent Surveillance-Broadcast (ADS-B) for air traffic services at selected sites and continue development of surface conflict detection in the cockpit and near-term Air-to-Air applications.
- Strategically link funding requests with the acquisition of research and development products or services that support FAA's transition to NextGen.

WHY WE NEED NEXTGEN

Congestion and delays increasingly hinder the efficient movement of passengers to their destinations, resulting in lost productivity and time away from families. Currently, the system handles 740 million enplanements on U.S. carriers each year. We expect this number to reach one billion passengers by 2015 and forecasts indicate increases in demand ranging from a factor of two to three by 2025. Delays in 2006 were the worst in history and daily headlines in newspapers across the country note the situation is not improving. The system is already straining and will reach its maximum by 2015. The forecasted increase in aviation travel means that passengers will experience ever-increasing levels of congestion unless the air transportation system is modernized and transformed so it can better serve current and expected travel demand.

The good news is that the FAA is working hard to reduce current delays and manage our congested airspace. We are building new runways, launching new technology, redesigning how we use airspace over the most crowded corridors in our country, and putting new procedures in place to facilitate capacity and efficiency enhancements. The NextGen system will play a central role in reducing delays and managing congestion. NextGen replaces today's system of ground-based radar with a high-performance satellite-based system. NextGen will enable us to meet future capacity needs, enhance safety, and provide an environmentally friendly National Airspace System to boot.

- Ensure that the environmental approach for capacity expansion is compatible with the road map developed by the Environmental Working Group (EWG) for NextGen.

- Develop the Airports Working Group road map to support NextGen.

- Develop and meet 90 percent of the deadlines in the NextGen Integrated Work Plan that identifies the research, capital, and implementation activities that are needed to implement NextGen across all agencies.

Strategy

Evaluate existing airport capacity levels and set investment and infrastructure priorities and policies that enhance capacity.

Initiatives

- Work with the aviation community to establish the most feasible policies to enhance capacity and manage congestion.

- Future Airport Capacity Task (FACT) will work with airports and local communities to develop toolbox of potential solutions to address anticipated capacity shortfalls.

- Establish priorities for infrastructure investments to maintain existing capacity in a cost-effective manner.

- Support airport planning studies to enhance capacity in the Atlanta and San Diego metropolitan areas.

- Ensure that all necessary activities are accomplished to meet new OEP runway capability commitments established in partnership with stakeholders.

- Support environmental processing of airfield improvements at the 35 OEP airports including projects that support Vision 100 environmental streamlining.

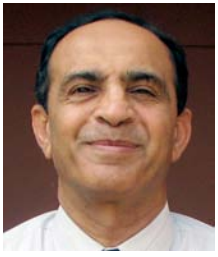
Strategy

Improve airspace access and modify separation standards to increase capacity and allow more efficient use of congested airspace.

Initiatives

- Redesign terminal airspace and change procedures to increase capacity.

- Implement the roadmap for performance-based navigation by the continued development and implementation of Area Navigation (RNAV) routes, standard



ARIF HABIB *Electronics Engineer, Air Traffic Organization, Southern Region*
Arif, you commented on the need for FAA assistance in developing smaller airports near the large OEP airports, and we agree that this will be a key factor to increasing capacity and reducing delays. We currently have an initiative to direct Airport Improvement Program funding towards reducing constraints at secondary and reliever airports located within congested metropolitan areas.

instrument departures (SIDs), and standard terminal arrival routes (STARs). In FY 2008, we will publish 50 RNAV SIDs and STARs and 12 RNAV routes.

- Using the cross-organizational Airport Obstructions Standards Committee (AOSC), develop recommended standards and action plans for runway procedures, such as end-around taxiways, and establish databases and data collection tools to improve airport flight operations, while maintaining an optimal balance among safety, capacity, and efficiency considerations.
- Conduct research to improve safety and increase throughput using wake turbulence monitoring, operational procedures, and controller tools.
- Enhance NAS performance for the 35 OEP airports through advanced engineering and program support.

Strategy

Improve bad weather departure and landing capacity with new technologies and procedures.

Initiatives

- Capitalize on Spring/Summer Plan data, developed in partnership with the airlines and other segments of aviation, to improve traffic flow in bad weather.
- Increase airport capacity through the use of Traffic Management Advisor (TMA).
- Identify and implement procedures and technology to improve the dissemination of weather information to pilots and controllers.

Strategy

Increase aviation capacity and reduce congestion in the seven major metropolitan areas and corridors that most affect total system delay. For FY 2008, those areas are Charlotte, Chicago, Las Vegas, Los Angeles, New York, Philadelphia, and San Francisco.

Initiatives

- Monitor and maintain scheduled progress for Environmental Impact Statements at South Suburban (Chicago) and Philadelphia Airports.
- Support airport planning study to enhance capacity at San Francisco and Southern Nevada Supplemental airports.
- Conduct regional studies for capacity and congestion in the New York, New England, and Los Angeles metropolitan areas.
- Direct Airport Improvement Program (AIP) funding to reduce capacity constraints of secondary and reliever airports located within those metropolitan areas.
- Update our projections on which metropolitan areas will have the greatest impact on the total system for delays over the period of the Flight Plan.
- Redesign the airspace of the seven major metropolitan areas.
- Expand use of time-based metering at air traffic control centers.
- In FY 2008, develop a metric to measure the delay savings enabled by NextGen improvements using minutes per scheduled Instrument Flight Rules (IFR) arrival at the 35 OEP airports by FY 2012, and beginning implementation of the metric in FY 2009.

Performance Targets

- Achieve an average daily airport capacity for the 35 OEP airports of 104,338 arrivals and departures per day by FY 2011 and maintain through FY 2012.
- Commission nine new runway/taxiway projects, increasing the annual service volume of the 35 OEP airports by at least 1 percent annually, measured as a five-year moving average, through FY 2012.
- Sustain adjusted operational availability of 99.7 percent for the reportable facilities that support the 35 OEP airports through FY 2012.
- Achieve an average daily airport capacity for the seven major metropolitan areas of 39,484 arrivals and departures per day by FY 2009, and maintain through FY 2012.

© Armand-Photo-CGI / Alamy

METRO 7 AREAS

The Average Daily Capacity Target (Arrivals and Departures) for the Metro 7 Areas will change from 63,080 in FY 2007 to 33,676 in FY 2008. In collaboration with the FACT 2 study, the Washington, DC area airports and the South Florida Metropolitan area airports were dropped because their delay problems have improved. They have been replaced with two airports: Charlotte and Las Vegas. In addition, the FY 2008 metric does not include several of the previously included secondary airports, and will be recalculated in order to add them back in FY 2009.

OBJECTIVE 2

Increase reliability and on-time performance of scheduled carriers.

Strategy

Promote the use of automated systems that provide more accurate and timely information for all system users.

Initiative

- Improve on-time performance and operator and passenger access to information by using Traffic Flow Management (TFM), Traffic Management Advisor (TMA), and Collaborative Air Traffic Management Technologies (CATMT), such as Airspace Flow Programs (AFPs).

Strategy

Restructure airspace to ensure efficient traffic flow between oceanic and domestic airspace.

Initiatives

- Use new equipment and technology to reduce en-route congestion.
- Implement high-altitude airspace redesign to reduce congestion.
- Reduce oceanic separation in the Pacific.
- Implement ocean capacity metrics and targets for FY 2008, using comprehensive Advanced Technologies and Oceanic Procedures (ATOP) data collection and analysis capability and oceanic simulation and modeling capability.

Performance Target

- Achieve a NAS on-time arrival rate of 88.76 percent at the 35 OEP airports by FY 2011 and maintain through FY 2012.

OBJECTIVE 3

Address environmental issues associated with capacity enhancements.

Strategy

Develop better systems, technologies, and analytical tools to evaluate aircraft noise and emissions, and ensure environmental stewardship.

© Kevin Fleming / Corbis

Initiatives

- Conduct research and develop, verify, and validate analytical tools to better understand the relationship between noise and emissions and different types of emissions, and to provide the cost benefit analysis capability necessary for data-driven decision-making.

- Along with stakeholders, increase aircraft noise and emissions mitigation activities at the environmental Center of Excellence.

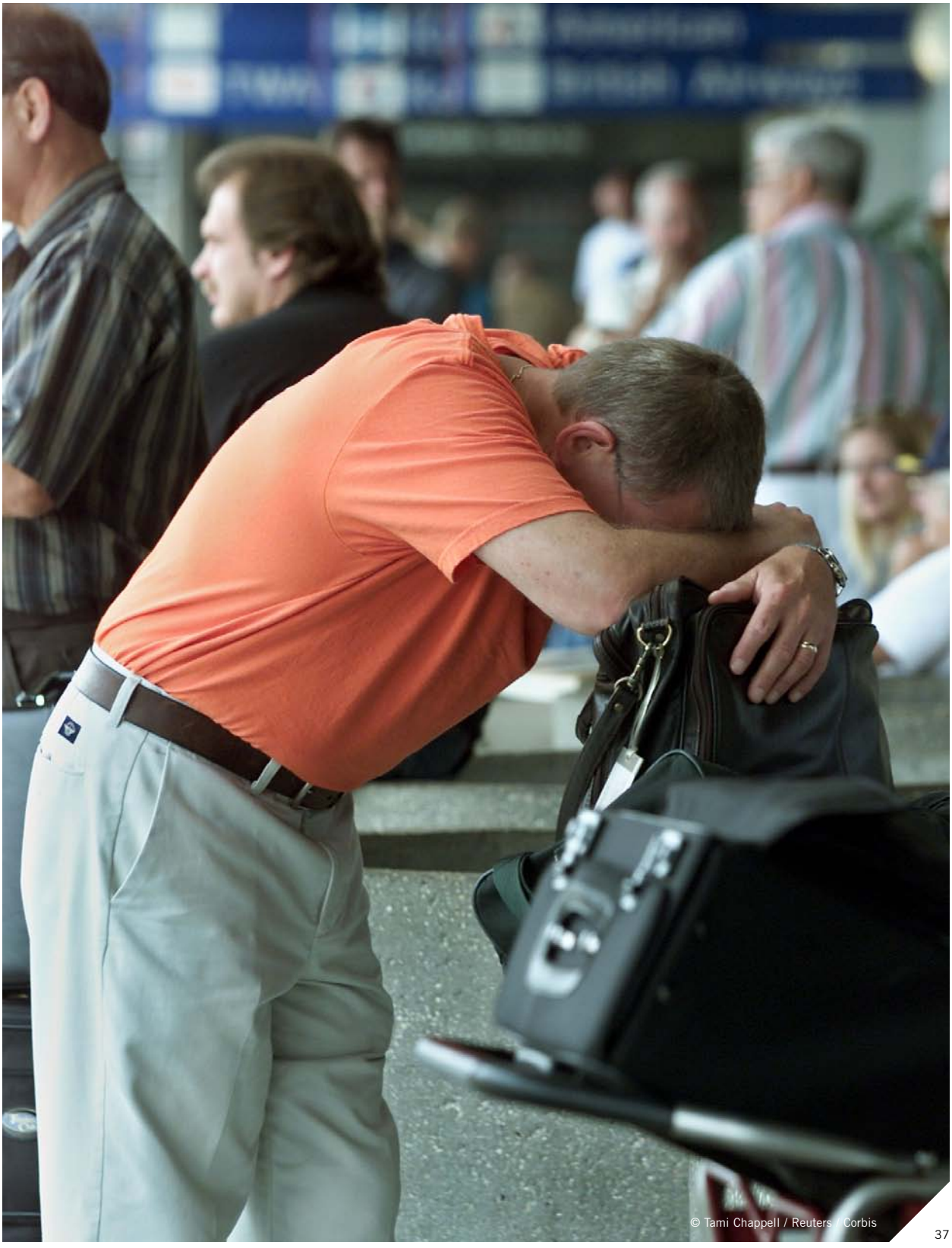
- Work with several airports to implement Continuous Descent Arrival (CDA) for night operations, and initiate research into CDA applicability to airports with greater traffic levels, general mixed fleet, and mixed operations.

- Implement Environmental Management Systems to ensure that FAA operations protect the environment, meet statutory and regulatory environmental requirements, and improve reliability and cost effectiveness.

Performance Targets

- Reduce the number of people exposed to significant noise by 4 percent per year through FY 2012, as measured by a three-year moving average, from the three-year average for calendar years 2000-2002.

- Improve aviation fuel efficiency by another 1 percent over the FY 2007 level (for a total of 6 percent) through FY 2008, and 1 percent each subsequent year through FY 2012 to 10 percent, as measured by a three-year moving average of the fuel burned per revenue mile flown, from the three-year average for calendar years 2000-2002.



© Tami Chappell / Reuters / Corbis

INTERNATIONAL LEADERSHIP

Our goal is to increase the safety and capacity of the global civil aerospace system in an environmentally sound manner.

The U.S. is a global aviation leader in terms of innovation, complexity, efficiency and safety. Through partnerships, associations, and collaborative efforts, we're working with the rest of the world to achieve the highest standards of safety and efficiency globally.

Our task is to spread the net of safety throughout the world and to create a seamless global aviation system for all users. We've helped more than 130 countries advance their aviation programs. We are an active component of regional and international aviation organizations as well.

China and India are already experiencing double-digit growth in aviation activity. In the next 10 years, China's air traffic control system will be second in volume only to our own. India is also at the forefront, moving ahead with a satellite-based navigation system as an important component of its aviation infrastructure. We are building upon our experience in working with China by developing an Aviation Cooperation Program (ACP) in India.

We're working with Europe to ensure compatibility between NextGen and the Single European Sky Air Traffic Management Research Program (SESAR). We signed an agreement last summer to formalize collaboration with the European Union to make sure that technology is seamless between our systems. Observers from the FAA and the European Organization for the Safety of Air Navigation (EUROCONTROL) have been assigned to each other's modernization advisory committees to ensure we are cooperating and collaborating to the fullest. The recently launched Atlantic Interoperability initiative to Reduce Emissions (AIRE) will

CHRISTOPHER POREDA *Manager Of The New England Regional Counsel's Office, Office of the Chief Counsel, New England Region* ✈ Chris, this is the second time you've given us a comment that has changed the Flight Plan, so thank you for being so vigilant in keeping us on track. This time you commented about the international contributions to aviation since the beginning of flight, and as a result, we've changed the narrative of this section to reflect that.

accelerate collaboration on environmentally friendly procedures and standards, with demonstration flights beginning in FY 2008.

We are expanding our outreach in the Western Hemisphere starting with opening an FAA office in Brazil in 2008. Through our leadership in the International Civil Aviation Organization (ICAO) Committee on Aviation Environmental Protection (CAEP), we are coordinating with other nations to address the environmental impacts of aviation. Bilateral aviation safety agreement negotiations are under way with Mexico, Japan, South Korea and the European Community as well. We continue to support Safe Skies for Africa, the Third Border Initiative and special programs to restore aviation infrastructure in Afghanistan and Iraq.

Photos by Barry Brayer / FAA

TOP **INTERNATIONAL LEADERSHIP**
ACCOMPLISHMENTS FOR FY 2007

Aviation Safety Leadership. For FY 2007, we focused on efforts to increase cooperation with China and India as both countries experience significant aviation growth. Additionally, we led U.S. preparations for the ICAO Triennial Assembly in September 2007 and the October 2007 ICAO Universal Safety Oversight Audit Program. We promoted U.S. aviation environmental policies with European partners, and supported the implementation of performance-based technologies in the Western Hemisphere region.

Global Aviation Harmonization. In Europe, we worked with aviation organizations on modernization programs to ensure compatibility of operating systems. We are cooperating with Canada and Mexico to implement technical systems that will help create a North American regional Wide Area Augmentation System (WAAS).

Bilateral Agreements. We are cooperating with bilateral and multilateral partners in the Americas, Europe, and Asia to negotiate agreements and procedures to support the transfer of aviation products and services. Since 2004, we've signed nine bilateral aviation safety agreements with eight countries. Bilateral agreements are currently under negotiation with Mexico, Japan, South Korea, and the European Community.

External Funding. The FAA has secured FY 2007 funding commitments of $13 million to support international aviation infrastructure projects. This includes $3 million for the Safe Skies for Africa Program and $5 million for aviation assistance programs in Afghanistan, funded by the World bank, the Swedish international Development Cooperation Agency, and the Asian Development Bank.

Environmental Leadership. Through the AIRE, we are working in partnership with the European Commission, air navigation service providers, airlines, and industry representatives toward enhanced interoperability, improved energy efficiency, reduced engine emissions, and lower aircraft noise.

NextGen Technologies. We are continuing to develop and apply uniform standards, procedures, and air and space transportation policies worldwide, enhancing safety and efficiency on a global scale. In April 2007, the FAA formally agreed to provide assistance and guidance to China in implementing Reduced Vertical Separation Minima (RVSM). This capability is critical in helping China handle the expected increase in air traffic volume as it prepares for the 2008 Summer Olympics in Beijing.

Air Tour Management Program (ATMP) — Majuro and Chuuk in Micronesia for FAA International Program / Photo by Barry Brayer / FAA

OBJECTIVE 1

Promote improved safety and regulatory oversight in cooperation with bilateral, regional, and multilateral aviation partners.

Strategy

Support the continued development of competent aviation authorities worldwide.

Initiatives

- Provide technical assistance and training and strengthen mutually beneficial partnerships with key civil aviation organizations in the Middle East, Asia, and the Americas.
- Implement civil aviation safety programs to support the Administration's initiatives.
- Support creating government-industry partnerships to help transfer aeronautical products, services, and technologies to key developing regions.
- Provide technical assistance and training to strengthen the capabilities of at least four regional aviation authorities or organizations to meet international safety and efficiency standards.

Strategy

- Work with key international partners to implement safety enhancements that will improve worldwide aviation safety while enabling the transfer of aeronautical products, technologies, and services.

Initiatives

- Establish an effective partnership with the European Union and the European Aviation Safety Agency (EASA) to ensure the highest level of cooperation for aviation safety and an efficient exchange of products, services, and technologies.

- Establish coordinated safety agendas throughout the world to improve aviation safety.

- Negotiate and conclude bilateral agreements for safety, certification, and approval systems that enable technology transfer with global aviation partners.

Strategy

Support ICAO and other international organization initiatives.

Initiatives

- Provide U.S. technical participation and leadership in ICAO meetings to achieve U.S. objectives.

- Strategically influence international aviation safety, capacity, and efficiency by promoting FAA recommendations and policies at key international venues.

- Increase recruitment of qualified U.S. technical personnel to fill positions at ICAO.

- Prioritize agency efforts to improve ICAO Standards and Recommended Practices (SARPs) to reflect advances in U.S. technologies, practices and procedures, and work with the international community to implement SARP changes.

- Work at ICAO to foster international environmental standards, recommended practices, and guidance materials that are technically feasible, economically reasonable, provide a measurable benefit and consider interdependencies between the various emissions and between emissions and noise.

Strategy

Secure external funding for global safety initiatives.

Initiative

- Increase international aviation development funding to strengthen the global aviation infrastructure.

Performance Targets

- Work with the Chinese aviation authorities and industry to adopt 27 proven Commercial Aviation Safety Team (CAST) safety enhancements by FY 2011. This supports China's efforts to reduce commercial fatal accidents to a rate of 0.030 fatal accidents per 100,000 departures by FY 2012.

- Conclude at least eight (new or expanded) bilateral safety agreements that will facilitate an increase in the ability to exchange aviation products and services by FY 2012.

BRINGING SAFETY TO MILLIONS

Day in and day out, FAA employees provide technical assistance and training to foreign aviation personnel from around the world — all in the name of safety. As we share technological and procedural advances with other countries, we work toward our goal of increasing the safety of the global aerospace system.

In FY 2007, the FAA provided technical assistance and training to over 40 countries. From teaching customized courses to giving guidance on aviation law, our support reached around the world. The FAA provided the civil aviation authorities of Kenya, Tanzania and Uganda with technical assistance and training, which was used when establishing the first regional safety oversight organization in the East African Community. We helped the Israel Airports Authority with a large-scale air traffic modernization project. With our ongoing technical assistance effort, both the Dominican Republic and Trinidad & Tobago achieved and maintained Category 1 status.

The FAA taught technicians from Canada and Mexico how to maintain Wide Area Augmentation System equipment, helping to increase navigational accuracy in North America. For the first time, we developed long-term U.S.-based training programs for aviation personnel from Spain and Korea. Required Navigation Performance workshops were conducted in New Delhi. Representatives from Jamaica, Canada, Australia, Japan, Brazil, Singapore and the United Kingdom participated in the first Aviation Safety Management Systems (SMS) course.

The list goes on and on. We salute our employees who work every day to increase aviation safety worldwide so that our citizens can travel as safely abroad as at home.

- Secure a yearly increase in international aviation development funding to strengthen the global aviation infrastructure. Increase the FY 2007 external funding baseline target of $12 million in $3 million annual increments for an FY 2012 target of $27 million.

OBJECTIVE 2

Promote seamless operations around the globe in cooperation with bilateral, regional, and multilateral aviation partners.

Strategy

Collaborate with strategic global partners to implement Next Generation Air Transportation System (NextGen) performance-based systems and concepts to ensure harmonization with corresponding international modernization efforts.

Initiatives

- Work with the international civil aviation community to adopt enabling systems, such as the Global Navigation Satellite System (GNSS) and ADS-B, to improve safety of flight operations.

- Develop and implement capacity enhancing applications, such as Performance-Based Navigation (PBN), embracing current operational capabilities to the maximum extent possible.

- Improve global interoperability and harmonization of systems, concepts, automation tools and operational procedures in support of future seamless global operations.

- Manage the international strategy in support of the NextGen Global Harmonization Working Group and work with civil aviation and interagency partners to continually assess and implement the strategy.

Performance Target

- By FY 2012, expand the use of NextGen Air Transportation System (NextGen) performance-based systems and concepts to five priority countries.

Air Tour Management Program in Micronesia.
Photo by Barry Brayer / FAA

© Dynamic Graphics Group / Creatas / Alamy

ORGANIZATIONAL EXCELLENCE

Our goal is to ensure the success of the FAA's mission through stronger leadership, a better-trained and safer workforce, enhanced cost-control measures, and improved decision-making based on reliable data.

The previous three goals — safety, capacity, and international leadership — are what we do. Organizational excellence is how we do it. We recognize that the success of an organization relies on the strength of its employees. None of the achievements in this Flight Plan would be possible without the cooperation, expertise, perseverance, and dedication of every person at the FAA.

Our managers are held accountable for achieving measurable goals in a safe, efficient, and cost-effective manner. We focus on outcomes. We set strategies, which dictate our funding priorities.

As part of the agency's Cost Control Program, FAA has realized over $150 million of recurring cost savings and cost avoidance from cost efficiency initiatives implemented in FY 2005 and FY 2006. These initiatives include non-controller attrition savings of approximately $60 million, IT-related savings of over $30 million, and cost avoidance of about $13 million in the workers' compensation program.

In FY 2007, we realized the first full year of cost savings from consolidation of accounting offices into one location — savings of more than $4 million annually. In addition, we negotiated office equipment and supply contracts on a national level, and expect to achieve a $15 million reduction in IT-related expenses this year.

We updated the Controller Hiring Plan so our facilities are staffed based on trends and traffic. This ensures we have the right number of controllers working in the right place at the right time. We also increased the number of air traffic controller classes at the FAA Academy, and continue to move controllers to facilities with the size or complexity most commensurate with their experience.

We are actively recruiting entry-level controllers from the general public including universities, military transition centers, state and local employment services and government recruitment centers. In addition to newspaper and radio ads we use technology to expand our reach and have

promoted the agency on MySpace, FaceBook, and CraigsList.

Our joint effort with the Department of Veterans Affairs enables veterans with disabilities to take advantage of on-the-job training opportunities through FAA's new Veterans' Employment Program. This initiative allows veterans with disabilities to train for air traffic control and airway transportation systems specialist positions.

Garrett A Morgan Day at DOT/FAA Potomac Airfield
Photos by Lockett Yee / FAA

GWYNNE O'CONNELL *Manager of Management & Business Services Division, Office of Aviation Safety, Washington Headquarters* ✈ Gwynne, you recommended that we change our metric on filling critical positions to better align with the Office of Personnel Management's metric for all external hires. This will result in more open competition on external hires and increase the number of positions included in the metric. We agree and have made the change to better improve our performance.

TOP **ORGANIZATIONAL EXCELLENCE**
ACCOMPLISHMENTS FOR FY 2007

NextGen Reform Act of 2007. The Secretary sent a legislative proposal for comprehensive reform of FAA programs and financing to Congress in February 2007. It would develop a cost-based financing system to support both the current air transportation system and the transformation to the NextGen system.

Air Traffic Controller Recruitment. FAA has successfully recruited and continues to recruit entry-level air traffic controller positions to keep a full pipeline of new controllers across the country. By the end of the fiscal year, we will have issued vacancy announcements for facilities in every state, Guam, and Puerto Rico. Recruitment efforts are taking place at over 800 colleges, universities, military transition centers, and government one-stop recruitment centers.

Employee Safety. Increased safety awareness in the workplace prevents injuries and reduces costs. We provided safety training to over 4,600 FAA employees, integrated employee safety into FAA management training, and our Aeronautical Center reached the Merit status in OSHA's Voluntary Protection program.

Thumbs up for MyFAA. We launched the new MyFAA Employee site on February 26, 2007 to improve internal communications. The new site is based on an employee-powered study in early 2006 as well as many suggestions employees sent to the web management team.

Sustained success managing Human Capital, an important element of the President's Management Agenda (PMA). The FAA has excelled in accomplishing its goals for Human Capital Planning for the last three years. We put in place a Senior Leadership Development Process to ensure the agency has high-caliber senior leadership critical to success. We completed assessments of our managers, information technology, human resources, engineering, and acquisition workforces to understand the expertise we have in our workforce.

Workers' Compensation Program Cost Containment. The FAA created a consolidated National Workers' Compensation Program (OWCP) resource and all FAA claims are now managed centrally. This consolidation reduced agency costs for the third consecutive year. As of June 2007, cost avoidance in this area totaled $14 million.

SAVES Program. The FAA continues implementation of its innovative strategic sourcing initiative (SAVES). Through the SAVES program, FAA awarded seven national contracts covering administrative commodities such as office supplies and equipment, IT hardware, and courier/overnight mail services. Through June 2007, the SAVES program has achieved over $2.5 million in savings and over 90 percent compliance in office supplies and equipment.

Photo by Jon Ross / FAA

OBJECTIVE 1

Make the organization more effective with stronger leadership, increased commitment of individual workers to fulfill organization-wide goals, and a better prepared, better trained, safer, diverse workforce.

Strategy

Use workforce planning to identify and fulfill current and future human capital needs to meet FAA's mission.

Initiatives

- Sustain and improve agency human capital planning and measurement processes.
- Implement the hiring, training, staffing analysis, and management recommendations of the Air Traffic Controller Workforce Plan to support FAA's safety mission and meet external stakeholder requirements. Update and report annually on agency progress.

Strategy

- Build stronger leadership to achieve strategic goals, manage people and resources effectively, and drive continuous improvement.

Initiatives

- Ensure compliance with corporate policies on managerial selection and requirements for training and evaluating probationary managers.

- Establish corporate managerial training programs that ensure we use resources effectively, align with agency goals, drive continuous improvement.

- Establish a corporate, senior leadership development process to build executive-level competencies.

Strategy
Implement corporate systems, policies, programs, and tools to build a results-oriented, high performance workforce.

Initiatives
- Undertake a timely and effective corporate approach to conflict management.

- Monitor and evaluate Employee Attitude Survey (EAS) Action Plan results.

- Develop new performance metric(s) in FY 2008 to measure our progress on more effective agency leadership.

Strategy
Make strategic people investments and provide a professional, safe and secure work environment to attract, acquire, and retain a highly skilled workforce.

Initiatives
- In external recruitment efforts, implement corporate strategies that expand the applicant pool to ensure equal opportunity to all applicants and result in attracting high quality candidates to the FAA.

- Establish corporate employee training programs to build leadership competence within the FAA workforce, support professional development, and promote continuous learning.

- Reduce workplace injuries through employee safety program evaluations and OSHA Voluntary Protection Program measures.

- Provide our employees with a secure environment by identifying measures to protect our employees, our facilities, and our critical infrastructure.

Strategy
Promote aviation related science, technology, engineering, and mathematics (STEM) skills in the emerging and future aviation workforce.

Initiative
- In partnership with other Federal, state and local agencies, aerospace oriented consortiums, and other private sector aviation organizations, enlarge the pipeline of students who are prepared to enter college and graduate with an aerospace oriented degree in science, technology, engineering, and mathematics (STEM).

Strategy
Improve labor management relations while delivering quality service.

Initiatives
- Monitor labor relations service level agreements to ensure the requirements of lines of business and staff offices are met.

- Develop and provide labor relations training for agency supervisors and managers.

- Using the Grievance Electronic Tracking System (GETS), reduce grievance processing time compared to the baseline measure.

Performance Targets

- Increase the score of the Employee Attitude Survey measure for the areas of management effectiveness and accountability by at least 5 percent, over the FY 2003 baseline of 35 percent by FY 2010 and maintain through FY 2012.

- By FY 2010, 70 percent of FAA external hires will be filled within OPM's 45-day standard for government-wide hiring.

- Reduce the total workplace injury and illness case rate to no more than 2.44 per 100 employees by the end of FY 2011, and maintain through FY 2012.

- Reduce grievance processing time by 30 percent (to an average of 102 days) by FY 2010 over the FY 2006 baseline of 146 days, and maintain the reduction through FY 2012.

- Maintain the air traffic control workforce at or above the projected annual totals in the Air Traffic Controller Workforce Plan.

OBJECTIVE 2

Improve financial management while delivering quality customer service.

Strategy

Develop and implement an agency-wide cost control and cost reduction program.

Photo by John M. Rodriguez / FAA

Initiatives

- Each FAA organization will develop, track, and report quarterly on a comprehensive measure of its operating efficiency or financial performance. These measures will include:
  - Cost per controlled flight
  - Research, Engineering, and Development (RE&D) Management Staff Efficiency Measure
  - Grant Administration Efficiency Measure

- Implement line of business-specific cost efficiency as well as agency-wide initiatives to reduce costs or improve productivity.

- Improve the overall management of cost-reimbursable contracts through the Defense Contract Audit Agency (DCAA) audit process.

- Improve management of FAA's real property assets.

Strategy
Improve financial performance.

Initiatives
- Maintain and improve business processes and systems in order to provide timely and reliable financial information to FAA organizations.

- Comply with Office of Management and Budget (OMB) guidance by performing routine testing of internal controls to improve the quality of financial information.

- Reduce improper payments.

- Continue integrating performance information into budgetary decision-making and presentation.

- Improve timeliness and accuracy of financial transactions by capitalizing assets in a timely manner.

Performance Targets
- Increase cost reimbursable contract close-outs by 1 percent per year, from 86 percent in FY 2008 to 90 percent in FY 2012.

- Organizations throughout the agency will continue to implement cost efficiency initiatives such as:
  - — 10-15 percent savings for strategic sourcing for selected products and services;
  - — By the end of FY 2009, reduce leased space for Automated Flight Service Stations from approximately 510,000 square feet to approximately 150,000 square feet;
  - — 3 percent reduction in help desk operating costs through consolidations; and
  - — Annual reduction of $15 million in Information Technology operating costs.

- Obtain an unqualified opinion on the agency's financial statements (Clean Audit with no material weaknesses) each fiscal year.

Strategy
Work with Congress on new legislation that furthers accomplishment of the FAA mission, provides stable, adequate funding, and supports cost control and reduction.

Initiatives
- In partnership with the aerospace community, implement FAA financial reform and reauthorization.

Photo by John M. Rodriguez / FAA

Strategy

Ensure that FAA is taken off the Government Accountability Office (GAO) High Risk List for Air Traffic Control Modernization in FY 2009.

Initiatives

- Develop, document, and use investment criteria to manage major capital programs.
- Implement and improve program management processes to remain within acquisition cost and schedule baselines.
- Meet all targets set in the FAA/GAO plan to get off the High Risk List in FY 2009.

OBJECTIVE 3

Make decisions based on reliable data to improve our overall performance and customer satisfaction.

Strategy

Better prepare managers to use cost and performance data in making decisions.

Initiatives

- Ensure that financial policies and procedures are updated and that management and staff are well trained in the use of FAA cost data, as derived from FAA's acquisition, cost accounting, accounting, payroll and personnel systems, to make management decisions.
- Monitor and report progress on Flight Plan targets and initiatives and establish the appropriate linkages and accountability in each line of business and staff office with annual Business Plans.

Strategy

Improve customer communication and web-based business processes.

Initiatives

- Communicate the goals of the Flight Plan to the FAA employees and the aerospace community and gain feedback that helps the FAA meet their needs. Give employees a clear line of sight from their jobs to the goals of the Flight Plan.
- Review customer requirements annually and measure customer satisfaction more broadly for FAA services.
- Standardize FAA websites making them more useful for exchanging information and conducting business.

Strategy
Improve the security of our data.

Initiatives
- Protect FAA's information infrastructure using advanced cyber defense strategies.
- Enable enterprise-wide conformance to information technology enterprise architecture.

Performance Targets
- In FY 2008, 90 percent of major system acquisition investments are within 10 percent of annual budget and maintain through FY 2012.
- In FY 2008, 90 percent of major system acquisition investments are on schedule and maintain through FY 2012.
- Increase agency scores on the American Customer Satisfaction Index, which surveys commercial pilots.
- Achieve zero cyber security events that disable or significantly degrade FAA services.

OBJECTIVE 4
Enhance our ability to respond to crises rapidly and effectively, including security-related threats and natural disasters.

Strategy
Continue to build and improve emergency plans and preparedness tools that enable us to sustain essential services and provide for employee well-being during crisis events.

Initiatives
- Develop web-based emergency operation information-sharing tools that create a common operational picture and support effective decision-making.

Strategy
Strengthen operational coordination, communication, and command and control capabilities needed to prepare for, respond to, and recover from crises.

Initiatives
- Improve the use and functionality of operational and corporate crises response structures such as specialized hurricane coordination cells and continuity of operations programs.

Photo by Bryan Whitcomb / FAA

- By October 1, 2008, develop performance targets that measure improvement in three outcome areas: readiness; providing a framework for effective decision-making; and effective response.

ACRONYMS

ADS-B Automatic Dependent Surveillance Broadcast

AIP Airport Improvement Program

AMASS Airport Movement Area Safety System

ASAP Aviation Safety Action Program

ASDE-X Airport Surface Detection Equipment-Model X

CAEP ICAO Committee on Aviation Environmental Protection

CAST Commercial Aviation Safety Team

CDA Continuous Descent Arrival

CEDR Center for Early Dispute Resolution

COSP Continued Operational Safety Program

EAS Employee Attitude Survey

EASA European Aviation Safety Agency

EWG Environmental Working Group

FACT Future Airport Capacity Task

FOQA Flight Operational Quality Assurance

FY Fiscal Year

GNSS Global Navigation Satellite System

ICAO International Civil Aviation Organization

JPDO Joint Planning and Development Office

NAS National Airspace System

NextGen Next Generation Air Transportation System

OE Operational Errors

OEP Operational Evolution Partnership

PMA President's Management Agenda

PRM Precision Runway Monitor

RNAV Area Navigation

RNP Required Navigation Performance

SAAAR Special Aircrew and Aircraft Authorization Required

SARPS Standards and Recommended Practices

SIDs Standard Instrument Departures

SRM Safety Risk Management

SMS Safety Management System

STARs Standard Terminal Arrival Routes

TFM Traffic Flow Management

TMA Traffic Management Advisor

UAS Unmanned Aerial System

URET User Request Evaluation Tool

VASIP Voluntary Aviation Safety Information Program

WAAS Wide Area Augmentation System

Acknowledgments

This *Flight Plan* is the result of the hard work and sustained commitment of everyone involved in the planning process. We would like to acknowledge and convey our sincere thanks to all of our employees, Members of Congress and their staff, our industry partners, and stakeholders.

OUR VISION

Improve the safety and efficiency of aviation, while being responsive to our customers and accountable to the public

OUR VALUES

- **Safety Is Our Passion.** We're the world leaders in Aviation Safety.
- **Quality Is Our Trademark.** We serve our country, our customers and each other.
- **Integrity Is Our Character.** We do the right thing, even when no one is looking.
- **People Are Our Strength.** We treat people as we want to be treated.

Moving America Safely.

It's what we do.

800 Independence Avenue, SW
Washington, DC 20591

www.faa.gov