# **CRS** Report for Congress

# Federal Aviation Administration Reauthorization: An Overview of Selected Provisions in Proposed Legislation

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Bart Elias, Coordinator Specialist in Aviation Policy Resources, Science, and Industry Division

John W. Fischer, Robert S. Kirk, Linda Luther, Carol Hardy Vincent, James E. McCarthy, and Brent D. Yacobucci Resources, Science, and Industry Division

Todd B. Tatelman and Jon O. Shimabukuro American Law Division



Prepared for Members and Committees of Congress

# Federal Aviation Administration Reauthorization: An Overview of Selected Provisions in Proposed Legislation

# **Summary**

Funding authorization for aviation programs set forth in Vision 100 — Century of Aviation Reauthorization Act (P.L. 108-176) and authorization for taxes and fees that provide revenue for the aviation trust fund expired at the end of FY2007. Revenue collections and the operation of the FAA and its programs have continued, however, as a result of continuing and consolidated appropriations legislation (P.L. 110-92, P.L. 110-116, and P.L. 110-161). The program has now been extended until June 30, 2008, by the Airport and Airway Extension Act of 2008 (P.L. 110-190).

Consideration of FAA reauthorization in the 110<sup>th</sup> Congress began with the introduction of the FAA's reauthorization proposal, entitled the Next Generation Air Transportation System Financing Reform Act of 2007 (H.R. 1356/S. 1076, introduced by request), which recommends a new system for financing aviation system costs through direct user fees and increased fuel taxes. The FAA proposal would also allow airports to increase passenger facility charges (PFC), and includes initiatives to simplify the apportionment of airport grants. The proposal also seeks to better integrate development of the Next Generation Air Transportation System (NGATS) into ongoing planning and acquisition activities, and would allow airport and private investment in certain aviation facilities and services. The FAA proposal would authorize funding for research on aviation noise, air emissions, and water quality impacts, and seeks to modify the Essential Air Service Program (EAS).

The Aviation Investment and Modernization Act of 2007 (S. 1300; S.Rept. 110-144) proposes a four-year authorization with modest overall budget increases and larger increases specifically for facilities and equipment (F&E) modernization. S. 1300 proposes a \$25 surcharge for certain flights and retention of existing taxes and fees as an alternative to the FAA's user fee proposal. S. 1300 would establish a modernization oversight board with powers over budgets and modernization plans. The bill would also set up offices at each federal agency supporting NGATS for defining agency resources and budgetary commitments to air traffic modernization. The bill also includes provisions regarding system capacity and safety and environmental issues. S. 2345, introduced by the Senate Finance Committee, may be considered as the revenue title of the overall bill, and modifies some aviation taxes and fees as a possible alternative to the \$25 surcharge proposal.

The FAA Reauthorization Act of 2007 (H.R. 2881) seeks higher spending authorizations for F&E compared to S. 1300. While the bill does not propose any direct user-fee mechanisms, it would allow airports to increase PFCs. The bill does, however, propose modest increases to existing aviation fuel taxes. The overall legislation also seeks to increase accountability and coordination of NGATS planning and implementation. An amendment agreed to would create a binding arbitration process to resolve labor negotiations impasses, and would apply this process to settle the current impasse between the FAA and air traffic controllers. The bill also addresses many safety-related and environmental issues. This report will be updated as needed.

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# **CRS Aviation Policy Staff**

Name	Areas of Expertise	Division	Telephone
Bart Elias	— Next Generation Air Traffic System (NGATS)  — FAA Facilities and Equipment (F&E)  — FAA Management and Operations  — Airport and Airspace Demand and Capacity Analysis  — Aviation Safety  — Aircraft Noise Policy and Quiet Aircraft Technology	RSI	7-7771
John Fischer	<ul> <li>FAA Financing and Aviation</li> <li>Taxes</li> <li>Airport and Airways Trust</li> <li>Fund (AATF)</li> <li>Essential Air Service and</li> <li>Small Community Air Service</li> <li>Development Programs</li> <li>Airline Economic Issues</li> </ul>	RSI	7-7766
Bob Kirk	<ul> <li>FAA Financing and Aviation</li> <li>Taxes</li> <li>Airport and Airways Trust</li> <li>Fund (AATF)</li> <li>Airport Improvement Program</li> <li>(AIP)</li> <li>Airport Finance</li> </ul>	RSI	7-7769
Linda Luther	— Airport Environmental Issues	RSI	7-6852
Carol Hardy Vincent	— Air Tour Management     Program     — Aviation Impacts on National     Parks	RSI	7-8651
Jim McCarthy	— Aircraft Emissions	RSI	7-7225
Brent Yacobucci	<ul><li>— Aviation Fuels</li><li>— Alternative Fuels for Aircraft</li><li>and Ground Support Vehicles</li></ul>	RSI	7-9662
Jon Shimabukuro	— Labor Law and Policy — FAA Labor Relations	ALD	7-7990
Todd Tatelman	— Aviation Law (Domestic and International)	ALD	7-4697

# Federal Aviation Administration Reauthorization: An Overview of Selected Provisions in Proposed Legislation

### Introduction

The report is intended to provide a brief summary and analysis of major legislative provisions under consideration in the ongoing Federal Aviation Administration reauthorization process. The report is organized into six major program areas: aviation system finance; airport finance; FAA management and organizational issues; system capacity and safety; environmental issues; and miscellaneous programs and provisions. In several cases, provisions that appear in various unrelated sections of proposed legislation have been rearranged in this report in an effort to group and discuss related items in an issue-driven or programmatic context. Since this report is primarily written as a means of communicating key legislative provisions under consideration in the ongoing FAA reauthorization process, it does not go into detail regarding the specific policy issues behind these legislative proposals. CRS has prepared two separate reports that provide discussion of the policy context for the current FAA reauthorization debate. For an overview of various selected issues related to the current FAA reauthorization debate, see CRS Report RL33789, Federal Aviation Administration: An Abridged Look at Reauthorization Issues in the 110<sup>th</sup> Congress; for more detailed background on these issues, see CRS Report RL33698, Reauthorization of the Federal Aviation Administration: Background and Issues for Congress, both by Bart Elias, Brent D. Yacobucci, James E. McCarthy, John W. Fischer, Jon O. Shimabukuro, Robert S. Kirk, and Todd B. Tatelman.

Funding authorization for aviation programs set forth in Vision 100 — Century of Aviation Reauthorization Act (P.L. 108-176, hereafter referred to as Vision 100) expired at the end of FY2007. Also, authorization of the existing tax and fee structure that provides revenue for the aviation trust fund expired at the end of FY2007. During the first session of the 110<sup>th</sup> Congress, the House passed the FAA Reauthorization Act of 2007 (H.R. 2881). While H.R. 2881, along with the Aviation Investment and Modernization Act of 2007 (S. 1300) and aviation financing provisions in American Infrastructure Investment and Improvement Act of 2007 (S. 2345) have all been placed on the Senate legislative calendar, they have not yet been debated on the Senate floor. In early May 2008, the Senate attempted, but failed, to take up consideration of H.R. 2881. Revenue collections and the operation of the FAA and its programs have continued, however, as a result of continuing and consolidated appropriations legislation (P.L. 110-92, P.L. 110-116, and P.L. 110-161). The program has now been extended until June 30, 2008, by the Airport and Airway Extension Act of 2008 (P.L. 110-190).

# **Overview of the FAA Proposal**

The legislative process toward reauthorizing the FAA began in February 2007 with the submittal to Congress of a legislative proposal by the Bush Administration and initial congressional hearings regarding FAA reauthorization. On February 14, 2007, the FAA transmitted proposals to reauthorize funding of FAA functions and related aviation programs and reform the financing of the national airspace system. The text of these proposals were introduced as bills in the House (H.R. 1356) and in the Senate (S. 1076) at the FAA's request. The FAA's proposed bill (H.R. 1356/S. 1076, hereafter referred to by bill number or as the FAA proposal), entitled the Next Generation Air Transportation System Financing Reform Act of 2007, proposes a new system for financing aviation system operations and capital improvements that includes various fee-for-service charges (user fees), directed primarily at commercial system users, and excise taxes (primarily fuel taxes) for general aviation system users. The FAA proposal also includes several modifications to airport revenues, including increases in the maximum passenger facility charges (PFCs) that airports can impose on passengers, and initiatives intended to modify and simplify the apportionment of grants to airports.

The FAA proposal also recommends several management and organizational reforms, most notably the proposed establishment of an air transportation system advisory board, and the authority to create a commission, similar to the military's Base Realignment and Closure (BRAC) commissions, to make independent recommendations regarding the realignment and consolidation of various FAA facilities and services. The proposal also includes proposed statutory language intended to better integrate the work of the Joint Planning and Development Office (JPDO) on the Next Generation Air Transportation System (NGATS) design and implementation into the FAA's ongoing planning and acquisition activities. Also, the proposal includes language to increase the flexibility in delivering various air traffic services and capabilities to system users by allowing airports and private entities to play a more direct role in acquiring, deploying, and maintaining facilities and services to augment the FAA's air traffic communications, navigation, and surveillance capabilities.

With regard to addressing system and airport capacity and safety, the FAA proposal seeks statutory authority to control congestion at certain airports through market-based mechanisms, such as slot auctions and peak-period pricing. The proposal would direct the Department of Transportation (DOT) to study the appropriateness of a market-based system at New York's LaGuardia Airport (LGA), and if deemed appropriate, would permit the airport operator to implement a market-based approach to controlling congestion. The FAA proposal also seeks to establish a pilot program to evaluate market-based mechanisms to relieve congestion at up to 15 other airports.

<sup>&</sup>lt;sup>1</sup> Representative Oberstar introduced the FAA proposal (H.R. 1356), by request, on March 6, 2007, and Senator Inouye introduced an identical Senate bill (S. 1076), by request, on March 29, 2007.

With regard to addressing the environmental impacts of aviation, the FAA proposal includes language that seeks to provide funding for research into technology or processes that would reduce noise, air emissions, and water quality impacts; provide grants for programs or projects intended to mitigate or minimize regulated environmental impacts; and provide grants or specify regulatory procedures to assist airports in complying with environmental requirements. The FAA proposal also recommends establishing a consortium for fostering innovation to develop cleaner, quieter, and more efficient next-generation aircraft. Further, the FAA proposal seeks to limit the scope of the Air Tour Management Program, designed to mitigate noise and other adverse impacts from air tours over national park units, to those parks where air tour impacts have been identified as a concern or could become a more substantial issue.

The FAA proposal also includes language that would significantly modify the existing Essential Air Service Program (EAS) that subsidizes air carrier service to small and isolated communities, primarily by setting more stringent criteria for program eligibility and restricting further expansion of the program.

### Overview of S. 1300 and S. 2345

On May 3, 2007, Senator Rockefeller introduced the Aviation Investment and Modernization Act of 2007 (S. 1300). On May 16, 2007, the Senate Committee on Commerce, Science, and Transportation convened a markup session and ordered that the bill be reported favorably with amendments. The reported bill, along with an accompanying committee report (S.Rept. 110-144), was ordered printed on August 3, 2007 and placed on the Senate Legislative Calendar under General Orders.

S. 1300 proposes a four-year reauthorization, including modest increases to the FAA's authorized spending levels through FY2011. S. 1300, as amended, offers an alternative to the FAA-proposed user fee structure, proposing to create a separate treasury fund, called the Air Traffic Modernization Fund, that would be financed through the collection of \$25 surcharges imposed on certain flights for air traffic control costs. The surcharge would be principally collected from airlines and high-performance business jet operators, as all piston-engine powered aircraft would be exempt from paying the surcharge. The bill language specifies that more than \$400 million toward the FAA's Facility and Equipment (F&E) account is to be derived from these surcharges each year from FY2009 through FY2011. The bill gives the FAA specific authority to collect these surcharges and impose sanctions upon those who don't pay, but leaves it up to the FAA to devise a collection system. The surcharge would be in addition to the existing tax and fee system, although proposals to modify that tax and fee structure may be considered by the Senate through separate legislation considered by the Senate Committee on Finance or possible floor action.

To further support the modernization of air traffic facilities and services, S. 1300 authorizes the Department of Transportation to issue obligations, such as bonds, totaling up to \$5 billion. These instruments would be repaid, with interest through revenues derived from the collection of the \$25 per flight surcharges. Interest yields on these instruments would be set at rates of comparable treasury obligations.

- S. 1300 includes several provisions for FAA management and organizational reform. The bill includes an alternate to the FAA-proposed board, by creating a smaller seven-member Air Traffic Control Modernization Oversight Board that would have greater oversight authority over FAA's planning, budgeting, and implementation of facilities and equipment modernization. The proposed board would have approval authority over large scale acquisition programs (those of \$100 million or greater), and would be responsible for approving the FAA's capital improvement program, operational evolution plan, facilities and equipment budget, and key leadership positions in the Air Traffic Organization (ATO) and Joint Planning and Development Office (JPDO).
- S. 1300 proposes \$100 million annual increases to the Airport Improvement Program (AIP) through FY2011, but does not include any increases to the maximum Passenger Facility Charge (PFC) that can be levied by airports. The bill does, however, propose a pilot program at up to six airports allowing airports to collect PFCs directly from passengers without any statutory ceiling on the amount that could be charged. The bill includes other technical modifications to the AIP program primarily aimed at increasing the eligibility of smaller passenger service airports to qualify as primary airports and extend the 95% federal share of airport project funding for smaller-sized airports.
- S. 1300 includes several provisions addressing customer service for passenger airlines. These provisions endeavor to provide assurances of adequate food, water, and restroom facilities when flights are substantially delayed. These provisions would also require airlines to provide consumer rights information and airline customer service policies on their Internet websites, and would require airlines to publish customer service and flight delay history information. S. 1300 would also expand DOT's consumer complaint investigations, subject to the availability of appropriations.

With regard to systems planning for next generation air traffic technologies, S. 1300 would require all agencies involved in the NGATS initiative to establish implementation offices and enter into multiagency agreements outlining their respective responsibilities and budgetary commitments to supporting NGATS. Like the FAA proposal, S. 1300 would make the JPDO director a voting member of the FAA's Joint Resources Council (JRC) and the ATO's Executive Council. The bill would extend the authorization of \$50 million annually to JPDO through FY2011. However, unlike the FAA proposal, S. 1300 would not establish a BRAC-like commission to examine FAA facility and services consolidation and realignment. Rather, under S. 1300, the Air Traffic Control Modernization Oversight Board would be tasked with reviewing the FAA's recommendations for realignment and proposing alternative recommendations, but gives the Board no specific power to influence the actions related to FAA realignment in the manner proposed in the FAA bill.

With regard to the FAA's personnel management system, S. 1300 includes a provision that would involve the Federal Services Impasses Panel (FSIP) in cases where the FAA and bargaining units cannot reach an agreement during collective bargaining. The provision would allow the FSIP to order binding arbitration in such cases and outlines a specific process for conducting such binding arbitration proceedings.

S. 1300 includes numerous provisions related to system capacity and safety including provisions designed to: improve runway safety; expedite progress on rulemaking to improve airliner fuel tank safety and reduce flammability risk; conduct research and improve regulations pertaining to pilot fatigue, flight time, and rest requirements; implement several NTSB recommendations pertaining to the safety of helicopter emergency medical service (HEMS) operations; address unmanned flight operations in the National Airspace System (NAS); and examine ways to improve capacity and safety by improving wake turbulence prediction, detection, and avoidance. The bill also seeks to expand the number of flights operating to and from Washington Reagan National Airport.

With regard to environment and energy issues, S. 1300 includes several of the FAA-proposed provisions regarding research and mitigation grants. Additionally, the bill seeks to establish a research grant program and center of excellence to examine the development of synthetic jet fuel from clean coal sources. The bill also includes a provision that would prohibit all aircraft under 75,000 pounds maximum weight that do not conform to Stage 3 noise standards five years after enactment. Heavier aircraft would be required to conform to Stage 3 noise standards by December 31, 1999. S. 1300 also seeks changes to the Air Tour Management Program that include allowing modifications to interim operating authority without further environmental review; allowing transfers of operating authority to conduct commercial air tours over national parks; establishing an annual reporting requirement for commercial air tour operators; and authorizing fee collections from air tour operators tied to the cost of carrying out the Air Tour Management Program.

S. 1300 also proposes changes to the Essential Air Service Program (EAS) including a requirement that DOT allow EAS airlines to code share with other carriers, extension of the existing statutory highway milage criteria for EAS eligibility through FY2011, the creation of financial incentives for improvements to EAS service, and a program to aid the conversion of former EAS airports to general aviation status. The bill would allow additional overflight fee collections in excess of the \$50 million level identified in the FAA proposal to be put toward the EAS program. Under S. 1300, the additional amount authorized in addition to the \$50 million base, would rise from \$77 million to \$83 million.

On November 13, 2007, the Senate Committee on Finance reported S. 2345, the American Infrastructure Investment and Improvement Act of 2007, incorporating the committee's recommendations for what is likely to be the revenue title of the Senate FAA reauthorization bill. Its proposal makes some changes to elements of the existing tax and fee structure, but does not create new user fees. As can be seen in **Table 3**, the committee has increased the general aviation jet fuel tax, increased the international departure/arrival tax, and created a new tax system for a particular segment of the aviation industry — fractionally owned aircraft. The Senate Finance bill provides what is viewed by many as a possible alternative to the surcharge proposal contained in S. 1300.

#### Overview of H.R. 2881

Representative Oberstar introduced the FAA Reauthorization Act of 2007 (H.R. 2881) on June 27, 2007. On June 28, 2007 the House Committee on Transportation and Infrastructure held a markup session on the bill and ordered the bill reported favorably with amendments. While the bill was ordered to be reported favorably with amendments by the committee, the amended bill and accompanying committee report has not yet been made publicly available. Also, on June 13, 2007, Representative Udall introduced The Federal Aviation Research and Development Reauthorization Act of 2007 (H.R. 2698), covering research, engineering, and development programs of the FAA which fall under the jurisdiction of the House Committee on Science and Technology. That committee held a markup session on that bill on June 22, 2007, and ordered that it be reported favorably with amendments. Funding authorization levels for FAA Research, Engineering, and Development (RE&D) and selected provisions contained in H.R. 2698 were incorporated into the version of H.R. 2881 considered on the House floor as Title IX of the bill (see H.Res. 664; H.Rept. 110-335). Also, the text of H.R. 3539 as ordered reported by the House Committee on Ways and Means, providing for the extension and modification of Airport and Airway Trust Fund (AATF) taxes, was adopted and incorporated into the version of H.R. 2881 considered by the House. On September 20, 2007, the House passed H.R. 2881, agreeing to several miscellaneous amendments to the bill. This report discusses H.R. 2881 as passed by the House.

H.R. 2881 proposes a boost in F&E spending to support NGATS initiatives. Also, funding authorization levels specified in H.R. 2698, and incorporated into funding authorization levels specified in H.R. 2881, would substantially increase the available funding for FAA Research, Engineering, and Development (RE&D) activities that fall under the jurisdiction of the House Committee on Science and Technology. The House Committee on Ways and Means reported H.R. 3539, the Airport and Airway Trust Fund Financing Act of 2007, on September 18, 2007. Title X of H.R. 2881 as passed by the House, adopted from the Ways and Means bill (H.R. 3539), follows the general intentions communicated by the House Committee on Transportation and Infrastructure (the T&I Committee), which sought a modest increase in federal aviation fuel taxes. Specifically, the T&I Committee called for increasing jet fuel taxes from 21.8 cents per gallon to 30.7 cents per gallon (roughly a 40% increase) and aviation gasoline taxes from 19.3 cents per gallon to 24.1 cents per gallon (about a 25% increase). The House Committee on Ways and Means, however, agreed to raise the jet fuel taxes even further, to 35.9 cents per gallon (roughly a 65% increase), while accepting the gasoline tax proposal at the 24.1-centper-gallon level. These levels were included in the House-passed version of H.R. 2881.

With regard to airport financing, H.R. 2881 would fund the AIP program at the same levels specified in S. 1300. H.R. 2881 would additionally allow for increased passenger facility charge (PFC) collections, but large hub airports that increase PFCs above the current \$4.50 per passenger level would have their AIP apportionments reduced by an amount equal to the projected PFC revenue increases derived from the fee increase. H.R. 2881 would allow for PFCs to increase, up to \$7 per passenger and would raise the PFC cap on a round trip ticket from \$18 to \$28. The bill also

calls for a study to assess the impact of proposing different PFC rates for connecting passengers versus origin and destination passengers.

H.R. 2881 would set state apportionments for AIP at 10% of total apportioned amounts, with a \$300 million minimum provided total AIP funding remains above \$3 billion. Apportionments for nonprimary airports would remain at \$150,000 or one fifth of the estimated five year development costs. The bill also would raise the required air carrier approval for airport privatization amounts from 65% to 75% and airports participating in the privatization pilot program would not be eligible for AIP funds. Like the FAA proposal and S. 1300, H.R. 2881 would exempt proceeds from the sale of a privatized airport to a public authority from AIP assurances that require all airport revenue be expended for capital and operating costs.

H.R. 2881 includes several provisions regarding passenger airline service, including a requirement that DOT review and adjust denied boarding compensation regulations every two years. The bill would establish additional carrier monthly reporting requirements to provide DOT with data on diverted flights and flights cancelled after leaving the gate. H.R. 2881 would also require contingency plans for providing food, safe drinking water, restrooms, cabin ventilation, and medical care to passengers during excessive ground delays to be developed and submitted to DOT. Airports would also be required to devise plans for sharing facilities and making gates available for such situations, and would require DOT to set up a consumer complaints hotline. The bill would also require airlines to inform passengers at the time of ticket purchase of the names of any insecticides it intends to use while passengers are on board. The bill requires DOT to establish an advisory committee for airline passenger consumer protection. The bill also directs the DOT Inspector General to conduct an audit of air carrier flight delays and cancellations, and requires a GAO assessment comparing passenger rights in the United States to those in the European Union.

With regard to next generation modernization initiatives, H.R. 2881, like the FAA proposal and S. 1300, would increase the stature of the JPDO director, and would require each JPDO supporting agency to designate a senior official and establish an office to oversee agency efforts supporting the NGATS planning and development initiatives. The bill would also require a multiagency integrated work plan describing annual objectives, milestones, and delineation of responsibility among federal agencies, and to tie these plans to the budgetary process. H.R. 2881 would also require GAO to review the progress and challenges associated with air traffic modernization initiatives under NGATS. The bill also authorizes additional appropriations specifically designated for airspace redesign initiatives to enhance aviation system capacity and reduce delays.

H.R. 2881 proposes to establish an FAA working group on facility and service consolidation, consisting of the FAA Administrator and representatives from sectors of the aviation industry as well as labor representatives representing FAA field employees. The working group's functions, however, would largely be advisory in capacity, and it could not by itself prevent any FAA consolidation actions from moving forward. An amendment agreed to and incorporated into House-passed H.R. 2881 would require that FAA regional office consolidation be included in the scope

of the working group's oversight, and would require that the working group include representation for regional office employees.

H.R. 2881 would create a public-private partnership including a university with expertise in air traffic management to serve as an airport-based test facility for NGATS technologies. The bill would also establish a NextGen Research and Development Center of Excellence to provide educational, technical, and analytical assistance regarding NGATS technologies. The bill would also require the FAA to establish a process for including affected employees, such as air traffic controllers and airways system specialists, in the NGATS process and other modernization initiatives.

With regard to FAA personnel management, the House Committee on Transportation and Infrastructure adopted an amendment offered by Representative Costello that, like S. 1300, would require binding arbitration to resolve impasses in contract negotiations. H.R. 2881, however, would invalidate FAA contract actions taken after July 10, 2005, thus appearing to have the effect of undoing the FAA contract with air traffic controllers adopted June 5, 2006, and subjecting the prior impasse with controllers to the terms of the binding arbitration provision. Pending the outcome of the binding arbitration, the provision would allow affected employees to receive "back pay" of any additional salary increase that may be included in the negotiated settlement, and it authorizes \$20 million for this purpose.

H.R. 2881 includes language requiring a GAO study of FAA technical training of system specialists that service air traffic and navigation infrastructure, and a study by the National Academy of Sciences on FAA inspector staffing levels and workload as well as air traffic controller staffing. The bill authorizes increased funding for increasing inspectors, safety technicians, and operational support staffing. H.R. 2881 also calls for an FAA study of front line manager staffing requirements for air traffic control facilities, and would establish a university center of excellence for aviation employment. The bill also seeks to create a 12-member task force to conduct a study assessing the conditions of FAA air traffic control facilities and recommend steps for rehabilitation, remediation, and programmatic changes to prevent unsafe building conditions.

H.R. 2881 provides for 10 additional beyond perimeter slots from Washington Reagan National Airport (DCA), but would reduce within perimeter slots by an equal amount. The bill does not specifically address slot issues at New York's LaGuardia Airport where statutory slot controls recently expired, nor at any other congested airports besides DCA. However, the bill includes a general provision that would allow the FAA to hold meetings among air carriers to voluntarily negotiate schedule reductions at any airport experiencing arrival and departure rates exceeding maximum hourly rates that is likely to have a significant adverse effect on a regional or national level. If air carriers were unwilling to voluntarily agree to schedule reductions, then the provision would authorize the FAA administrator to take appropriate action to reduce arrivals and departures to reflect available airport capacity. Also, an amendment agreed to by the House would require GAO to assess the use of market-based strategies for reducing airspace congestion, such as peakperiod pricing, slots, or quotas, and compare the effects of such initiatives to the improvements in congestion attainable through airspace redesign initiatives.

H.R. 2881 contains language similar to S. 1300 requiring the FAA to report on its progress to install systems to mitigate runway incursions. H.R. 2881 would authorize dedicated funds for runway incursion reduction programs and runway status lights. Additionally, H.R. 2881 would require the FAA to develop a strategic runway safety plan. H.R. 2881 includes language identical to S. 1300 calling on the FAA to finalize rulemaking regarding fuel tank flammability reduction on large transport aircraft. H.R. 2881, like S. 1300, also directs the National Academy of Sciences to carry out a study of pilot fatigue and requires the FAA to implement recommendations of an FAA study on flight attendant fatigue. The bill would also require the FAA to rewrite current flight and duty time regulations for air carrier, commuter airline, and charter pilots to count flight time accumulated conducting nonrevenue flight assignments for the operator toward pilot flight and duty time totals. The bill would also require the FAA to establish occupational safety and health standards for flight attendants, and would require flight attendants, as well as gate agents, to receive specific training in serving alcohol, recognizing intoxicated individuals, and handling disruptive passengers.

With regard to airline maintenance, H.R. 2881 includes a provision that would restrict the use of non-certified maintenance providers, allowing only airline employees or employees of FAA-certified repair stations to carry out substantial and routine maintenance and complete required inspections of aircraft used in airline service. Air carriers would also be required to provide complete lists of their non-certificated maintenance providers, whose activities would be restricted to non-routine, non-substantial maintenance and repair work under this provision. The bill also adopts an amendment agreed to by the House that would extend the requirement for drug and alcohol testing programs to safety-critical positions at foreign repair stations working on air carrier aircraft or components.

With regard to unmanned aircraft, H.R. 2881 would require the FAA to develop a comprehensive plan to safely integrate commercial unmanned aircraft in the national airspace system as soon as possible but not later than the end of FY2012. It also calls for expediting authorization of public-use unmanned aircraft, and implementing interim regulations to allow certain commercial unmanned aircraft to have access to airspace prior to completion of the comprehensive plan.

H.R. 2881 also would authorize funding for wake vortex mitigation technologies, including advisory systems. The bill identifies specific funding amounts totaling more than \$45 million over the four year reauthorization period for wake turbulence-related research and development.

An amendment agreed to by the House would also require the FAA to study the feasability of creating a publicly-searchable Internet database of acceptable height and distance from aviation sites for the installation of wind turbines. The bill would also require the FAA to update standards for aircraft rescue and firefighting (ARFF) personnel and equipment at commercial airports based on national voluntary consensus standards, but does not specifically expand the scope of these standards to all-cargo operations as some aviation safety experts have argued for.

H.R. 2881 includes a provision, similar to that in the FAA proposal, to establish a consortium to develop Continuous Low Energy, Emissions and Noise (CLEEN)

engine and airframe technology. The bill includes proposed sense of Congress language asserting that the European Union's proposed emissions trading scheme is inconsistent with International Civil Aviation Authority (ICAO) practices of establishing consensus-based international standards and recommended practices, and urges the European Union and others to work cooperatively through ICAO to develop "a consensual approach to addressing aircraft greenhouse gas emissions."<sup>2</sup> The bill also calls for research to promote development of alterative jet fuels and calls for the JPDO to establish environmental standards for NextGen technologies. Like the FAA proposal and S. 1300, the H.R. 2881 also includes a provision to fund environmental mitigation grants under a proposed pilot program. Unique to H.R. 2881 is a provision for a pilot program for aircraft departure queue management to decrease fuel consumption and emissions, and a provision requiring the FAA and the EPA to examine how engine noise and emissions standards development could be better integrated across the two agencies. Similar to S. 1300, H.R. 2881 includes a provision that would prohibit operations of non-Stage 3 compliant jets under 75,000 pounds after 2012. An amendment agreed to by the House also adds language stating that it is the sense of the House of Representatives that the Port Authority of New York and New Jersey should conduct noise compatibility planning studies (referred to as Part 150 studies) at John F. Kennedy International Airport and LaGuardia Airport in New York and Newark Liberty and Teterboro Airports in New Jersey. Additionally, the bill would increase funding for the Airport Cooperative Research Program (ACRP) to examine airport environmental issues and calls for an interagency study on the effects of aviation on climate change. The bill would also require the FAA to study the use of lead-free fuels for piston aircraft. With regard to the Air Tour Management Program and curtailing aircraft noise in national parks, the modifications proposed in H.R. 2881 are similar to the FAA proposal initiatives to streamline and expedite agency actions.

H.R. 2881 reserves \$50 million in overflight fees for funding the Essential Air Service (EAS) program and increases the authorization for additional EAS funds to \$83 million. The bill encourages financial incentives and long-term contracts for EAS, but would eliminate the local participation program created by Vision 100. The bill would also create an Office of Rural Aviation within DOT to monitor and improve air service to small communities. The bill also includes language allowing state and local governments to restore an airport's EAS eligibility status by offering proposals, developed in cooperation with the air carrier, to reduce subsidies to below statutory per passenger maximums and allows DOT to increase negotiated EAS subsidies to adjust for any significant increases in air carrier fuel costs. The bill also seeks to clarify the statutory definitions related to the actual control of the operations of U.S. airlines that are owned in part by foreign entities. The House Committee on Transportation and Infrastructure has also agreed to an amendment offered by Representative Oberstar to limit express carrier employees covered under the Railway Labor Act (RLA) to those performing certain aviation-related functions, leaving other express carrier employees, like delivery truck drivers, to be covered under provisions of the more broadly defined National Labor Relations Act (NLRA), which allow them to organize and collectively bargain at the local level and according to less formal standards for affiliation. The measure is supported by labor

<sup>&</sup>lt;sup>2</sup> H.R. 2881, §512, p. 178.

unions and United Parcel Service (UPS) whose employees are already primarily covered under the NLRA, but is opposed by FedEx, whose employees fall under the RLA guidelines.<sup>3</sup>

# **Funding Authorization Levels**

Funding authorization levels for the FAA have been historically split among four principal accounts: Operations and Maintenance (O&M); the Airport Improvement Program (AIP) or Grants in Aid for Airports; Facilities and Equipment (F&E); and Research, Engineering, and Development (RE&D). However, beginning in FY2008, the FAA proposes a restructuring of these accounts, largely to separate operational activities carried out by the Air Traffic Organization (ATO) from FAA's regulatory functions in the FAA's accounting structure. S. 1300, however, proposes to reauthorize the four existing FAA accounts. Therefore, the bills are not directly comparable with regard to funding authorizations. The FAA also proposes new userfee funding mechanisms, under which much of the revenue to be used for air traffic services and regulatory functions would be determined through fee-setting activities carried out by the FAA Administrator, rather than through traditional congressional funding authorizations. This further complicates any effort to make comparisons among the bills with regard to funding levels. Funding mechanisms and levels identified in the bills are generally described below, and more detailed treatment of the FAA-proposed revenue system is provided later in the section titled **Proposed** Tax and Fee Structure.

# **FAA Proposal**

Funding authorization levels in the FAA proposal cannot be compared to historical funding in the FAA's four accounts — O&M, AIP, F&E, and RE&D. This is because the FAA has proposed to restructure these accounts, and also because the FAA proposes to establish a user fee collection authority under which the FAA Administrator would set fees that would be deposited into separate Treasury accounts as offsetting collections. The proposed new accounts under the FAA plan include the Air Traffic Organization (ATO) account and the Safety and Operations account. These would replace the current O&M and F&E accounts, but there is not a one-toone relationship between the current accounts and the proposed accounts. Specifically, some O&M and F&E functions would map into the Safety and Operations account while others would map into the Air Traffic Organization account. One goal of this new accounting structure is to fully separate the FAA regulatory responsibilities from its operational functions on the books as has been done organizationally with the creation of the Air Traffic Organization (ATO). Under the FAA plan, the proposed Safety and Operations and ATO accounts would be funded primarily through user fee collections, while RE&D would continue to be funded through a combination of Airport and Airway Trust Fund (AATF) and General Fund contributions. The AIP program would continue to be funded by the AATF.

<sup>&</sup>lt;sup>3</sup> Ian Swanson, "UPS Works to Hobble Its Rival, FedEx," *The Hill*, July 11, 2007.

**Table 1** Shows the FAA proposed funding authorizations coming out of the existing Airport and Airways Trust Fund (AATF) and the proposed limits or caps on General Fund contributions over the proposed three-year authorization period. Because the proposed fee collection authority would not fully take effect until FY2009, larger contributions from the AATF would be required in FY2008 during the transition to the user fee based system. For FY2009 and FY2010, the proposal assumes that these user fees would cover a large part, but not all, of the FAA's costs for the ATO and Safety and Operations accounts. The AIP program account would continue to receive its revenue from the AATF, and the FAA's RE&D account would still rely primarily on the AATF for its revenue source, with additional funding coming from the General Fund contribution. Maximum General Fund contributions would remain flat at around \$2.5 billion under the FAA proposal. This level of General Fund contribution is particularly troubling to critics of the FAA proposal because it is lower than contribution levels from recent years, which have already been declining. Also, because the proposed maximum General Fund contribution is flat across the proposed three-year authorization period, it will comprise a smaller percentage contribution to the FAA's total budget if costs continue to rise. These increased costs would be covered instead by user fees under the FAA proposal. However, because the FAA proposal would give the FAA administrator fee setting authority, the anticipated revenue generated from fee collections is not discussed in the bill or supporting documentation provided by the FAA. This proposal is discussed in further detail in the section titled **Proposed Tax and Fee Structure**.

Table 1. Airport and Airway Trust Fund Funding Authorizations and General Fund Limits Proposed Under the FAA Bill

(\$ in millions)

Account	FY2008	FY2009	FY2010
Air Traffic Organization (AATF)	7,916	1,130	1,126
Safety and Operations (AATF)	672	69	69
Research and Development (AATF)	123	174	174
Airport Planning and Development	2,750	2,900	3,050
General Fund Contribution (Maximum)	2,618	2,532	2,532

Source: H.R. 1356/S. 1076.

**Note:** Unlike historic tables which show the total revenues for each FAA account, this table only provides revenues for these accounts coming solely from the AATF.

#### S. 1300

Under S. 1300, the FAA's O&M account would see an increase of about 7.7% in authorized levels for FY2008 compared to FY2007 appropriated amounts. This is notable because FY2007 appropriated amounts for O&M already slightly exceed authorized amounts, a situation largely attributed to unanticipated increases in labor costs within the FAA. Beyond FY2008, increases to the O&M account are more modest, averaging slightly above a 3% annual rate, which tracks closely with inflation and employment cost index projections for the broader economy.

Under S. 1300, the authorized levels for the Airport Improvement Program (AIP) would continue the trend of \$100 million annual increases through FY2011.

Perhaps the most notable increase in S. 1300 would be for the Facilities and Equipment (F&E) account. While this account would only see about a 3.7% increase in authorized funding levels in FY2008 compared to FY2007 appropriations, the authorization would then be increased by slightly more than 13% for FY2009. This would be the largest percentage increase on an annual basis for this account, and would be followed by more modest percentage increases to F&E of slightly more than 5% for FY2010, followed by a larger increase of almost 8% for FY2011. This schedule likely reflects the Senate committee's views on the needed spending schedule to keep the acquisition of next generation technologies to modernize the national airspace system on track to meet stated objectives of fully implementing the next generation or NextGen air traffic system by 2025.

S. 1300 also proposes a substantial increase to FAA Research, Engineering, and Development (RE&D) authorized funding levels starting in FY2009. Authorized funding for RE&D would increase by 36% in FY2009 compared to both the FY2008 request and the proposed FY2008 authorized amount in the bill. Under S. 1300, this would be followed by essentially flat funding of about \$190 million annually for RE&D through FY2011. Like the proposed increase to the F&E account authorized levels, this proposed increase to RE&D likely reflects the Senate committee's views on the increased funding for research and development needed to support progress on NextGen development efforts.

#### H.R. 2881

H.R. 2881 would provide funding for the FAA's O&M account and the AIP program at the same levels specified in S. 1300. With regard to the F&E account, however, H.R. 2881 proposes to set higher funding levels than specified in S. 1300. H.R. 2881 proposes an increase of almost 25% in FY2008 authorizations for F&E spending compared to FY2007 appropriated amounts. This would be followed by smaller annual increases from FY2009 through FY2011.

The House Committee on Science and Technology, which has jurisdiction over the FAA's research functions and components, has proposed substantial increases to available funding for the FAA's RE&D account. Specifically, H.R. 2881 would triple the available funding for RE&D activities in FY2008 compared to FY2007 appropriated amounts. Available funding for RE&D would be further increased by 44% in FY2009. Authorized funding levels for RE&D would increase over the proposed authorization period to \$515 million in FY2011, compared to current appropriated levels of \$131 million.

**Table 2. Reauthorization Funding Levels for FAA Accounts**(\$ in millions)

Account	FY2007	FY2008	FY2009	FY2010	FY2011
Operations and Maintenance (O&M) Administration Senate (S. 1300) House (H.R. 2881) Conference Enacted Authorization Appropriated (FY2007)	8,064 NS 8,064 8,064 8,084 8,104	See Note 8,726 8,726	See Note 8,978 8,978	See Note 9,305 9,305	See Note 9,590 9,590
Airport Improvement Program (AIP) Administration Senate (S. 1300) House (H.R. 2881) Conference Enacted Authorization Appropriated (FY2007)	3,400 NS 4,000 3,700 3,700 3,515	2,750 3,800 3,800	See Note 3,900 3,900	See Note 4,000 4,000	See Note 4,100 4,100
Facilities and Equipment (F&E) Administration Senate (S. 1300) House (H.R. 2881) Conference Enacted Authorization Appropriated (FY2007)	3,098 NS 3,110 3,110 3,110 2,481	See Note 2,572 3,120	See Note 2,923 3,246	See Note 3,079 3,259	See Note 3,317 3,353
Research, Engineering, & Development (RE&D) Administration Senate (S. 1300) House (H.R. 2881) Conference Enacted Authorization Appropriated (FY2007)	107 NS NS 356 356 131	140 140 335	+174 191 482	+174 191 487	NS 194 515
TOTALS Administration Senate (S. 1300) House (H.R. 2881) Conference Enacted Authorization Appropriated (FY2007)	14,007 14,196 13,929 14,475 14,475 14,231	See Note 15,238 15,981	See Note 15,992 16,606	See Note 16,575 17,051	See Note 17,201 17,558

**Sources:** P.L. 108-176; S. 1300; CRS Report RL32498, *Vision 100: Historical Review of the Century of Aviation Reauthorization Act (P.L. 108-176)*, by Bart Elias, John W. Fischer, and Robert S. Kirk; and Federal Aviation Administration, *Budget in Brief: Fiscal Year 2008*. Note: Beginning in FY2008, the Administration has proposed to restructure its accounts creating a new Safety and Operations account and an Air Traffic Organization account and abandoning the O&M and F&E accounts. Without detailed analysis, these newly proposed accounts are not comparable to authorization and funding levels under the historic account structure. Administration requests for AIP and RE&D reflect amounts requested in the Administration's FY2008 budget. However, the FAA proposal does not

contain specific authorization requests for these accounts. For RE&D the authorization specifies amounts that may be appropriated from the aviation trust fund in addition to any general fund amounts set by future year appropriations. These amounts are designated with a preceding plus sign (+) in this table, to indicate that this activity may receive additional general fund contributions above these proposed authorization levels. For FY2008, the Administration requested an authorization of \$123 million in addition to general fund contributions for RE&D. However, the appropriations request of \$140 million, presented in the President's Budget, is reflected in the table. This table provides overall funding levels for the four main FAA accounts as specified in the respective bills. It does not, however, include miscellaneous additional, specifically designated appropriations included in separate provisions of the bills.

#### **FAA Finance**

Over the last reauthorization period there has been considerable discussion about the long term health of the existing trust fund based FAA financing system. The FAA, and others, believe the existing system will have difficulty providing the funding that the agency will need in the years ahead and that a new funding system more closely tied to aviation industry activity should be adopted. Other aviation interests, especially those representing the GA portion of the industry believe the existing funding system is adequate at least for the next reauthorization cycle. As Congress considers reauthorization it will likely need to weigh these opposing viewpoints. For a detailed examination of the existing aviation finance system and the proposed changes to this system see CRS Report RL33913, *Aviation Finance: Federal Aviation Administration (FAA) Reauthorization and Related Issues*, by John W. Fischer.

# **FAA Proposal**

The Next Generation Air Transportation System Financing Reform Act of 2007 (H.R. 1356/S. 1076), proposes the most significant change in FAA aviation finance since the federal program was created by the 1970 Act. The FAA proposal provides for a three year authorization period (FY2008 - FY2010) during which the FAA would transition from its existing trust fund/general fund based financing system to a system based on new direct fees and existing excise taxes, as well as general fund monies. Although the trust fund would be continued, its overall role in funding the agency is significantly reduced. The proposal uses a mix of direct fees (referred to as user fees by the FAA and throughout this section), excise taxes, and general funds, to pay for the FAA's ATO related activities. The proposal funds the FAA's safety activities primarily from general funds, but also allows the FAA to collect user fees related to its registration and certification activities for this purpose. Excise taxes would be used to support the continued aviation trust fund which is dedicated primarily toward funding AIP, but also supports part of RE&D and Essential Air Service (EAS) programs.

The FAA proposal does not set new user fee rates for ATO services. Rather it enunciates a framework for how fees can be set and creates an Air Transportation System Advisory Board (Board) to assist the FAA Administrator in establishing appropriate fee levels and mechanisms. Ultimately, however, the Administrator would be the sole decision maker on fee setting issues.

The proposal adopts a new financial structure for the FAA that would correspond to the new program funding regime. To facilitate this structure: it would create two new accounts in the Treasury to receive the newly imposed user fees; allows for the establishment of a reserve fund; and allows the FAA to issue bonds to speed-up F&E equipment acquisition. Agency funding would still be subject to annual congressional appropriations.

The FAA proposal is controversial, and several aviation interest groups came out against it almost as soon as it was introduced.<sup>4</sup> The proposal, however, has supporters, especially the Air Transport Association (ATA), which views it as a positive step forward.<sup>5</sup> Congressional hearings on H.R. 1356/S. 1076, which embodies the FAA proposal, have been held in both the House and the Senate.

**Proposed Tax and Fee Structure.** As mentioned above, the principal feature of the FAA proposal is the creation of a direct user fee system to pay for the majority of the Agency's costs associated with its ATO activities. The FAA proposal, however, does not recommend a specific user fee structure. Instead, it lists the criteria that must be considered in setting fee levels and leaves it to the Board and ultimately the FAA Administrator to actually set the fees. The proposal requires that the Administrator consult with affected parties prior to establishing a fee structure, but gives the affected parties no further role in the process.<sup>6</sup>

**ATO User Fees.** Specific ATO user fees can be set for enroute, oceanic, and terminal area flight activity. Enroute and oceanic fees can be based on "distance traveled or any other method that is consistent with the treaties and international agreements to which the United States is a party." Since much of the rest of the world uses aircraft weight and the distance flown as part of its fee setting process, it would appear that a similar fee setting regime could be implemented here. Overflight fees (for aircraft transiting U.S. airspace) would be eliminated and these flights would be subject to the enroute and oceanic fee system.

Fee setting for terminal area activities could be somewhat more complicated because the proposal would allow for fees to be differentiated at various locations and at different times of the day. Factors that could be included in the terminal fee structure can include aircraft takeoffs/landings (at airports with over 100,000 passenger boardings per year), aircraft weight, operations at a large hub airport (1% of total U.S. enplanements), time of day or day of week at congested large hubs, and different fees for daytime and nighttime operations.

<sup>&</sup>lt;sup>4</sup> Wolfe, Kathryn. "FAA's Funding Proposal Doesn't Fly With Entire Aviation Industry, Lawmakers." *CQ Today - Transportation and Infrastructure*. February 16, 2007.

<sup>&</sup>lt;sup>5</sup> [http://www.airlines.org/news/releases/2007/statement 12-14-07.htm?PF=true].

<sup>&</sup>lt;sup>6</sup> It would appear that the Board, with wide industry representation, is supposed to be part of the consultation process, although this is unstated in the bill.

<sup>&</sup>lt;sup>7</sup> The airline industry, and groups such as the air cargo industry, have traditionally opposed weight-based tax structures.

User fees would be imposed on all commercial users of ATO services irrespective of aircraft type. For the purposes of determining which tax certain aircraft might pay, the applicability of IRS regulations would delineate between commercial and noncommercial users. Although GA aircraft operate outside of the ATO user fee system most of the time, they would be subject to terminal-related fees at congested large hub airports.

The FAA proposal would require that fees be set in relation to the costs incurred for providing ATO services. In setting the fees mentioned above the FAA would be prohibited from using flight altitude as a fee setting factor. Under the proposal, it could offer incentives, by way of reduced fees, for the purchase and use of equipment that enhances an aircraft's safe and efficient operation in the air traffic system. In addition, it could seek sufficient user fee revenues to establish a reserve fund to be available if system revenues fail to reach projected levels.

The ATO would also receive funding from excise taxes. The proposal suggests that a 70-cent-per-gallon fuel tax be imposed on all GA users (kerojet or aviation gasoline). Of this, 56.4 cents per gallon is dedicated to ATO activities and 13.6 cents is reserved for the aviation trust fund. These fees are to be indexed to inflation beginning in 2009 and can be modified by the Administrator in future years. The FAA believes that it is no longer necessary to differentiate the tax rate for turbine (avgas) and piston (aviation gasoline) aircraft users because of the much higher fuel use rates of turbine aircraft.

**Safety and Operations User Fees.** Safety and non-ATO operations activities would be primarily funded by Treasury general funds. In addition, however, the FAA is to impose registration fees for specified services at rates detailed in the proposed legislation. By way of example, aircraft registration would be subject to a \$130 fee and issuing an airman medical certificate would cost \$42. Many of the activities listed here were previously provided at nominal fee levels.

Fees are also to be imposed for FAA certification activities. Specific fees for activities such as certification of a large foreign repair station or a maintenance technical school are not enumerated in the legislation. Rather, the Administrator is to set fees at levels that correspond to the costs imposed on the FAA for providing the certification service in question.

**Trust Fund Excise Taxes.** The largest source of revenues for the trust fund would come from a 13.6-cent-per-gallon tax on all aircraft irrespective of fuel type. These taxes are to be adjusted for inflation and can also be adjusted, up or down, if the FAA cost allocation process so dictates.

The other principal source of funding for the trust fund is by continuation of the international arrivals/departure fee which is set at \$6.39 per event. This tax can also be adjusted for inflation and/or cost allocation reasons.

Although the FAA proposal is based primarily on direct user fees, there is a transition period during which the trust fund would continue to provide some funding for ATO and all other FAA activities, albeit at a diminishing level.

Air Transportation System Advisory Board (Board). The FAA proposal would creates a 13 member Board charged with advising the Administrator on user fee and other issues at his or her request. The Board's membership would include the Administrator, a Department of Defense representative, three members representing "the public interest," an airport member, three airline members representing different size air carriers, a cargo airline member, a GA member, a business aviation member, and a representative of the aviation manufacturing industry. Appointment of all members is made by the Secretary of Transportation. In addition, the proposal would prescribe the Board members' terms and provides guidance on its administrative functioning.

The Board can advise the Administrator on a wide range of FAA programs and activities. At the outset, however, it would appear that the Board's principal duty is to help with the creation of the new user fee system. According to provisions of the FAA proposal, "prior to establishing or modifying fees ... the Administrator shall consult with and seek the recommendations of the type and level of such fees." A procedure is established whereby the Administrator, who has ultimate fee setting responsibility, can disagree with the Board's recommendations and establish fees by publishing the reasons for disagreement in the Federal Register.

It would be up to the Administrator to determine how, and how much, they might wish to use the Board's expertise. There is nothing in the legislation as proposed that automatically gives the Board any power to exercise its advisory role, especially in a public forum. This is because the Board's actions would not be subject to the public meeting and other administrative provisions of Title 5 U.S.C. Further, it is not clear that the Board would have access to information about cost allocation and other subjects, except to the extent that the Administrator wishes to make this material available to the Board.

**Budget and Structural Provisions.** As suggested by the new tax and fee proposal, the FAA would be reorganized from a budgetary perspective. ATO assessed user fees are to be deposited into a newly created Treasury ATO account. Similarly, registration and certification fees are to be deposited in a newly created Treasury safety and operations account. The trust fund, however, remains intact.

The new user fees would require a new collection system to insure that they are deposited in the appropriate account. The Administrator would be charged with developing this system, perhaps with the help of the Board. The FAA proposal would give the Administrator some enforcement powers to assist in the collection effort long term.

FAA spending would still require annual appropriation by Congress. The relationship between the FAA and congressional appropriations committees would apparently be unchanged. From a budgetary standpoint, however, it appears that the offsetting collections process created by the proposal would remove FAA spending from the discretionary part of the budget. At least one outside source has suggested that the new funding arrangement could run afoul of the newly created pay-as-you-go

rules adopted by the House of Representatives.<sup>8</sup> In short, it is unclear at this point how the new funding arrangement proposed here would play out as part of the congressional budget and appropriations process.

Congressional finance committees (House Ways and Means and Senate Finance) could lose their existing jurisdiction over some aspects of the FAA tax and fee setting. These committees would likely retain their jurisdiction over the excise taxes to be deposited in the aviation trust fund, but could have no role or oversight over the newly established user fees. Authorizing committees normally have jurisdiction over offsetting collection programs of the type that would be created for the ATO, and for safety and operations. As proposed, however, all fee-setting powers would reside with the Administrator, meaning that a specific oversight role for the authorizing committees is not defined in the legislation.

**Bonding Authority.** The Secretary of Transportation would have the ability to issue Treasury bonds to facilitate a rapid implementation of the NGATS program. Up to \$5 billion could be issued at interest rates established by the Treasury. To finance the bonding the Secretary could increase user fees by an amount needed to repay the bonds with interest. These additional revenues would not go into the new Treasury accounts mentioned earlier, but would flow directly to the Treasury. Full repayment would be required by the end of FY2017.

The concept of using bonds to speed up the acquisition of F&E capital items has been discussed for years. The dedicated revenue stream to the ATO account would make bonding possible as part of the FAA's program for the first time. It has been argued that having this authority would allow the FAA to better program its acquisition requirements over an extended period of time, as opposed to the potential uncertainty of the annual appropriations process. In addition, access to additional funds should give the Agency the ability to pursue a number of technology and equipment upgrades at the same time. The main argument against bonding is that the interest payments make it a more expensive way to pay for infrastructure than direct appropriations would be.

**Agency Funding.** The FAA proposal provides overall authorization levels for the FY2008 - FY2010 period of nearly \$28 billion. This number, however, cannot be meaningfully compared to previous legislation because it excludes much of the funding required by the prospectively user-fee funded ATO, and safety and operations activities. These activities would now be linked to actual system costs which cannot be determined this far in advance. To the extent that the authorized levels can be compared they suggest a significant cut in AIP and EAS funding.

#### S. 1300

S. 1300 as reported by the Senate Committee on Commerce, largely ignores the Bush Administration proposal and maintains the existing funding structure for the FAA with a couple of important caveats. First, the Commerce Committee lacks

<sup>&</sup>lt;sup>8</sup> *Transportation Weekly.* "Administration FAA Bill Likely Violates House Pay-As-You-Go Budget Rule." February 28, 2007, p. 13.

jurisdiction over taxes and fees which are in the domain of the Senate Committee on Finance. This being the case, Commerce Committee-reported bill does not include tax and fee provisions though, as will be discussed subsequently, it does include a significant revenue raising element. In addition, the committee has proposed an oversight Board and provided for bonding authority. In each instance S. 1300 differs from provisions in the FAA proposal. On September 21, 2007 the Senate Committee on Finance ordered an original bill to be reported that makes some changes to the existing aviation tax and fee structure. The Finance Committee proposal declines to adopt a user fee system for aviation system finance. It is expected that the differing views of the two committees will be reconciled before or during floor consideration of S. 1300 in the weeks ahead.

**Modernization Surcharge.** The most contentious element of S. 1300 is a proposal to levy a \$25 surcharge on flights<sup>9</sup> operating in the national airspace system. The surcharge is designed to pay for a significant portion of FAA costs associated with the NGATS modernization program. Revenues collected by the surcharge are to be treated as "offsetting collections" for congressional budgetary purposes and are to be deposited in a new Treasury created air traffic modernization fund. As an offsetting collection the surcharge is under the jurisdiction of the authorizing committee, in this case Senate Commerce. Spending of these funds is subject to authorization and to subsequent annual appropriation.

Although the bill provides for broad industry collection of the surcharge, it exempts a large segment of annual flight activity from the fee. The major exemptions are for all piston powered aircraft, and for all turboprop and turbojet aircraft operating outside of controlled airspace. Other exemptions are provided for certain intrastate flights (Alaska and Hawaii) where neither a terminal radar approach control (TRACON) or other FAA ATC facility is involved in servicing the flight. Other exemptions apply to military and public aircraft (U.S. and foreign), air ambulance aircraft, agricultural aircraft, and Canada-to-Canada flights.

The surcharge is to be payable to the Administrator of the FAA. The Administrator is also charged with implementing the surcharge collection process. Limited guidance is provided in the bill as to how the collection process might work leaving it largely to the Administrator and Treasury to establish a workable process. The bill provides for penalties for non-payment of the surcharge.

As reported the provision would provide a portion of the annual F&E budget beginning in FY2009 at a level of \$412 million. Funding for the subsequent two years of the authorization period is provided at \$423 million and \$436 million respectively.

A related provision in the bill requires that all aircraft filing flight plans with the FAA, including those exempt from the surcharge, include information as to whether or not the flight is being operated for commercial purposes (for compensation or for hire). Collecting this information is apparently directed toward filling what many

<sup>&</sup>lt;sup>9</sup> The bill defines a "flight" as a takeoff and landing by an aircraft.

industry observers see as a large gap in existing industry data (i.e., determining what portion of GA flights is for commercial rather than personal purposes).

**Surcharge Issues.** The surcharge is viewed by the GA community as a user fee and is opposed for the same reasons that GA opposes the user fee portions of the Administration proposal (i.e., GA believes that it creates marginal demands on the ATC system and that its contribution to funding the FAA is best handled by the already existing fuel tax system). Conversely, the airline industry generally supports the surcharge proposal and views it as a positive move toward getting all system users, and especially corporate aviation, to pay for their fair share of ATC system costs.

Within the Senate Commerce Committee support for the surcharge proposal was closely split. An attempt to strike the surcharge from the reported version of the bill failed on a vote of 12 to 11. Senator Ted Stevens, having voted initially to abstain on the amendment, later changed his vote in order to provide a majority for moving the surcharge provision for future consideration on the Floor.<sup>10</sup>

In addition to the philosophical questions about the desirability of user fees the question can also be raised about whether a \$25 surcharge would be sufficient in and of itself to provide the amount of designated modernization funding authorized in S. 1300. The answer, based on a simple analysis of industry data is that this might not be the case. As a result, supplemental revenues for the modernization fund may be considered by the Senate Committee on Finance. There has already been an open discussion in industry circles about the need to consider possible fuel tax and/or other fee increases in order to meet both modernization needs and additional funding needs for other FAA activities.

**Leveraged Financing for Next Generation Air Traffic Control System** (Bonding Authority). S. 1300, like the FAA proposal, would provide the FAA with up to \$5 billion in bonding authority to facilitate expedited spending for NGATS-related capital projects. Other administrative aspects of the bonding proposal differ, however. For example, funds would be available for the period FY2009 through FY2025, instead of FY2009 through FY2017. Bonds could be used to pay for NGATS projects listed as part of the FAA's Capital Improvement Program (CIP) at the discretion of the Secretary of Transportation, with the approval of the Office of Management and Budget (OMB). Interest rates would be set by the Treasury. Repayment would be made from the surcharges deposited in the modernization fund, on which repayment would have priority over other types of modernization spending. Bonding, for capital improvements, as opposed to using

<sup>&</sup>lt;sup>10</sup> "Senate Committee Approves FAA Reauthorization," *Transportation Weekly*, Legislative Services Group, Vol. 8, Issue 22, May 23, 2007, p. 6.

<sup>&</sup>lt;sup>11</sup> According to the FAA there were over 18 million total flights in the U.S. in 2005. If each of these flights were to be taxed, which would not be the case since a large segment of these flights would be exempted from the surcharge, \$450 million might be raised. In addition to paying for the modernization fund contribution to F&E, the surcharge would also be used to pay for up to \$5 billion in bonds, plus interest, issued in accordance with another provision of the bill.

appropriated funds, remains a controversial concept for the same reasons enunciated in the earlier discussion of the Bush Administration's proposal.

Air Traffic Control Modernization Oversight Board (Oversight Board). The Oversight Board that would be created by this bill, unlike the Board proposed by the Administration, has real power and, some might argue, some unusual powers as well. S. 1300 creates a seven member Oversight Board appointed by the President and confirmed by the Senate. Membership consists of: the Administrator of the FAA, a representative of DOD, a representative of the "public interest," the chief executive officer (CEO) of an airport, the CEO of an airline, a representative from one of the FAA's labor organizations, and a representative of the GA segment of the industry.

The Oversight Board is assigned a number of functions, some advisory in nature and some that give the Oversight Board approval authority over FAA actions. As stated in the bill these functions are as follows:

- Review and advise on FAA modernization, budget, and cost accounting activities.
- Review the FAA strategic plan. Provide recommendations on nonsafety elements and advice on safety elements.
- Review ATC efficiency and make recommendations based on its performance.
- Approve all capital expenditures of over \$100 million related to the ATC system modernization.
- Approve the FAA's F&E budget prior to its submission to OMB.
- Approve the CIP prior to its submission to Congress.
- Annually approve the Operational Evolution Plan (OEP).
- Approve the Administrator's choice of a chief operating officer (COO) for the Air Traffic Organization (ATO).
- Approve the selection of the Head of the Joint Planning Development Office (JPDO).

The bill requires that Oversight Board members have certain types of expertise in aviation and organizational subject areas. They also must not have a pecuniary or financial interest (defined by the provision), and not be a member of a group that lobbies on aviation-related legislation. From an administrative perspective the bill allows the Oversight Board to choose its own chairman and vice chairman, makes a simple majority of members a quorum, and allows a majority vote of members present to be sufficient for Oversight Board action. Also, Oversight Board members are exempt from personal liability laws as concerns their official activities.

**Discussion.** The proposed make-up of the Oversight Board and its role in the NGATS implementation process are likely to raise several questions during further congressional consideration of this reauthorization proposal. One very notable provision here is that the bill gives equal status vis-a-vis Oversight Board activity to the FAA Administrator and to the representative of FAA's labor unions. This arrangement certainly raises questions about executive branch authority. Given the proposed structure of the Oversight Board, given its ability to choose its own Chairman, it is not out of the realm of possibility that the FAA labor representative

could have certain powers that are normally associated with the executive branch, especially as regards budget issues.

Another unusual provision is the requirement that the Administrator seek Oversight Board approval before submitting the F&E portion of the annual FAA budget to OMB. This provision can be viewed as an extra step that could potentially slow down the annual agency budget approval process. Hence, the Oversight Board sign-off is likely to require certain accommodations in terms of deadlines, etc.

Questions can be raised about the desirability/likelihood of certain of the conditions to be met by potential Oversight Board members. For example, it seems unlikely that the CEO of an airline would not have a disqualifying financial interest in his/her airline. The same type of question could certainly be raised for the airport CEO member and potentially for the GA member. Further, the member representing the public interest is to have a "fiduciary responsibility" to represent the public, although how this charge is defined is not detailed in the proposed legislation.

The bill allows the Administrator to withhold certain information and documents from the Oversight Board if they reveal proprietary or commercial information. The members of the Oversight Board, having gone through the congressional confirmation process, would normally be viewed as officers of the United States in the same manner as other FAA employees. Certain FAA, and other designated federal employees, routinely deal with this type of information in the normal performance of their duties. It, therefore, seems unusual that such an exclusion of information, especially if it provided substantive information relevant to capital improvement projects, could be denied to the Oversight Board.

#### S. 2345

On November 13, 2007, the Senate Committee on Finance reported an original bill, S. 2345, the American Infrastructure Investment and Improvement Act of 2007, incorporating the committee's recommendations for what is likely to be the revenue title of the Senate FAA reauthorization bill. Its proposal makes some changes to elements of the existing tax and fee structure, but does not create new user fees. As can be seen in **Table 3** the committee has increased the general aviation jet fuel tax, increased the international departure/arrival tax, and created a new tax system for a particular segment of the aviation industry — fractionally owned aircraft. At the moment, passengers on fractionally owned aircraft are treated by the tax code in the same manner as airline passengers, subject to the airline ticket tax, the segment fee, and international departure/arrival tax. The Committee bill would instead treat this industry segment as if it were part of the general aviation industry for the purposes of the aviation jet fuel tax, but would also impose a flat fee departure tax on the aircraft, rather than on the passenger. All of the additional revenues collected by the changes in taxation would be deposited in a newly created account within the Treasury and reserved for NGATS related activities.

**Table 3. Proposed Aviation Tax and Fee Changes** 

Tax or Fee	Existing Tax or Fee Rate (2007)	H.R. 2881	S. 1300 — Senate Commerce	S. 2345 — Senate Finance
General Aviation Gasoline <sup>a</sup>	19.3 cents/gallon	24.1 cents/gallon	NA	no change
General Aviation Jet Fuel (Kerosene) <sup>a</sup>	21.8 cents/gallon	35.9 cents/gallon	NA	35.9 cents/gallon Applies to fractional ownership aircraft
Commercial Jet Fuel (Kerosene) <sup>a</sup>	4.3 cents/gallon	no change	NA	no change
International Departure/ Arrival Tax	\$15.10 international departure tax (indexed to CPI)(prorated Alaska/Hawaii to mainland)			
\$15.10 International Arrivals Tax (indexed to CPI)(prorated Alaska/Hawaii from mainland)	No change	NA	\$16.65 (indexed to CPI)	
Surcharge	No provision	No provision	\$25 per departure for non-exempt aircraft	No provision
Fractional Aircraft Ownership per Departure Tax	No provision	No provision	NA	\$58

a. Does not include 0.1 cents/gallon for the Leaking Underground Storage Tank (LUST) trust fund.

The Finance Committee bill does not deal exclusively with airline financial issues. Provisions in the bill seek to remedy an expected FY2009 shortfall in the highway trust fund and creates a new bonding authority program for intercity passenger rail service. It remains to be seen whether the Senate will consider these provisions as part of the FAA reauthorization bill or consider them separately.

**Discussion.** There is a difference of opinion as to the need for a surcharge between Members of the Finance Committee and the Commerce Committee that will need to be resolved before work on the FAA reauthorization bill is completed in the Senate. The two bills can be viewed as competing proposals on how additional financing of the FAA should be accomplished. The leadership of Commerce's Aviation Subcommittee strongly favors the surcharge approach to increasing FAA modernization financing and is opposed to the idea of stripping this provision out of the final bill, which is the position favored by several Members of the Finance Committee. In effect, the Finance Committee has largely taken the GA industry position against user fees. The full Senate, therefore, will decide the ultimate fate of the surcharge proposal.

#### H.R. 2881

Like the Senate Commerce and Finance Committees, the House bill rejects the Bush Administration's financing proposal outright. H.R. 2881, as reported by the House, increases the general aviation gasoline tax to 24.1 cents-per-gallon and the general aviation jet fuel tax to 35.9 cents-per-gallon, **Table 3**. The existing 4.3-cent-per-gallon tax on commercial jet fuel is unchanged by the bill, as are all other existing aviation taxes and fees. The bill also reserves the increased revenue to be collected by the fuel tax increases for funding of NGATS-related programs.

The bill also includes a provision calling for the adjustment of existing overflight fees (flights that do not take off or land in the U.S.) (these fees are currently used primarily to fund a portion of the EAS program). The FAA is to adjust these fees by expedited rulemaking to insure that the fees are reasonably related to the cost of providing air traffic services for overflights. The bill, however, specifically excludes altitude as a factor that can be used in the adjustment of the overflight fees.

**Registration, Certification, and Related Fees.** The bill includes fees for aircraft registration, airman certificates, and other types of FAA provided documentation at the same levels proposed by the Administration. It also provides that these fees may be adjusted over time if the FAA's cost accounting system indicates that the cost of providing these services to the aviation sector are higher/lower than the fee levels established in the bill. The House bill does not, however, follow the lead of the Administration bill and impose a new fee structure for FAA's new large aircraft certification programs and for other activities such as certification of foreign repair stations.

**Discussion.** Unlike the FAA proposal and S. 1300, H.R. 2881 is notable primarily for what it does not do. The House ultimately decided not to recommend major tax and fee changes to the existing aviation finance system. The modest increases in fuel taxes suggested by the bill, indicates that a majority of the House Members believe that the existing tax system needs only minor tweaking in order to support more robust FAA spending in the years ahead. This view is largely shared

<sup>&</sup>lt;sup>12</sup> National Journal's Congress Daily AM. Senate Standoff Prompts Move to Extend Aviation Taxes. September 26, 2007.

by the GA industry, but not by other sectors of the industry, especially the airlines and airports.

# **Airport Financing**

The Airport Improvement Program (AIP) provides federal grants for airport development and planning. AIP funding is usually limited to capital improvements related to aircraft operations. Commercial revenue-producing portions of airports and airport terminals are improvements that are generally not eligible for AIP funding. AIP money cannot usually be used for airport operational expenses or bond repayments. AIP funds are distributed either as formula grants or as discretionary grants. Small airports are much more dependent on AIP grants than large and medium hub airports. The larger airports can more easily generate revenue from user fees and have historically had the financial wherewithal to successfully access the bond market. For background and legislative history of federal aid to airports, including a description of the AIP program, as well as an overall discussion of AIP issues, see CRS Report RL33891, *Airport Improvement Program: Issues for Congress*, by Robert S. Kirk.

The Passenger Facility Charge (PFC) program provides a source of non-federal funds intended to complement AIP spending. The PFC is a local tax imposed, with federal approval, by an airport on each boarding passenger. PFC funds can be used for a broader range of projects than AIP grants and are more likely to be used for "ground side" projects. PFCs can also be used for bond repayments.

The AIP and PFC programs are the sources of funds for airport capital development that have the most federal involvement. Other sources are bonds, state and local grants, and airport revenue.

The FAA proposal (H.R. 1356/S. 1076), would make major changes in both the AIP and PFC programs. In effect, the proposal would reduce the size and scope of the AIP program, while increasing the role of PFCs in airport finance. The proposal would broaden allowable costs under both programs. The distribution of AIP grants would undergo major changes and the local matching share for AIP grants would be changed for some airports.

S. 1300, as reported, retains the basic AIP program size, structure, and funding distribution. It would increase the program's overall year-over-year authorization level by \$100 million for each of the four years covered by the bill. S. 1300 does not raise the PFC cap. Consequently, under S. 1300, the significance of the AIP and PFC programs relative to each other's role in airport finance would remain roughly the same as it is under current law.

H.R. 2881 also retains the basic AIP program size, structure, and funding distribution. As does S. 1300, it would increase the program's overall year-over-year authorization level by \$100 million for each of the four fiscal years covered by the bill. Unlike S. 1300, however, H.R. 2881 would raise the PFC cap to \$7.

Consequently, the bill would raise the significance of the role of the PFC relative to that of AIP within the context of airport finance.

Neither S. 1300, as reported, nor H.R. 2881, as passed, restructure the AIP or PFC programs substantially but they do make a significant number of what may be seen as perfecting changes.

### **AIP Funding**

The authorization for FY2007, the final year of funding under Vision 100 was \$3.7 billion, the amount actually made available through the appropriations process (i.e., the obligation limitation under P.L. 110-5) for AIP was \$3.515 billion.

**FAA Proposal.** The funding levels for AIP, under the FAA proposal, reflect a reduction of AIP's role in airport finance. The proposal recommends \$2.75 billion for FY2008, \$2.9 billion for FY2009, and \$3.05 billion for FY2010. The FAA's section-by-section analysis suggests that the recommended increase in the PFC ceiling and the elimination of the AIP entitlements for large and medium airports (discussed later in this report) reduces the need for AIP funding. In recent years, the George W. Bush Administration annual budget proposals have consistently recommended reduced spending on AIP only to have it just as consistently restored to near its authorized level by Congress. Some observers in the transportation community have suggested that cutting the popular AIP program is also a way of keeping down the annual totals set forth in the FAA's reauthorization proposal. Given that the Administration's financing proposal for the Airport and Airway Trust Fund would support AIP spending directly through aviation fuel taxes, the lower spending for AIP, meant that the Administration could propose a smaller increase in their aviation fuel tax proposal than they would have had to if they had supported continuing the funding of AIP at the higher current FY2007 authorized level of \$3.7 billion.<sup>13</sup> Over time, the link of the AIP spending level to the fuel tax could make it difficult to increase the program's funding because this could require raising the fuel taxes that support the program. Also, should AIP be authorized at the current authorization level or higher it could change the implications of the programmatic changes in AIP proposed by the Administration, should they be enacted.

**S. 1300.** S. 1300 recommends an increasing authorization for AIP over the life of the bill, as follows: \$3.8 billion for FY2008; \$3.9 billion for FY2009; \$4.0 billion for FY2010; and \$4.1 billion for FY2011. The \$100 million per year growth in the program extends the pattern of funding growth in Vision 100. Over the four-year life of the bill's authorization this would provide an aggregate additional authorization of \$1 billion for AIP (i.e., compared to freezing the AIP authorization for FY2008-FY2011 at the \$3.7 billion level authorized for FY2007, the final year of Vision 100).

**H.R. 2881.** H.R. 2881, as passed, would provide the same amounts as recommended in S. 1300.

<sup>&</sup>lt;sup>13</sup> See FAA, Next Generation Air Transportation System Financing Reform Act of 2007: Section-by-Section Analysis, 37.

# Formula Funding (Entitlements)

The FAA proposal would make a number of changes in the distribution of AIP funds that airports are entitled (hence the term entitlements) to based on administrative formulas. S. 1300 would make few changes to the AIP entitlements.

Elimination of the \$3.2 Billion AIP Program Level "Trigger". Under current law the formula apportionments (also referred to as entitlements) fund two levels of entitlements: a lower entitlement level when the overall AIP funding is below \$3.2 billion and a higher level when the program is funded at \$3.2 billion or more.

**FAA Proposal.** Basically the FAA proposal eliminates the lower entitlement level in favor of the higher formula distribution levels and higher minimum and maximums (the general aviation apportionment is treated somewhat differently, see below). The proposal would also eliminate the \$3.2 billion trigger itself. The trigger mechanism was designed, in part, to encourage funding of AIP above the \$3.2 billion level. Since the FAA proposes funding AIP below the \$3.2 billion level, not making this change would, in effect, cut most primary airports' entitlement funding in half and would reduce general aviation entitlements also. During the life of the trigger, AIP funding has always been above \$3.2 billion, making the lower entitlement formulas existence a moot point since FY2001.

**S.** 1300. S. 1300 does not include a provision to eliminate the \$3.2 billion trigger. Given that the bill's recommended authorization levels would be from \$600 to \$900 million above the trigger, some would argue that the trigger would continue to be a moot issue. On the other hand, the increasing gap between the recommended authorizations and the trigger provides more room for possible AIP reductions during the appropriations process (i.e., reductions that would not trigger the distribution of entitlements based on the lower below-trigger formula levels).

*H.R.* **2881.** As is true with S. 1300, H.R. 2881 does not include a general provision to eliminate the \$3.2 billion trigger.

#### **Primary Airport Entitlements.**

**FAA Proposal.** The FAA proposal would phase out the formula funding that is provided for large and medium hub airports under current law by FY2010. To provide a transition period for these airports, their formula funding is continued at 50% of the calculated level for FY2008 and FY2009. The FAA's section-by-section analysis of the FAA proposal notes that this reduction is more than offset by the increase in the PFC ceiling (discussed later in this report). In addition, large and medium airports that impose PFCs above the \$4.50 level are to forego or "turnback" 100% of their AIP entitlement funding during FY2008-FY2009. In FY2010, large and medium hub airports would receive no entitlement funds and therefore the turnbacks would end.

**S.** 1300. S. 1300 does not include provisions altering the primary airport formulas.

*H.R.* 2881. H.R. 2881 also does not include provisions altering the primary airport formulas. Unlike S. 1300, the bill does, however, include a provision related to the reduction of apportionments at large hub airports that charge PFCs above the \$4.50 level. These airports would have their formula apportionments (entitlements) reduced by 100% of the projected PFC revenues for the fiscal year, but not more than 100% of the amount that otherwise would be apportioned.

Virtual Primary Airports. A special rule, enacted after the September 11, 2001 terrorist attacks, allowed some airports (referred to as virtual primary airports), whose annual passenger boardings fell below the required minimum passenger levels needed to maintain their primary airport status, to continue receiving their annual primary airport entitlements (generally \$1 million vs. the GA entitlement, which is generally \$150,000). Earlier, the FY2006 Transportation/Treasury Appropriations Act (P.L. 109-115) extended the virtual primary airport eligibility through FY2006 but at a reduced entitlement of \$500,000. The explanatory language in the conference report expressed the Appropriations conferees' intent that FY2006 be the last year for virtual primary airport entitlements. Paying the higher entitlements to the virtual primary airports reduces the amount of funding remaining available for discretionary spending after all the entitlement requirements are satisfied.

**FAA Proposal.** The FAA proposal would repeal the special rule. The FAA's section-by-section analysis argues that seven years after the attack it is unlikely that these airports (currently 44) will again attain primary airport status.

- **S.** 1300. S. 1300 would authorize the special rule for FY2008-FY2011, in effect, extending the virtual primary category with some modifications. The virtual primary determination would be made based on the airports having an average annual passenger boardings for calendar years 2004-2006 below 10,000 but passenger boardings that were 10,000 or above in calendar year 2003.
- S. 1300 also includes provisions that could, in effect, also include a new group of virtual primary airports. The bill does this by amending the provision in 49 U.S.C. 47114(c)(1) that deals with using the previous year's apportionment level to retain primary airport status. S. 1300 would drop the provision that limits the determination of eligibility to airports where passenger boardings fell below 10,000 boardings to airports had a "temporary but significant interruption of service due to an employment action, natural disaster or other event unrelated to demand for air transportation at the affected airport," and allow it for: Essential Air Service airports whose passenger boardings fall below 9,700; commercial service airports that can meet the 10,000 boardings by counting nonscheduled service; or single carrier airports that suffer from a 4% decline in scheduled flights due to severe weather conditions. The bill also includes a related provision that for FY2009-FY2011 would allow DOT to use the last year that an airport's passenger boardings exceeded 10,000 to determine its primary status for these years. The bill also includes a provision that appears to be written for an unnamed airport that is served by a large certificated carrier that began scheduled service at the airport in May 2006 and ceased scheduled service at the airport in October 2006. Under the bill this airport would retain its primary airport entitlement.

As of this writing, CRS has been unable to determine the number of airports that would be eligible under S. 1300 for virtual primary entitlements. However, the difference for an airport between primary and GA entitlement funding is usually \$850,000, so the provisions could have a significant impact on entitlement spending as well as the amount left over for discretionary grants once all the required entitlement distributions are satisfied.

*H.R.* **2881.** H.R. 2881 includes no provisions regarding virtual primary airports.

**Puerto Rico Minimum Guarantee.** The House bill provides a minimum entitlement for Puerto Rico which guarantees that Puerto Rico shall receive at least 1.5% of the total amounts apportioned to all airports under 49 U.S.C. 47114 (c) and (d) for commercial service and general aviation airports.

**General Aviation Entitlements.** There are two components of the general aviation entitlements: the State Apportionment and the General Aviation apportionment (sometimes referred to as the Nonprimary Entitlement). Under current law 20% of AIP funds are to be apportioned for both components.

**FAA Proposal.** The FAA proposal would separate the underlying funding sources of the two components and make a number of other changes. Under current law the nonprimary entitlement is apportioned from the designated 20% of AIP funds first and then the remaining funds are used for the State Apportionment.

State Apportionment. The FAA proposal would provide 10% of the amounts made available for apportionment under AIP for the state apportionment distribution only. The state apportionment distribution would be determined as they are now (according to a state-based population and area formula). The proposal would also provide for a \$300 million minimum apportionment. If the \$300 million minimum could not be met, the nonprimary entitlements (see discussion below) would be reduced on a prorated basis to make funds available for the state apportionment.

The Nonprimary Entitlement. Under current law all nonprimary airports receive the lessor of \$150,000 or one fifth the estimated five year development costs estimated in the most recent NPIAS. The FAA proposal would change this to providing three tiers of entitlement funding distribution based on the number of registered aircraft based at the airport:

- \$400,000 for airports having 100 or more based aircraft;
- \$200,000 for airports having 50 to 99 based aircraft or three or more jet aircraft; and
- \$100,000 for airport having 10 to 49 based aircraft.

NPIAS airports with fewer than 10 aircraft would not be eligible for a nonprimary entitlement but could still qualify for state apportionment funds and could compete for discretionary grants and these grants would retain a 95% federal share. The nonprimary entitlements would not be funded from the 10% of available funds reserved for the state apportionment but would be funded from the general

amounts available for apportionment under AIP (these amounts also fund the primary airport and cargo entitlements). The below-trigger language is eliminated.

- **S.** 1300. S. 1300 does not include a similar provision. GA entitlements would remain essentially the same as under current law.
- *H.R.* 2881. The general aviation entitlements provision of H.R. 2881 is a combination of the FAA proposal on the state apportionment and current law on nonprimary entitlements. The state apportionment would be 10% of the amounts available for apportionment under AIP with a \$300 million minimum. The nonprimary airport entitlement would remain \$150,000 or one fifth the estimated five year development costs published in the most recent NPIAS. Should the 10% of amounts available for apportionment to the states fall below \$300 million in a fiscal year (for this to happen the amounts available for apportionment for all of AIP would have to fall below \$3 billion) the nonprimary entitlements would be reduced on a prorated basis to provide the funds to bring the state apportionment up to its \$300 million minimum.

## Alaska Supplemental Entitlement.

**FAA Proposal.** Under the FAA proposal, the "above trigger" level of funding would be provided.

- **S. 1300.** S. 1300 does not address the Alaska entitlement.
- *H.R.* **2881.** H.R. 2881 does not address the Alaska entitlement.

## **Cargo Service Airport Entitlement.**

- **FAA Proposal.** Cargo service airports would continue to receive 3.5% of AIP funding (the existing, above-trigger percentage) and the landed weight-based formula would be retained. The below-trigger provision is eliminated.
- **S. 1300.** Cargo Service Airports apportionment would increase to 4% of AIP funding.
- *H.R.* **2881.** H.R. 2881 makes no changes in the Cargo Service Airport apportionment.

#### Pilot Program for Redevelopment of Airport Properties.

#### **FAA Proposal.** No provision.

**S.** 1300. S. 1300 requires FAA to establish a pilot program allowing local airport operators that have submitted a noise compatibility program to FAA to use their AIP formula funds, in partnership with neighboring jurisdictions to support planning and site preparation for the consolidation and redevelopment of property purchased with noise mitigation funds or passenger facility charges (PFCs), to encourage airport-compatible land uses and "generate economic benefits" to the local airport authority and adjacent community. The grant could only be made if it were

made to expedite redevelopment efforts and if the grant is subject to a requirement that the local jurisdiction governing the property has adopted zoning regulations that permit airport compatible redevelopment.

*H.R.* **2881.** As passed, the House bill includes a provision of similar intent. Section 818 of the house-passed bill establishes a pilot program for redevelopment of airport properties. This would allow for AIP grants to up to four airports to support joint planning, engineering design, and environmental permitting for the assembly and redevelopment of real property purchased with AIP or PFC noise mitigation funds to encourage compatible land uses with the airport and to generate economic benefits to the airport operator and an affected local jurisdiction.

# **Discretionary Funds**

The discretionary fund includes the AIP funding that is not distributed under the apportioned entitlements as well as the forgone PFC revenues that are not directed to the small airport fund. Related PFC changes are discussed later in this report.

**Minimum Discretionary Fund.** 49 U.S.C. 47115 requires that a minimum amount (\$148 million plus any outstanding pre-January 1, 1997, letters of intent) remains available for the discretionary fund after all apportionments and set-asides are satisfied. If less money remains, the apportionments are reduced pro rata to bring the discretionary funding up to the required level. Because AIP has been funded since FY2001 at historically high levels, the minimum discretionary fund provision has not recently been a factor in AIP funding.

- **FAA Proposal.** The FAA proposal would set the minimum that can be made available for discretionary grants at \$520 million per year (the letter of intent language is dropped).
- **S.** 1300. S. 1300 also sets the minimum amount to be credited to the discretionary fund at a flat \$520 million per year and drops the letter of intent language.
- *H.R.* **2881.** H.R. 2881 also sets the minimum amount to be credited to the discretionary fund at \$520 million per year and drops the letter of intent language.

#### Noise Set-Aside.

- **FAA Proposal.** The FAA proposes to replace the discretionary fund 35% noise set-aside with a broader environmental set-aside that would be 8% of all AIP apportioned funds. Examples of projects that would be eligible are water quality mitigation projects and environmental research. Based on FY2005 AIP funding distribution the a set-aside based on 8% of apportioned funds would have provided less than the 35% discretionary fund set-aside.
- **S.** 1300. S. 1300 would provide for a flat \$300 million annual discretionary set-aside for AIP noise program costs. It would, however, also make water quality mitigation projects eligible under the set-aside.

*H.R.* **2881.** H.R. 2881's provision is the same as S. 1300.

## **Small Airport Fund.**

- **FAA Proposal.** The FAA proposal would eliminate the small airport fund. The revenues supporting the fund are derived from the forgone entitlement funding from medium and large hub airports that they forego in return for permission to impose PFCs. Since the FAA is proposing to phase out the entitlements for these airports, the funding source for the Small Airport Fund would no longer exist in FY2010. Small Airport Fund monies are used in a manner similar to discretionary funds. Instead the FAA proposal would set-aside 20% of discretionary funds for small hub, nonhub, nonprimary commercial service, reliever, or general aviation airports. The set-aside is to compensate for the loss of the Small Airport Fund.
- **S.** 1300. S. 1300 does not include a similar provision. The small airport fund would continue.
  - *H.R.* **2881.** H.R. 2881 does not include a similar provision.

## Military Airport Program (MAP) and Reliever Airport Set-Asides.

- **FAA Proposal.** Both of these set-asides would be eliminated. The special AIP eligibilities for MAP would continue.
- **S.** 1300. S. 1300 includes no proposal similar to the FAA proposals. Adds whether or not a grant to the airport would be critical to the safety of commercial, military, or general aviation in trans-oceanic flights to MAP program selection considerations.
- *H.R.* **2881.** H.R. 2881 retains the MAP program and reliever set asides as they are under current law.

# **AIP Project Eligibility Changes**

**FAA Proposal.** The FAA proposal would redefine "revenue producing aeronautical support facilities" in a way to make "fuel farms, new hangar buildings, self-service credit card aeronautical fueling systems, airplane wash racks, major rehabilitation of a hangar owned by a sponsor, or other aeronautical support facilities" clearly AIP-eligible for nonprimary airports. The construction of mobile refueler parking within a fuel farm at a non primary airport would be made eligible on condition that it meets the EPA's requirements regarding oil spill prevention, control, and countermeasures under 40 CFR 112.8. Up to \$10 million in AIP grants could be made to make grants for commercial space infrastructure development. The cost of environmental review of airport-proposed environmentally-beneficial aircraft flight procedures would be AIP eligible. Relocation of airport-owned facilities that must be moved because of design standards beyond the sponsor's control would be eligible for AIP funding. The required passenger aircraft size required to meet the eligibility requirements for purchasing firefighting and rescue equipment would be reduced from aircraft designed for more than 20 passenger seats to aircraft designed for more than nine passenger seats. The proposal also includes language

consolidating the definition of terminal development. In addition, "general aviation airport" is defined as a public airport that does not have scheduled service or has scheduled service with fewer than 2,500 passenger boardings each year.

**S. 1300.** S. 1300 includes language identical to the FAA proposal on eligibility of the cost of environmental review for environmentally-beneficial (i.e., mostly noise-related) aircraft flight procedures and also for the relocation of airport-owned facilities. It does not include most of the other FAA proposed changes, including provisions similar to the FAA proposal's regarding revenue producing aeronautical support facilities and does not include language for commercial space infrastructure development grants.

**H.R. 2881.** H.R. 2881 makes a number of definitional and other changes that would impact AIP project eligibility. The bill includes the FAA proposed provisions regarding eligibility of "revenue producing aeronautical support facilities" at nonprimary airports and the lowering of the passenger aircraft size required to meet the eligibility requirements for purchasing firefighting and rescue equipment. Terminal development is redefined to include development of an airport passenger terminal building, including gates and access roads and walkways servicing exclusively airport traffic that leads directly to or from the airport passenger terminal building. It also includes the FAA's proposal regarding the construction of mobile refueler parking and the clarifying definitions of general aviation airport and terminal development. As does S. 1300, H.R. 2881 includes the FAA proposed language regarding the relocation of airport-owned facilities. Under H.R. 2881 repaying borrowed money for terminal development under 49 U.S.C. 47119(a) is clarified as an "airport development" and made eligible under certain circumstances. Projects to provide air conditioning, heating or electric power from terminal facilities to parked aircraft to reduce energy use and "harmful emissions," would be eligible. Airport planning would be redefined to include "developing an environmental management system." The cost of environmental review of airport-proposed environmentally-beneficial aircraft flight procedures would also be AIP eligible.

#### **AIP Grant Assurances**

**FAA Proposal.** The FAA proposal makes two changes to AIP grant assurances under 49 U.S.C. 47107. The proposal allows for the use of AIP entitlement funds to replace or move a facility at an airport if the cause of the need was beyond the owner's control, for example, a new design standard that could make the facility a safety hazard.

The second proposed change deals with the disposition of profits made from the sale of land that was originally acquired for a noise compatibility purpose but is no longer needed for noise compatibility. Current law requires that the federal share of the proceeds, proportional to the federal share of the original land acquisition cost, be deposited in the trust fund. The proposed change would allow the proceeds to be reinvested in another project, for, in preferential order: 1) an approved noise compatibility project at the airport; 2) an environmentally related project at the airport; 3) another eligible AIP project at the airport; 4) transfer to another airport for a noise compatibility project; or 5) payment to the trust fund.

- **S. 1300.** S. 1300 includes the same two grant assurance proposals as described above.
- **H.R. 2881.** H.R. 2881 includes language similar to the two grant assurance proposals in the FAA proposal and S. 1300.

#### **Federal Share**

Under current law, the federal government share for AIP projects is as follows:

- 75% for large and medium hub airports (80% for noise compatibility projects);
- 95% for other airports; and
- "not more than" 95% for airport projects in states participating in the state block grant program;
- 70% for projects funded from the discretionary fund at airports receiving exemptions under 49 U.S. C. Section 47134, the pilot program for private ownership of airports.

Vision 100 included a sunset clause that returns the federal share of the projects eligible for 95% share to 90% after FY2007. The increase in share to 95% was established to provide relief to operators of small airports after the 9/11 terrorist attacks.

**FAA Proposal.** The FAA proposal would make a number of changes in the federal-local matching share requirements. The proposal would change current law to add the phrase "may not exceed" to all federal share percentages. Under current law some airports' project shares were fixed percentage shares. FAA argues that this change would allow it to "leverage AIP funds more efficiently and provide support for a broader number and type of projects." Some small airport advocates may be concerned that this provision could allow FAA to routinely offer discretionary grants at less than the maximum allowable federal share on some projects. The FAA proposal would also lower the maximum federal share for runway, taxiway and apron (ramp) projects at large and medium hub airports from 75% to 50%. Other AIP eligible projects at these airports would retain their 75% maximum federal share. A special rule is proposed for airports recently reclassified a medium hub because of increased passenger enplanements that allows them to retain their eligibility for up to 90% federal share for two years. The FAA proposal would allow the 9/11 related increase 95% federal share for AIP grants to small airports to lapse. The federal maximum share at these airports would be 90%. As mentioned earlier, general aviation airports that have lost their nonprimary minimum entitlements because they have fewer than 10 based aircraft (approximately 800 airports) would be allowed an up to 95% federal share on their discretionary or state apportionment grants.

**S. 1300.** S. 1300 would set the federal share for airports smaller than medium hub and state block grant program states at 95% for FY2008-FY2011, in effect extending the post-9/11 federal share increase for the life of the bill. It also provides

<sup>&</sup>lt;sup>14</sup> FAA, Section-by-Section Analysis, 9-10.

a special rule for small hub airports that because of passenger growth are becoming medium hub airports (which would drop their federal share to 75%). These airports have for two years a federal share not to exceed 95% of allowable project costs.

- **H.R. 2881.** As would be the case in the FAA proposal and S. 1300, H.R. 2881 would provide a special rule to allow airports recently classified as medium hub (which would drop their federal share to 75%) to retain their eligibility for an up to 90% federal share for a two year transition period.
- H.R. 2881 also includes a special rule for "Economically Depressed Communities." The rule would maintain the 95% federal share for projects at airports that are receiving subsidized service under the Essential Air Service (EAS) program that meet one or more of the criteria established in 42 U.S.C. 3161(a) as determined by the Secretary of Commerce. 42 U.S.C. 3161(a) sets forth three criteria for eligibility: 1) the area has a per capita income of 80 percent or less of the national average; 2) the area has an unemployment rate that is, for the most recent 24-month period for which data are available, at least 1 percent greater than the national average unemployment rate; and 3) the area is an area that the Secretary of Commerce determines has experienced or is about to experience a special need arising from actual or threatened severe unemployment or economic adjustment resulting from severe short-term or long-term changes in economic conditions. Given the variety of eligibility criteria and the rural location of EAS airports it is likely that many EAS airports could retain their 95% federal share under H.R. 2881.

Non-EAS airports (smaller than medium hub) would revert to 90% federal share under the bill.

# Passenger Facility Charges (PFCs)

## Project Eligibility.

**FAA Proposal.** The FAA proposes to make eligible any capital cost that an airport could pay for with airport revenue eligible. The proposal would specifically make fixed-guideway ground access-related projects, including rail mass transit projects (whether publically or privately owned), eligible for PFC funding. The FAA proposal would also ease the current so called "limitations" on the use of PFCs (i.e., the requirement that the project would preserve or enhance capacity, safety, or security, reduce noise, or provide an opportunity for enhanced competition among carriers at the airport). It also eliminates the limitation that, in regard to surface transportation or terminal projects, for an airport to impose a PFC above the \$3 level for this purpose, that the airport has made adequate provision for financing the airside needs of the airport. These transit projects would require DOT approval, however. Airlines may object to this broadening of PFC eligibility. The FAA proposal also includes a change in the language of the written assurance on the use of revenues which would appear to allow for use of AIP and PFC grants on facilities that are "directly and substantially related to the air transportation of passengers or property," but are not "owned or operated" by the sponsoring airport, as is now required.

**S.** 1300. S. 1300 does not include the FAA language broadening PFC project eligibility to virtually any capital cost that an airport could pay for with airport

revenue. It also does not broaden the definition of "intermodal ground access" project which, whether publically or privately owned (or also, not for exclusive airport use), under the FAA proposal would have been eligible for PFC funding. S. 1300 also does not change the language of the assurance on the use of revenue as the FAA proposed. PFCs could be used for planning or redevelopment activities of property acquired for noise compatibility purposes.

S. 1300 does, however, include language similar to the FAA proposal that would make major changes to section 40117 (d), which sets certain "limitations on approving applications." The bill would restrict the limitations to intermodal ground access projects, thereby freeing PFC applications for other types of projects from the limitations. The bill then also eliminates some of the current law limitations that would otherwise still apply to ground access projects. Among the limitations eliminated for all PFC applications are a finding by the Secretary of DOT that the project will: preserve or enhance capacity, safety, or security of the national air transportation system; reduce noise from an airport; or provide an opportunity for enhanced competition between or among air carriers and foreign air carriers. In addition, the bill would eliminate the precondition that for an airport to impose a fee above the \$3 level the Secretary must find that the airport has made adequate provision for financing the airside needs of the airport, including runways, taxiways, aprons, and aircraft gates.

**H.R. 2881.** The bill does not include the changes proposed in the FAA proposal or S. 1300. H.R. 2881 does, however, include PFC eligibility provisions that are in neither the FAA proposal nor S. 1300. One provision would make eligible projects to construct secure bicycle storage facilities for use by passengers at the airport and that are in compliance with applicable security standards. One year after enactment FAA is to submit a report on progress made by airports to install bicycle parking. Another provision would make noise mitigation for certain schools in Los Angeles eligible for PFC funding.

In addition, H.R. 2881 proposes a pilot program that would make available PFC funds for eligible intermodal ground access projects at 5 airports. The projects do not have to be on property owned or controlled by the sponsoring airport. The PFC project cost share would be limited to the projected ratio of airport bound passengers to the total number of passengers using the ground access facility.

## Increasing the PFC Cap.

**FAA Proposal.** The FAA proposal would increase the maximum charge to \$6 per passenger boarding. Any charge over \$4.50 would require medium and large hub airports to forego 100% of their AIP entitlement funding. Airports participating in the pilot program for the transfer of navigational equipment to airport control would be able to adopt a \$7 PFC.

- **S. 1300.** The bill does not increase the PFC cap (see pilot program discussion, below).
- *H.R.* **2881.** The bill would allow for PFCs above the existing \$4.50 cap at the \$5, \$6, and \$7 levels. As is true under current law only two PFCs could be charged

for any one-way trip for a round-trip maximum of \$28 (the current maximum is \$18). As mentioned earlier, large hub airports imposing a PFC above the \$4.50 level would forego from their AIP formula entitlements an amount equal to their projected PFC revenues but not more than 100% of the entitlement funding that, otherwise, would have been apportioned.

H.R. 2881 includes a provision requiring a study of the impacts on airports of accommodating connecting passengers. The study is to include a recommendation as to whether different levels of PFCs should be imposed on connecting passengers versus origin and destination passengers. Some have argued that the PFC structure favors large hub airport's PFC revenues because the costs to an airport of a connecting passenger is less than at airports that are primarily originating airports.

## Passenger Facility Charge Pilot Program.

**FAA Proposal.** The proposal includes no provision similar to S. 1300.

**S.** 1300. Would establish a pilot program at up to six airports that would allow them to collect a PFC with no statutory ceiling on the fee. The fee, however, must be collected by the airport from the passenger. Under current law the PFCs are collected for the airports by the airlines during the ticketing process.

*H.R.* **2881.** The bill includes no similar program proposal.

## Competition Plans.

**FAA Proposal.** The FAA proposes changing the requirement that no AIP or PFC grant may be approved for a large or medium hub airport unless the airport has submitted a written competition plan to the FAA. The FAA proposal would eliminate the requirement that the competition plans include information on patterns of air service and comparative airfare levels.

**S. 1300.** There is no provision similar to the FAA proposal in S. 1300.

**H.R. 2881.** The bill extends the competition plan requirement.

#### PFC Grant Streamlining.

**FAA Proposal.** The proposal includes an extensive provision to streamline the PFC review and approval process. Instead of seeking approval on a project-by-project basis, for existing projects, an airport would be required to submit to air carriers at the airport, the FAA, and make available to the public, an annual PFC status report that sets forth the airport's PFC revenues, spending, PFC funded projects, the next year's projected revenues, and a description of the consultation and public notice process. Once the status report is submitted no further action is required and implementation could continue. For new projects, the airport would have to provide for a notice and comment period for carriers operating at the airport and a public notice and comment period before they file their PFC status report. Once the report is filed the airport could begin collecting the new PFC. Stakeholders could, however, file objections and, if the FAA agrees with the objection, the FAA

may terminate the airport's authority to collect PFC revenues for the project. The proposal also provides that DOT may investigate whether a PFC charge is excessive or whether PFC revenue is being diverted to non-allowable uses.

**S.** 1300. The bill's streamlining language closely mirrors the FAA bill. The bill also includes revenue diversion language.

*H.R.* **2881.** The bill does not include language similar to the FAA proposal or S. 1300.

# Other Airport-Related Provisions

**Privatization.** The FAA proposal would make changes to the Airport Privatization Pilot Program. The number of airports that could participate would be increased from 5 to 15 and there would be no restrictions by airport category (the existing program allows for only one large airport to participate and Chicago Midway airport has reserved that authority).

Since the program was enacted in 1996 (Section 149 of the Federal Aviation Reauthorization Act of 1996, P.L. 104-264), only one airport has been privatized, Stewart International Airport (New York). The FAA and others supportive of the pilot program have argued that the current program gives airlines effective veto power over privatization transactions. Current law requires that the airport sponsor may only recover from the sale or lease the amount that may be approved by at least 65% of the air carriers serving the airport; and by air carriers that account for 65% of the total landed weight at the airport for the year. The FAA proposal would eliminate these requirements and only require that the airport show the FAA that they had consulted with: for primary airports, each air carrier and foreign air carrier serving the airport and, for non-primary airports, consulted with at least 65 percent of the owners of aircraft based at the airport.

The proposal eliminates the airline approval requirement of airport fee increases that exceed inflation and eliminates the provision that requires that the percentage general aviation fee increases not be larger than the percentage increases for air carriers. Also eliminated would be the existing prohibition on the abrogation of a labor agreement in consequence of the sale or lease of an airport under the program. Finally, the private operator could set fees to recover all capital and operating costs except for the sale or lease price, which would require air carrier approval.

**S.** 1300. The bill does not include a similar provision.

*H.R.* **2881.** The bill would raise the required air carrier approval percentages from 65% to 75%. Airports participating in the pilot program would not be eligible for AIP funds.

## Sale of a Private Airport to a Public Sponsor.

**FAA Proposal.** Although written in general terms, this provision appears to facilitate the return of Stewart International Airport to public ownership (the Port Authority of New York and New Jersey plans to purchase the remainder of the lease at Stewart). Essentially, the proposed provision would exempt the proceeds (i.e., profit) from the sale of a privatized airport to a public authority from the AIP assurance that requires that all airport revenue be expended for capital and operating costs at the airport. The exemption requires that the sale be approved by the Secretary of DOT; funding under Title 49 is provided for the public sponsor's acquisition; and the amount of the remaining unamortized portion of the original grant, amortized over a 20-year period, is repaid to the Secretary by the private owner for deposit in the trust fund for airport acquisitions.

**S. 1300.** Includes language identical to the FAA proposal.

*H.R.* **2881.** Includes language similar to the FAA proposal, however the funds are to be treated as recovery of prior year obligations.

## Airport Development Rights Pilot Program.

**FAA Proposal.** The FAA proposal would allow this Vision 100 initiated program to expire at the end of FY2007. The pilot program allows for the purchase of a privately owned public use airport's development rights as a means of keeping the airport open and operating. FAA argues that the program has not been a success and suggests a better strategy would be to find a public sponsor to purchase the airport rather than just the development rights. Some general aviation supporters may still be supportive of the pilot program.

**S.** 1300. The bill does not include a sunset provision for the Airport Development Rights Pilot Program.

*H.R.* **2881.** The bill includes a sunset provision that would end the Airport Development Rights Pilot program on September 30, 2007.

## **ADS-B Support Pilot Program.**

**FAA Proposal.** This FAA-proposed program would allow for AIP state/insular area formula entitlement funds (at a 90% federal share) to be used for airport purchase of Automatic Dependent Surveillance-Broadcast (ADS-B) equipment. The ground stations where this equipment would be installed are not airport specific (most AIP projects are required to be within airport boundaries). ADS-B is part of FAA's air traffic modernization system. The use of AIP funds would supplement other FAA funding sources for ADS-B ground station deployment. The FAA argues that "states, regions and airports would benefit because the program would provide ADS-B coverage to areas that would not be reached under the FAA's direct procurement." Project sponsorship would be limited to states, metropolitan planning organizations (MPOS), or consortiums of two or more airports. Not more than 10 airports could apply. In the past, the use of AIP funds for air traffic equipment has met resistance by some program supporters,

usually on the grounds that air traffic control capital costs are not within the AIP's original programmatic intent and should be paid for elsewhere in the FAA budget.

**S. 1300.** The bill includes language identical to the FAA proposal.

*H.R.* **2881.** The bill does not include the FAA proposal.

# **Airline Passenger Rights Issues**

Recent incidents where passengers were held in aircraft for eight or more hours awaiting take off, as well as reports of deterioration of on-time arrival performance by airlines have led to increasing interest in airline passenger consumer issues. Currently, most passenger rights are set forth in the airlines' "contract of carriage" language. The contract of carriage is the legal contract between the airline and the ticket holder which describes the rights and responsibilities of both the air carrier and the passenger. Passengers may take legal action in federal courts based on these contracts. Historically, the Department of Transportation's (DOT) role in consumer protection is limited. The existing law does provide procedures and compensation rules for "bumping" and lost or damaged baggage, however. The main power DOT has to protect consumers is the department's power to take action against air carriers for "deceptive trade practices." The definition and interpretation of deceptive trade practices can significantly impact the scope of DOT's enforcement authority. Staffing of DOT's Office for Aviation Enforcement and Proceedings has also been an issue in the past. This DOT office also deals with passenger discrimination issues.

# **FAA Proposal**

No provisions.

#### S. 1300

S. 1300 includes several airline customer service provisions. Section 401 would add a new, "Sub-chapter IV — Airline Customer Service," to Chapter 417 of 49 U.S.C. The new sub-chapter includes provisions on contingency services and the posting of consumer rights. An additional provision directing DOT to investigate certain types of consumer complaints was also added during committee mark-up.

Airline Contingency Service Requirements. Requires that no later than 60 days of enactment each air carrier must provide in any case in which a flight is substantially delayed, adequate food, potable water, and restroom facilities during the delay. Each air carrier must develop a plan to ensure that passengers are provided a clear time-frame under which they will be permitted to deplane. In absence of such a plan, after 3 hours air carriers are to provide passengers with the option to deplane safely before the departure of the air carrier. Exceptions are provided for a pilot decision that the flight will depart within 30 minutes after the 3 hour limit or if the pilot believes that allowing a passenger to deplane would jeopardize passenger safety or security. DOT is to promulgate regulations to carry out this provision within 60 days.

**Posting Consumer Rights on Website.** Air carriers would be required to publish conspicuously and update monthly on their Internet websites their customer service policies and air carriers' consumer rights under federal and state law.

**Publication of Customer Service Data and Flight Delay History.** This provision would require air carriers that provide scheduled service to publish and update monthly on their Internet website or provide, on request, a list of chronically delayed flights operated by the air carrier. When customers are in the process of purchasing tickets, air carriers must prominently disclose, prior to the booking of the ticket on the air carrier's Internet website, to the individual, 1) the on-time performance for the flight if it is a chronically delayed flight, 2) the cancellation rate for the flight if it is a chronically canceled flight. DOT is directed to define "chronically delayed flight" and "chronically canceled flight."

**Expansion of DOT Airline Consumer Complaint Investigations.** This provision requires that DOT, "subject to the availability of appropriations," investigate consumer complaints regarding: flight cancellations; compliance with federal overbooking regulations; lost/damaged or delayed baggage, and problems with baggage-related airline claims procedures; ticket refund problems; incorrect or incomplete information regarding fares, discount fare conditions and availability, overcharges, and fare increases. In addition, the provision requires DOT to include in its annual budget request an estimate of the resources that would have been sufficient to investigate all such claims DOT received in the previous fiscal year.

#### H.R. 2881

**Monthly Air Carrier Reports.** The bill would require airlines to file monthly reports on flights that are diverted from their scheduled destination to another airport and on flights that depart from the originating airport gate but are cancelled before takeoff. The data must be compiled in a single monthly report and be made available on the DOT website.

**DOT Inspector General (IG) Review of Air Carrier Flight Delays, Cancellations, and Associated Causes.** The IG is ordered to update its 2000 report "Audit of Air Carrier Flight Delays and Cancellations." In conducting the review the IG is directed to assess: 1) the need for an update on delay and cancellations statistics such as chronically delayed flights and taxi-in and out times; 2) air carrier scheduling practices; 3) the need to reexamine the FAA's airport capacity benchmarks; 4) the impact of flight delays and cancellations on passengers and recommendations to address these impacts.

Airline and Airport "Emergency Contingency Plans". The bill would require, no later than 90 days after the date of enactment, that airlines and operators of large or medium hub airports submit to DOT an emergency contingency plan for each of these airports. The plans must describe how the airline plans to provide food, water, restroom facilities, cabin ventilation, and access to medical treatment for passengers on aircraft that are on the ground for extended time without access to the terminal and how they plan to share facilities and make gates available at the airport

during an emergency. Airport operators must also submit an emergency plan describing how the airport operator will provide for the sharing of facilities and make gates available during an emergency.

Advisory Committee for Aviation Consumer Protection. The Secretary of DOT is to establish an advisory committee for aviation consumer protection to advise the Secretary in carrying out passenger service improvements.

**Denied Boarding Compensation.** Within one year of enactment, the Secretary of DOT is to issue a final regulation to modify title 14 of the Code of Federal Regulations, section 250, to appropriately adjust the amount of denied-boarding compensation. Within two years of the date of issuance of the final regulation, and every two years thereafter, shall evaluate the amount provided.

Expansion of DOT Airline Consumer Complaint Investigations. Requires that, subject to the availability of appropriations, the Secretary of DOT is to investigate consumer complaints regarding: flight cancellations; compliance with federal regulations regarding the overbooking of seats on flights; lost, damaged, or delayed baggage (and problems with air carrier claim procedures); problems with refunds for unused or lost tickets; incorrect or incomplete information on fares, discount fare conditions and availability, overcharges, and fare increases; rights of frequent flier miles holders; and deceptive or misleading advertising. DOT is to provide in an annex to its budget request and estimate of the resources needed to investigate all such claims received by DOT in the previous year.

**Consumer Complaint Hotline Telephone Number.** DOT shall establish a consumer complaints hotline telephone number for use by airline passengers.

**Insecticide Use on Passenger Aircraft.** The bill prohibits the selling of tickets for a flight on which an insecticide is planned to be used in the aircraft while passengers are on board unless the ticket purchasers are informed of the planned use and insecticide name.

# **Spending Guarantee Mechanisms**

Since the 1971 creation of the user-supported airport and airway trust fund there has been disagreement over the appropriate use of the trust fund's revenues. This led, beginning in 1976, to the enactment of a series of legislative mechanisms designed to assure that federal capital spending for U.S. airports and airways (i.e., AIP and F&E) would be funded at their fully authorized levels. For a detailed discussion of the history and impact of the various spending guarantee mechanisms, see CRS Report RL33654, *Aviation Spending Guarantee Mechanisms*, by Robert S. Kirk.

The current mechanism dates back to 2000 and includes two spending guarantees. One makes it out-of-order in the House or Senate to consider legislation that fails to use all aviation trust fund receipts and interest annually. The second makes it out-of-order to consider any bill that provided any funding for RE&D or

O&M if the bill fails to fully fund AIP and F&E at their fully authorized levels. The current guarantees will lapse at the end of FY2007 if no action is taken to extend them.

## **FAA Proposal**

The FAA proposal includes no provisions regarding the spending guarantees.

## S. 1300

S. 1300 would extend the current spending guarantees through FY2011.

#### H.R. 2881

H.R. 2881 would amend the airport and airway trust fund guarantee that requires that the total amounts made available from the trust fund be equal to the level of receipts plus interest for the year. Under H.R. 2881, for each year FY2008-FY2009, the amounts made available would equal 95% of the estimated level of receipts plus interest on the fund for each respective fiscal year. For FY2010 and FY2011, the guaranteed level would be 95% for each respective year plus the difference between the actual receipts and total amounts made available for obligation from two years before (i.e., FY2008 and FY2009, respectively). The bill would retain the point-of-order enforcement mechanisms.

This change would have a number of possible implications. First, the change could lessen the demands on trust fund revenues for the first two years of the reauthorization allowing a modest accumulation in the unexpended balance of the trust fund during these years. Second, it would reduce the likelihood that overly optimistic revenue projections could lead to spending at rates that exceed the actual revenues accruing to the trust fund (as has happened in recent years), at least in the first two years of the bill. Finally, by limiting trust fund spending, the change could, in the minds of some, increase the likelihood that the general fund contribution percentage for the FAA budget could be set at a higher level.

# **FAA Management and Organizational Issues**

Management and organizational reform at the FAA has been a central focus of both legislative and administration initiatives over the past several years. Major provisions of the FAA proposal and S. 1300 addressing management and organizational issues include:

- Measures designed to achieve better integration of NGATS planning and implementation into the FAA's ongoing planning and acquisition activities;
- Measures to establish a mechanism for considering possible realignment and consolidation of various FAA facilities and services; and

 Provisions to increase the flexibility in the design and implementation of NGATS by allowing airports and private entities to play a more direct role in acquiring, deploying, and maintaining facilities and services to augment the FAA's air traffic communications, navigation, and surveillance capabilities.

These issues, and the related legislative proposals under consideration in the current FAA reauthorization debate are discussed in further detail below.

# Planning and Oversight of Next Generation Air Transportation System Development

A central issue permeating the current reauthorization debate is the adequacy of management and organizational processes to facilitate development of the NGATS. The NGATS is being developed to address system-wide capacity needs, and is scheduled to be completed prior to 2025. A provision in Vision 100 created the multi-agency Joint Planning and Development Office (JPDO) and charged it with the task of defining, developing, and implementing the NGATS plan.

Over the past three years, the JPDO has collaborated with governmental and industry partners to draft a concept for NGATS development. Some critics have argued that the pace of this effort has been too slow, while others have voiced concern that the scope of the JPDO concept — encompassing "curbside-to-curbside" movement of airline passengers, rather than just block to block handling of all aircraft types within the national airspace system — may be inappropriate. Still others have raised concerns over the organizational and management structure of the JPDO, specifically regarding the JPDO potential lack of influence over management and budgetary processes of participating agencies. While these agencies are ultimately charged with the task of carrying out the engineering work to build the NGATS as well as the operational responsibilities to run and maintain the national airspace system and its many components, including, but not limited to air traffic control services and airport security functions, the link between their respective budgets and the NGATS program is not clearly defined.

Various options to address these concerns that have been identified include establishing a lead systems integration (LSI) entity to oversee the engineering of the NGATS systems, and possibly establishing specific reporting requirements, perhaps through the budget and appropriations process, in which the various agencies involved could identify how budgetary elements would support NGATS development and how cross-agency efforts would be coordinated and aligned.

**FAA Proposal.** Addressing the overarching objective of facilitating implementation of the NGATS engineering effort, the FAA proposal includes language designed to give the JPDO greater input into FAA systems development and operational decision making, by making the JPDO director a voting member of the FAA's Joint Resources Council as well as the Air Traffic Organization's (ATO's) Executive Council. The FAA proposal also includes language that would more closely integrate the JPDO's plans and progress on the NGATS with the FAA's ongoing modernization and capacity enhancement initiatives. Specifically, the FAA

proposal would require an annual Operational Evolution Partnership (OEP) plan to be developed to provide details of how the FAA is implementing next generation concepts, and would also include in the FAA's annual report to Congress details on how each of the JPDO participating agencies' respective budgets will support NGATS development.

- **S. 1300.** S. 1300 also addresses facilitation of NGATS development, but proposes instead to establish implementation offices within the various federal agencies involved in the NGATS program. The bill language specifically directs the FAA, the Department of Defense, the National Aeronautics and Space Administration (NASA), the Department of Commerce, the Department of Homeland Security, and any other federal agency asked by the Department of Transportation to assist with NGATS development to each establish an implementation office. Each implementation office, or system planning office (SPO) as they are referred to in the title of the provision, would be charged with the task of overseeing agency implementation activities related to NGATS, and would serve as a liaison and coordinator between the agency or department it represents and other federal departments and agencies involved in the NGATS effort. Each SPO would also be responsible for managing all NGATS-related programs including management of budgetary and staff resources.
- S. 1300 further requires that each participating federal department or agency would enter into a memorandum of understanding with the JPDO and other departments and agencies involved in the NGATS initiative describing respective responsibilities, budgetary commitments, and staff resources committed to the NGATS project. This memorandum, as well as Department and agency budget requests, are to be revised as needed to reflect any changes in responsibilities and commitments of the agencies involved.

Like the FAA proposal, S. 1300 would establish the JPDO director as a voting member of the FAA's Joint Resources Council and the Air Traffic Organization's (ATO's) Executive Council. S. 1300 also includes language amending current requirements for an NGATS integrated plan, requiring that a multiagency implementation plan, including a schedule of regulatory activities (rulemakings), be developed and updated on an annual basis. The bill would extend authorization of \$50 million annually for the JPDO through 2011.

**H.R. 2881.** H.R. 2881 includes sense of Congress language recognizing that modernizing the air transportation system is a national priority. To address this need to prioritize investment in the Next Generation Air Transportation System (NGATS), the bill includes several provisions designed to improve the management and implementation of this effort.

Like the FAA proposal and S. 1300, H.R. 2881 would establish the JPDO director as a voting member of the FAA's Joint Resources Council. The bill would give the JPDO director the title Associate Administrator for the Next Generation Air Transportation System, a position that would report directly to the FAA Administrator. To the extent possible, the JPDO director would be required to oversee development of the integrated NGATS plan, ensuring that each federal agency involved has requested sufficient funds in the annual budget process to carry

out its responsibilities under the plan. The JPDO director would also be responsible for making sure that the development and implementation of NGATS stays on schedule, and identify and justify in the President's budget submission any inconsistencies between the NGATS plan and the budget request.

Similar to S. 1300, H.R. 2881 would also require each component agency involved in the NGATS initiative to designate a senior official responsible for carrying out NGATS-related activities of the agency, serving as a liaison for the agency in matters involving NGATS support, and ensuring that the agency meets its obligations set forth in memoranda of understanding regarding NGATS development and support. The bill further requires that the JPDO work with the OMB to develop a process for identifying projects tied to the NGATS program across all affiliated federal agencies and consider the NGATS as a cross-agency, unified program.

Further, H.R. 2881 would require a multiagency integrated work plan for NGATS including an outline of activities required to achieve the end-state architecture defined in the program's concept of operations (CONOPS); year-by-year details of accomplishments, activities, research, requirements, rulemakings, policy decisions, and other milestones; an outline of annual objectives and responsible agencies; an estimate of year-by-year funding requirements for each development stage; and "a clear explanation of how each step in the development of [NGATS] will lead to the following step and the implications of not successfully completing a step in the time period described in the integrated work plan." The bill would also require the FAA to issue the "Operational Evolution Partnership," detailing how the agency is implementing NGATS, on an annual basis as well as annual reports to the Congressional oversight committees detailing progress made in carrying out the multiagency integrated NGATS work plan. Also, under H.R. 2881, the NGATS Senior Policy Committee would be required to meet twice each year and prepare an annual report to coincide with the President's budget request detailing progress made on the multiagency integrated NGATS work plan and any changes to that plan, detailing the impact of those changes.

H.R. 2881 would also require GAO to review the progress and challenges of transforming the national airspace system to NGATS, and review ongoing air traffic modernization projects and progress on NGATS component systems including En Route Automation Modernization (ERAM); Standard Terminal Automation Replacement System/Common Automated Radar Terminal Systems (STARS/CARTS); Traffic Flow Management Modernization (TFM-M); System Wide Information Management (SWIM); and ADS-B. The bill would also task the National Research Council with performing a review of the enterprise architecture for the NGATS examining technical activities, program risk, and opportunities to mitigate risk based on experiences with other complex, software-intensive systems. The bill would also require the FAA, in consultation with other agencies such as NASA, to initiate a research program on methods to improve and streamline the process of certifying new technologies for introduction into the national airspace system. The bill also authorizes additional appropriations, totaling \$56.8 million over the four year authorization period, specifically for airspace redesign initiatives to enhance aviation system capacity and reduce delays.

# Realignment and Consolidation of FAA Facilities and Operations

**FAA Proposal.** The FAA proposal includes language giving the FAA authority to establish a commission, to be known as the Realignment and Consolidation of Aviation Facilities and Services Commission, that would be tasked with making independent recommendations to the President regarding the realignment and consolidation of FAA facilities and services. The commission would be comprised of five members appointed by the Secretary of Transportation to serve three-year terms, with one serving as a member-elected chairperson of the commission. In order to conduct its work, the commission would be permitted to hire experts and consultants on either a temporary or intermittent basis, subject to DOT approval.

The proposal outlines a process for evaluating and implementing recommended FAA facility and service consolidation in a manner designed to minimize political influence on the process, much like the military BRAC process which it is closely modeled after. The overall objective would be to identify and implement recommended realignment and consolidation activities that would help reduce FAA capital, operating, maintenance, and administrative costs without adversely impacting system safety.

The FAA proposal includes details of the process and a timeline for carrying out a systemwide review and implementation of realignment and consolidation of FAA facilities and services. First, within six months after establishing the commission, the commission would be required to publish its final criteria for making recommendations regarding realignment and consolidation. Thereafter, the FAA would be required to publish a list of recommendations to the commission for realignment and consolidation. The commission would subsequently review the FAA's recommendations and consider public comments on these recommendations. Based on this review, the commission would then make its own independent recommendations and justify these recommendations in a report to the President.

If the President concurs with the commission's recommendations, the President would transmit the recommendations, along with a presidential certification of approval, to Congress. If, on the other hand, the President disapproves, the President would be required to transmit to the commission and to Congress the reasons for disapproval. The commission may then address the President's report and make revised recommendations. If the President still disapproves, the entire process would then be terminated. If the President approves of all of the revised recommendations, the President would then forward them, along with indication of presidential approval to Congress. Congress, in turn, would have the opportunity to review the recommendations and would have 60 days to disapprove of the plan through passage of a joint resolution. If Congress does not disapprove, then the FAA would be statutorily required to carry out the realignment and consolidation activities detailed in the presidentially approved commission plan. The FAA would be required to initiate implementation of the approved actions within two years and would be required to complete the realignment and consolidation activities within six years.

While the proposed process closely follows the military BRAC process, which has generally been regarded as a successful approach to realignment and consolidation of military bases and units, the prospect of implementing such a process to assess FAA facilities and services may be regarded as controversial during the reauthorization debate, particularly in local regions that may stand to lose FAA facilities and jobs as an outcome of the process. Consideration of the process in legislation may also be opposed by labor organizations representing FAA employees, although nothing in current statute generally prohibits the FAA from engaging in organizational consolidation and realignment, as evidenced by the FAA's recent consolidation of its regional service areas in 2006.

**S. 1300.** S. 1300 does not include the Administration proposal to establish a BRAC-like commission and process to examine FAA facility realignment and consolidation. Rather, the bill proposes an alternative process for realigning FAA services and facilities. Under S. 1300, within nine months of enactment, the Administrator would be required to establish final criteria for the realignment of services and facilities to assist in the transition to next generation operations and to reduce costs, after providing an opportunity for public comments on proposed criteria. After the final realignment criteria are published, the FAA would be required to identify those services and facilities recommended for realignment, including a justification for these recommendations and the anticipated costs and savings for each recommended realignment action. The Air Traffic Control Modernization Oversight Board would then have the opportunity to study the FAA's recommendations for realignment, and provide an opportunity for public comment on the recommendations. Based on its review of the FAA's recommendations and related public comments, the Board would then be required to make independent recommendations of its own and report these recommendations to the President and to the congressional oversight committees having jurisdiction over the FAA. In this report, the Board would be required to explain and justify any recommendations that differ from those recommendations offered by the FAA. S. 1300 does not discuss what would happen next, nor does it require any specific further action once the recommendations of the Board are received by the President and Congress.

Unlike the Administration's proposal which would limit the ability to take action on any recommendation unless it was supported by the proposed commission and would require the FAA to implement approved recommendations within two years, S. 1300 does not limit the FAA's ability to take action on its own recommendations, nor does it require the FAA to implement any recommendation. So, in contrast to the commission proposed under the FAA proposal which would play a direct role in the realignment process, the Board's role under S. 1300 would only be advisory in nature. While the bill does not require the FAA to implement any specific actions regarding its proposals for realignment or consolidation, planned consolidations of terminal radar approach control (TRACON) facilities in Southern California, Houston, TX, and Memphis, TN, would be put on hold until the above described process is completed and the Board completes its recommendations.

**H.R. 2881.** In contrast to the FAA proposal and S. 1300 that seek more formal entities and processes for reviewing FAA consolidation initiatives, H.R. 2881 proposes to establish an FAA working group, similar to an advisory group, to develop criteria and make recommendations for realignment of services and facilities.

Members of the nine-member working group would consist of the FAA Administrator, two airline representatives, two airport representatives, two representatives from the general aviation community, and two labor organization representatives representing FAA regional office or field employees. An amendment agreed to and incorporated into the House-passed version of the bill would require that FAA regional office consolidation be included in the scope of the working group's oversight. That provision also stipulates that the working group members from labor unions representing FAA employees may be selected from unions representing employees working at either field facilities or regional offices.

The FAA would be required to form the working group within nine months of enactment, and once established, the working group would have six months to develop criteria and recommendations for realignment and present those findings to the appropriate congressional oversight committees. The working group's report is to include justifications for each recommendation to consolidate or realign specific facilities and services, including associated costs and savings estimates. In addition to providing the report to the congressional committees, the report would be published in the Federal Register allowing 45 days for public comments and written objections to the recommendations contained in the report.

Sixty days after the close of the public comment period, the FAA Administrator would be required to submit a second report to the congressional oversight committees detailing the Administrator's recommendations for consolidation and realignment, along with copies of any public comments and objections received. The statute would bar the Administrator from implementing any consolidation or realignment of facilities or services until this report is submitted. However, once the report is submitted, this does not otherwise limit the Administrator's authority to initiate proposed actions or require that these actions be subject to any further review.

# Partnerships for Next Generation Technology Deployment

One option under consideration is to allow private sector investment in communications, navigation, surveillance and other services provided within the context of the national airspace system. For example, under such provisions, telecommunications providers may opt to deploy technologies to augment in-cockpit air traffic surveillance, capabilities and datalink weather and other flight-related information to airborne aircraft. Under such a scheme, these providers may be able to offer certain fee-for-service capabilities to aircraft to augment a core set of required aircraft communication, navigation, and surveillance capabilities. Another option being considered is to allow for airport ownership and control of certain communications, navigation, and surveillance equipment that has been historically acquired, deployed, and maintained by the FAA.

**FAA Proposal.** In the FAA proposal, the Administration has offered language addressing these various proposals. Specifically, language in the FAA proposal would permit non-government entities to provide communications, navigation, surveillance, or other services to the extent that such arrangements would improve safety and efficiency, reduce regulatory burdens on system users, encourage competition, make these services available to the largest feasible number of users, and take into consideration the unique role served by general aviation. Further, a

provision of the bill proposes that a pilot program be established at up to ten large or medium hub airports under which the FAA would transfer, without cost, ownership of terminal area navigation equipment to the airport. The participating airport would, in turn, be responsible for operation and maintenance of the equipment. Under this pilot program, airports would be required to agree that they would maintain the equipment according to FAA standards, allow the FAA to conduct periodic inspections, and upgrade facilities and equipment when they become obsolete. Airports would be permitted to recoup costs associated with operating and maintaining such equipment through PFCs, and pilot program airports would be authorized to impose a PFC of up to \$7, \$1 greater than the proposed PFC maximum level.

Another proposed pilot program, outlined in the FAA proposal, would be established to promote airport acquisition and deployment of Automated Dependent Surveillance — Broadcast (ADS-B) ground stations to supplement the FAA's own acquisition of these facilities (see **ADS-B Support Pilot Program**, above). Under the pilot program, airports would be eligible to receive AIP grant money to fund the acquisition and installation of ADS-B ground equipment, even though it is acknowledged that such equipment is not airport-specific. The FAA envisions ADS-B — a technology through which aircraft could transmit their precise position, direction of flight, and speed to ground stations and other aircraft — as a potential replacement for radar as the primary means for air traffic surveillance and control. The FAA also views ADS-B as a possible safety system for improving pilot situation awareness of air traffic, thereby mitigating the risk of midair collisions, particularly among general aviation aircraft.

While such provisions may expand FAA's options and flexibility with regard to deploying and maintaining next generation air traffic equipment, these approaches may raise operational issues regarding ownership and operational control of these facilities, which are anticipated to be networked and highly integrated into the NGATS. These provisions may also raise liability issues regarding cases of equipment failures and failures to perform to technical specifications.

**S. 1300.** S. 1300 includes the language from the Administration proposal regarding the pilot program for airport takeover of certain navigation facilities, the ADS-B Support Pilot Program, and the provision allowing non-government providers to provide communications, navigation, surveillance or other services to airspace users. In addition to these provisions, S. 1300 requires that, within 90 days of enactment, the FAA submit a report to its congressional oversight committees detailing progress on implementing ADS-B ground stations, and plans and schedules for disseminating advanced operational procedures using ADS-B and ADS-B air-to-air applications.

Additionally, S. 1300 would require the FAA to issue guidelines and regulations regarding requirements for ADS-B avionics equipage, including a schedule indicating when certain types of aircraft would be required to install such equipment, the expected costs to operators, and the expected uses and benefits operators will derive from these avionics. The FAA would be required to issue this guidance and rulemaking within one year of enactment.

- S. 1300 would also impose a requirement designed to accelerate the FAA's operational certification and dissemination of improved instrument approach capabilities using advanced precision navigation capabilities using satellite-based navigation technologies. The bill specifies that the FAA should set a target of adding 200 additional precision approach procedures, known as Required Navigation Performance or RNP procedures, each fiscal year through FY2012. The provision further specifies that the FAA should set a goal of 25% of the target number, or at least 50 procedures per year, meeting the criteria for use in low visibility conditions. The provision would also allow the FAA to authorize third parties to design, flight check, and implement RNP procedures.
- H.R. 2881. H.R. 2881 authorizes the creation of a public-private partnership that includes a "university component with significant aviation expertise in air traffic management, simulation, meteorology, and engineering and aviation business" to serve as an airport-based testing site for existing NGATS technologies. The provision stipulates that the testing site should serve a mix of both commercial and general aviation traffic. Also, a provision of the so-called "manager's amendment" agreed to by the House and incorporated into H.R. 2881 would establish a NextGen Research and Development Center of Excellence. The center would be responsible for leveraging the FAA's centers of excellence program, a program that relies on several university consortia to address ongoing FAA research and development challenges, to enhance the development of NGATS technologies within academia and industry. The NextGen Research and Development Center of Excellence would be responsible for providing educational, technical, and analytical assistance to the FAA and other agencies involved in NGATS development, such as NASA and the DoD, to aid in the research and development of NGATS technologies.
- H.R. 2881 also includes language that would require the FAA to establish a process for including certain FAA employees, selected by their respective collective bargaining units, that are likely to be impacted by the NGATS development and other modernization initiatives in the planning, development, and deployment of ATC modernization projects. This may include air traffic controllers and airway system specialists that maintain ATC infrastructure, who have expressed concern that they have not been adequately included in the planning and conceptualization of NGATS and in the development of other modernization initiatives. These employees would serve in a collaborative, advisory capacity and, in addition to regular compensation and benefits, would receive travel and per diem expenses in accordance with FAA travel policies while serving in this capacity.
- H.R. 2881 would also require the FAA to prepare a report on the program and schedule for integrating ADS-B into the national airspace system. The report is to include detailed information on protections and contingencies that would be included in any FAA contracts to cover the event of a contractor's default, bankruptcy, acquisition, or other event that may jeopardize the uninterrupted delivery of ADS-B services. The provision further specifies that any FAA contract for ADS-B services contain contingencies requiring: FAA Administrator approval of any assignment of the contract or assumption of the contract vendor by another entity; designation of ADS-B assets as critical national infrastructure for security purposes; continuation of ADS-B broadcast services for a reasonable period following a contract termination or in the event of material nonperformance, until another vendor can begin providing

these services; and permission for the federal government to acquire or utilize the ADS-B contractor assets to ensure uninterrupted ADS-B services, provided that reasonable compensation for use of such assets is made.

H.R. 2881 would require the Department of Transportation's Office of Inspector General (DOT OIG) to conduct a review of the effectiveness of FAA oversight in connection with third party development of flight procedures, such as instrument approaches to airports. The review would include an assessment of the degree to which the FAA is relying or plans to utilize third parties for developing flight procedures, and whether there is adequate FAA staff and processes to assess the safety of these third party activities. The report is to also assess whether the FAA has sufficient internal staffing and resources to meet the needs for safely and efficiently developing flight procedures without the use of third party resources.

# **FAA Personnel Management**

In 1995, Congress authorized the Administrator of the FAA to develop a new personnel management system for the agency's workforce. Section 347(a) of the Department of Transportation and Related Agencies Appropriations Act, 1996, provided for the development and implementation of a new personnel management system following consultation with FAA employees and any non-governmental experts in personnel management systems employed by the Administrator.<sup>15</sup> The new system was to provide for "greater flexibility in the hiring, training, compensation, and location of personnel."<sup>16</sup> As enacted originally, chapter 71 of the U.S. Code, relating to labor-management relations in most federal agencies, did not apply to the new personnel management system.<sup>17</sup> However, in March 1996, Congress amended section 347 to make chapter 71 applicable to the new system.<sup>18</sup>

In October 1996, Congress considered additional requirements for the FAA personnel management system. Section 253 of the Federal Aviation Reauthorization Act of 1996 amended title 49 of the U.S. Code to add a new section involving consultation and negotiation with respect to the new system. <sup>19</sup> 49 U.S.C. § 40122(a) provides, in relevant part:

(1) Consultation and Negotiation. — In developing and making changes to the personnel management system initially implemented by the Administrator of the Federal Aviation Administration on April 1, 1996, the Administrator shall negotiate with the exclusive bargaining representatives of employees of the Administration certified under section 7111 of title 5 and consult with other employees of the Administration.

<sup>&</sup>lt;sup>15</sup> P.L. 104-50, § 347(a), 109 Stat. 436, 460 (1995).

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> See P.L. 104-50, § 347(b), 109 Stat. 436, 460 (1995) (identifying provisions of title 5, U.S. Code, that would be applicable to the new personnel management system).

<sup>&</sup>lt;sup>18</sup> P.L. 104-122, § 1, 110 Stat. 876 (1996).

<sup>&</sup>lt;sup>19</sup> P.L. 104-264, § 253, 110 Stat. 3213, 3237 (1996).

(2) Mediation. — If the Administrator does not reach an agreement under paragraph (1) with the exclusive bargaining representatives, the services of the Federal Mediation and Conciliation Service shall be used to attempt to reach such agreement. If the services of the Federal Mediation and Conciliation Service do not lead to an agreement, the Administrator's proposed change to the personnel management system shall not take effect until 60 days have elapsed after the Administrator has transmitted the proposed change, along with the objections of the exclusive bargaining representatives to the change, and the reasons for such objections, to Congress.

In the report that accompanied the Senate version of the 1996 Act, the Senate Committee on Commerce, Science, and Transportation indicated that "[i]n negotiating changes to the personnel system, the Administrator and the exclusive bargaining representatives would be required to use every reasonable effort to find cost savings and to increase productivity within each of the affected bargaining units, as well as within the FAA as a whole."<sup>20</sup> The House version of the act did not include a provision on consultation, negotiation, and mediation. The Senate provisions were incorporated into the final version of the legislation during conference.<sup>21</sup>

In 2005, a federal district court considered the impact of 49 U.S.C. § 40122 on labor-management relations at the FAA. Her reaching bargaining impasses with the FAA, the National Air Traffic Controllers Association ("NATCA") and the Professional Airways Systems Specialists ("PASS") sought the assistance of the Federal Service Impasses Panel ("FSIP"), an entity within the Federal Labor Relations Authority ("FLRA") that provides assistance with resolving negotiation impasses between federal agencies and unions. In 2004, unclear about whether it had the authority to resolve impasses involving the FAA in light of 49 U.S.C. § 40122, FSIP declined to provide assistance.<sup>23</sup>

After reviewing the development of the FAA personnel management system and the enactment of 49 U.S.C. § 40122, the district court concluded that complaints related to an agency's participation in FSIP's impasse resolution procedures could be deemed an unfair labor practice. <sup>24</sup> Consequently, the court declared that "[w]hen agency action constitutes an arguable unfair labor practice, jurisdiction rests exclusively with the Authority and the Courts of Appeals.... For these reasons, the [court] concludes that it is without jurisdiction and should defer to the FLRA."

<sup>&</sup>lt;sup>20</sup> S.Rept. 104-333, at 36 (1996).

<sup>&</sup>lt;sup>21</sup> See H.Rept. 104-848, at 109 (1996).

<sup>&</sup>lt;sup>22</sup> National Air Traffic Controllers Association v. Federal Service Impasses Panel, 2005 WL 418016 (D.D.C. 2005).

<sup>&</sup>lt;sup>23</sup> *Id.* at 1-2.

<sup>&</sup>lt;sup>24</sup> *Id.* at 4.

<sup>&</sup>lt;sup>25</sup> *Id*.

Although the FLRA did not address the matter, the U.S. Court of Appeals for the District of Columbia Circuit did review the district court opinion in February 2006. In *National Air Traffic Controllers Association v. Federal Services Impasses Panel*, the D.C. Circuit affirmed the district court decision, concluding that FSIP did not have a clear and specific statutory mandate to assert jurisdiction over the parties' bargaining impasses.<sup>26</sup> The court did observe, however, that the FAA's refusal to participate in proceedings before FSIP could form the basis of an unfair labor practice charge before the FLRA.<sup>27</sup>

On April 5, 2006, the FAA announced formally that it had reached an impasse in its negotiations with NATCA regarding its agency-wide contract covering the air traffic controller workforce.<sup>28</sup> In accordance with 49 U.S.C. § 40122(a)(2), the FAA Administrator indicated that the agency would send its last, best offer to Congress.<sup>29</sup> On June 5, 2006, the FAA imposed a new labor contract on NATCA. FAA maintained that the new contract would save the government approximately \$1.9 billion over five years through various measures, including the creation of a separate, lower pay scale for new employees.<sup>30</sup>

**FAA Proposal.** The FAA Proposal does not include provisions that would alter the agency's existing personnel management system.

**S. 1300.** Section 313 appears to respond to the events involving NATCA and PASS in 2006. The section would amend 49 U.S.C. § 40122(a)(2) to allow for the involvement of FSIP if the Administrator and a bargaining representative fail to reach agreement under 49 U.S.C. § 40122(a)(1). Under the amended 49 U.S.C. § 40122(a)(2), FSIP would be permitted to assist the parties by ordering binding arbitration by a private arbitration board consisting of three members. Each party would select one arbitrator from a list of not less than 15 arbitrators with federal sector experience provided by the director of the Federal Mediation and Conciliation Service. The two arbitrators would then select a third arbitrator from the list. If the two arbitrators are unable to agree on the third person, the parties will select the third person by alternately striking names from the list until only one name remains.

The arbitration board would be required to give the parties a full and fair hearing, including the opportunity to present evidence in support of their claims, and

<sup>&</sup>lt;sup>26</sup> 437 F.3d 1256 (D.C. Cir. 2006).

<sup>&</sup>lt;sup>27</sup> *Id.* at 1265.

<sup>&</sup>lt;sup>28</sup> See FAA Declares Impasse in Controller Talks; Next Stop for Two Sides is Congress, Daily Lab. Rep. (BNA) No. 66, at A-5 (April 6, 2006).

<sup>&</sup>lt;sup>29</sup> *Id.* H.R. 5449, a measure introduced by Representative Steven C. LaTourette on May 22, 2006, to repeal 49 U.S.C. § 40122(a)(2), was defeated. The measure was considered under suspension of the rules and required a two-thirds vote to pass. The vote was 271-148. For additional information on the congressional consideration of H.R. 5449, *see FAA Imposes Labor Contract on NATCA Following 60-Day Congressional Review*, Daily Lab. Rep. (BNA) No. 111, at A-10 (June 9, 2006).

<sup>&</sup>lt;sup>30</sup> FAA Imposes Labor Contract on NATCA Following 60-Day Congressional Review, supra note 15.

an opportunity to present their case in person, by counsel, or by another representative. The arbitration board would be required to render its decision within 90 days of its appointment. The costs of the arbitration would be shared equally by the parties.

**H.R. 2881.** Like section 313 of S. 1300, section 601 of H.R. 2281 would permit the involvement of FSIP and the use of binding arbitration to resolve impasses. Unlike section 313, however, section 601 would permit an enforcement action under the amended 49 U.S.C. § 40122 to be brought in any U.S. district court in the state in which a violation has allegedly been committed, the state in which the FAA has its principal office, or in the District of Columbia. Under section 313, enforcement actions would have to be brought in the U.S. District Court for the District of Columbia.

In addition, section 601(b) would invalidate any changes that were implemented by the FAA Administrator on and after July 10, 2005, without the agreement of the exclusive bargaining representative. The parties would be governed by their last mutual agreement until a new contract was adopted. Thus, section 601(b) would appear to have the effect of undoing the new contract that was imposed on June 5, 2006.

# **FAA Technical Training and Staffing**

With an aging workforce and an increasing percentage of FAA employees becoming eligible for retirement over the reauthorization period, there has been growing concern among some regarding the FAA's ability to maintain adequate technical skills and knowledge within its workforce.

**FAA Proposal.** The FAA proposal does not include language directly addressing technical training and staffing issues.

**S. 1300.** While the FAA proposal does not include any provisions addressing FAA technical training and staffing issues, S. 1300 includes a provision directing GAO to conduct a study of FAA technical specialists, specifically airway transportation system specialists, examining the types of training provided to these individuals, the training needs for maintaining the latest air traffic system technologies, FAA actions that have been taken to ensure that these specialists receive up-to-date training, and recommendations regarding the most cost-effective approaches to providing such training. S. 1300 would also require the National Academy of Sciences to conduct a study to assess workload and staffing needs for FAA air traffic controllers and system specialists. The bill also directs the FAA to come up with a staffing model for its aviation safety inspectors, within 18 months of enactment, that is to be developed through consultation with representatives of aviation safety inspectors and other interested parties. The FAA has had a similar staffing model for air traffic controllers for some time; however, this model has been the subject of considerable scrutiny and criticism over the past few years in response to the FAA's strategy for handling the increasing number of controller retirements. Recently, there has been growing concern that similar trends in retirements could impact the FAA's aviation safety inspector workforce. The National Research Council recently published a book detailing a model for aviation safety inspector staffing standards in response to a congressional mandate for such a study that was included in Vision 100.<sup>31</sup>

**H.R. 2881.** H.R. 2881 contains similarly worded language tasking GAO with completing a study on airway transportation system specialist training, and directs the National Academy of Sciences to study the methods and assumptions used by the FAA in gauging workload and setting system specialist staffing levels.

H.R. 2881 would also require the FAA to develop a staffing model for aviation safety inspectors by October 31, 2009. The bill also calls for an increase in the number of FAA safety inspectors, safety technical specialists, and operational support positions and sets specific inspector staffing levels throughout the authorization period. The bill specifies authorizations, in addition to the overall amounts provided for Operations and Maintenance (O&M), in the following amounts to increase safety inspector and operational support staffing levels: \$58 million in FY2008; \$134 million in FY2009; \$170 million in FY2010; and \$208 million in FY2011. The bill also allows for such sums as may be necessary to implement the numbers of aviation safety inspectors, safety technical specialists, and operational support positions specified as necessary to support the flight standards mission as determined by the staffing model. A safety-related provision of the bill would require FAA inspectors to inspect foreign repair stations that service air carrier aircraft or components at least two times per year. In addition, H.R. 2881 calls for a GAO report on the status of previously made GAO recommendations regarding the FAA's use of designees and oversight and management of the FAA designee programs.

H.R. 2881 would also task the National Academy of Sciences with carrying out a study examining the assumptions and methods used by the FAA to estimate air traffic controller staffing needs. In carrying out the study, the National Academy of Sciences would be required to consult with FAA labor groups, the FAA administrator, and CAMI, and consider human factors, traffic activity, and available technology and equipment in developing recommendations and cost and schedule estimates for the FAA to develop an objective staffing standard. The FAA has maintained a controller staffing standard for several years, and has revised this standard in recent years to address pending controller turnover, although the existing staffing standard has been criticized by FAA labor organizations and by some Members of Congress. H.R. 2881 would also require the FAA to assess the adequacy of training programs for air traffic controllers, and also study options for training graduates from Collegiate Training Initiative (CTI) programs, and assess alternatives to training newly hired controllers from such programs through the current training provided at the Mike Monroney Aeronautical Center in Oklahoma City, OK.

H.R. 2881 also contains a provision that would require the FAA to carry out a study of the front line manager staffing requirements in air traffic control facilities. The study would address the number of supervisory positions for watch coverage in each ATC facility in relation to traffic demand and complexity, facility type,

<sup>&</sup>lt;sup>31</sup> National Research Council, Committee on Federal Aviation Administration Safety Inspector Staffing Standards, *Staffing Standards for Aviation Safety Inspectors*, 2007, The National Academies Press: Washington, DC.

managerial responsibilities, proficiency and training requirements, and other related factors. The ongoing use of the controller-in-charge (CIC) program to supplement line managers in ATC facilities has been an ongoing controversy.

H.R. 2881 also calls for establishing a center of excellence in aviation employment. The center would conduct applied research and provide training on: human performance in the aviation environment; air transportation personnel including air traffic controllers, pilots, and technicians; and other aviation human resource issues.

# **System Capacity and Safety**

System capacity and safety remain as overarching issues behind much of the reform sought in the proposed FAA reauthorization. However, in terms of requested statutory changes specifically addressing system capacity and safety issues, major provisions offered in the FAA's proposal have focused on obtaining the authority to implement market-based approaches to controlling congestion at selected highdensity airports. Specifically, the FAA proposal seeks statutory authority to control congestion at certain airports through market-based mechanisms, such as slot auctions and peak-period pricing. The proposal would direct DOT to study the appropriateness of a market-based scheme at New York's LaGuardia Airport (LGA), and if deemed appropriate, would permit the airport operator, the Port Authority of New York and New Jersey, to implement a market-based approach to controlling congestion. The FAA proposal also seeks to establish a pilot program to evaluate market-based mechanisms to relieve congestion at up to 15 other airports. S. 1300 does not contain any provisions addressing this issue, but does seek to increase the number of flights to and from Washington Reagan National Airport which are tightly controlled through a statutorily defined slot system. The bill also contains numerous provisions addressing assorted aviation safety and capacity issues including runway incursions; airliner fuel tank safety; pilot fatigue; helicopter emergency medical service operations; age limits for airline pilots; unmanned aircraft operations; and wake turbulence prediction, detection, and avoidance.

# Controlling Congestion at New York's LaGuardia Airport

A statutory provision that set specific capacity controls in the form of "slots" at LaGuardia Airport (LGA) expired on January 1, 2007. Statutory slot controls at other airports had previously expired, leaving Washington Reagan National Airport (DCA) as the only airport in the country with statutorily imposed slots. In response to the sunset of the statutory slot provision for LGA, the FAA issued an order establishing temporary limits to prevent congestion-related delays at LGA. The FAA imposed similar restrictions at Chicago's O'Hare airport (ORD) to alleviate congestion and delay and maintain operational safety.

**FAA Proposal.** In the FAA proposal, the Administration has drafted language that would authorize DOT to determine whether the use of a market-based mechanism for controlling access to LGA, such as a slot auction or congestion pricing, would be an appropriate means for allocating takeoffs and landings among

the airport's users. If such a mechanism is determined to be appropriate, then DOT shall permit the Port Authority of New York and New Jersey to implement a market-based approach to controlling flights at LGA under guidelines that would be established by DOT rulemaking. The FAA proposal, however, raises some potential intergovernmental relations questions. These concern the ability of the FAA to delegate what could be considered air traffic rationing authority to the airport operator. These issues may need to be addressed before this section could be implemented.

- **S. 1300.** S. 1300 does not contain any language addressing congestion, slots, or market-based mechanisms for addressing congestion and capacity issues at LGA.
- **H.R. 2881.** H.R. 2881 also does not contain any language addressing flight operations at LGA.

# **Market-Based Strategies for Alleviating Congestion**

As airline operations become increasingly concentrated at a relatively small number of airports throughout the nation, market-based approaches have been viewed favorably by aviation experts as a means for controlling congestion. Critics, however, remain concerned that the cost of operating under these market-based schemes could negatively affect service to smaller communities. Specifically, routes to smaller communities may have more difficulty being profitable if a market-based price associated with connections to major hubs is factored into the cost of service. This may result in a loss of service to some communities if the costs of implementing market-based mechanisms make these routes unprofitable.

**FAA Proposal.** In addition to the authority sought to implement market-based congestion controls at LGA, the FAA proposal also seeks to establish a pilot program to evaluate market-based mechanisms to relieve congestion at up to 15 other airports. As previously mentioned, besides LGA, the FAA has imposed temporary restrictions on air carrier flight operations at ORD in an effort to mitigate congestion and delay and maintain operational safety. The FAA proposal, however, does not make any special accommodations for service to small communities in the context of these market-based approaches, although such options may be considered during congressional debate.

- **S. 1300.** S. 1300 does not include any provisions for implementing market-based strategies or techniques for alleviating congestion at any airports.
- **H.R. 2881.** H.R. 2881 includes a general provision included as part of the "manager's amendment" which was agreed to by the House that would allow the FAA to hold meetings among air carriers for the purposes of reducing schedules at a capacity constrained airport under a defined set of conditions. These meetings would be for the purpose of voluntarily negotiating schedule reductions in cases where an airport is experiencing arrival and departure rates that exceed maximum hourly rates and these delays are likely to have a significant adverse effect on a regional or national level. If air carriers are unwilling to voluntarily agree to schedule reductions, then the provision would authorize the FAA administrator to take appropriate action to reduce arrivals and departures to reflect available airport

capacity. Also, an amendment agreed to by the House would require GAO to assess the use of market-based strategies for reducing airspace congestion, such as peakperiod pricing, slots, or quotas, and compare the effects of such initiatives to the improvements in congestion attainable through airspace redesign initiatives.

# **Washington Reagan National Airport Slot Controls**

The total number of flights that can be handled in a given period of time at Washington Reagan National Airport is set by federal statute (landings and takeoffs are referred to in industry parlance as slots). This system has existed for over two-decades, although the statutory limitations on the number of slots available has been modified over that period by congressional action, especially since 2000.

In addition, flights at Reagan National are further restricted by what are known as perimeter rules. These rules, which date to the opening of Dulles Airport in the late 1950s, were designed to move most long distance airline traffic to the new airport. Again these perimeter rules have been modified over time. At present, flights of 1,250 miles or less are referred to as being within the perimeter. Prior to congressional action in 2000, all slots for flights arriving or departing Reagan National were required to operate within the perimeter. Since 2000, Reagan National has accommodated additional flights, using newly created slots providing service to destinations outside the perimeter, so-called beyond perimeter slots.

Many Members of Congress and their constituents were long unhappy with the perimeter restrictions, wishing to be able to fly to more distant locations from Reagan National. In 2000, and again in 2003, Congress acceded to this view in a limited fashion allowing the aforementioned beyond perimeter slots. In the same pieces of legislation Congress also added additional slots for service within the perimeter, thereby increasing the absolute number of flights allowed per day at the airport.

Certain other Members of Congress, Washington metro area local governments, and local residents living near the airport or in its flight paths have opposed increased traffic at Reagan National for any reason. Although this opposition focuses primarily on the noise impacts of additional traffic, opponents of increased flights have also cited other reasons to hold this view.

In February 2007, the Government Accountability Office (GAO) produced a study that suggested that additional flights could be handled at Reagan National.<sup>32</sup> Although the operator of the airport, the Washington Metropolitan Airports Authority, agreed that additional capacity could be added, it did not support additional slots.

**FAA Proposal.** In its proposed legislation the Bush Administration did not propose any changes in the Reagan National slot rules.

<sup>&</sup>lt;sup>32</sup> U.S. Government Accountability Office. *Reagan National Airport: Update on Capacity to Handle Additional Flights and Impact on Other Area Airports.* GAO-07-352. Washington, DC. February 2007. 31 p.

- **S. 1300.** S. 1300 envisions the creation of 20 new slots at the airport on a daily basis, 12 of these for beyond perimeter operations and eight for within perimeter operations. During Senate Commerce mark-up an amendment to strike the additional slots failed on a 12-11 vote.
- **H.R. 2881.** H.R. 2881 provides for an additional 10 beyond perimeter slots, but does so by reducing existing slot allocations at the airport by an equal number.

# **Runway Safety**

Runway incursions — events where aircraft, vehicles, or pedestrians stray onto active runways and pose a collision hazard to landing or departing aircraft — remain a central safety concern. The FAA's major technology initiatives to mitigate runway incursions include the deployment of advanced surface radar capabilities (Airport Surface Detection Equipment, Model X or ASDE-X) and controller alerting to warn of impending incursions (the Airport Movement Area Safety System or AMASS) at busy airports. However, ASDE-X has been scaled back and delayed. Also, the utility of the AMASS system has been questioned by the NTSB because it does not convey warning information directly to pilots, potentially limiting the systems ability to mitigate collisions. The NTSB has recommended that the FAA develop systems that provides direct warnings to pilots. The FAA recently approved the use of electronic flight bags, portable computers for pilot use, with moving maps to improve pilot situation awareness while taxiing. While useful for orienting and navigating in the airport environment, these devices currently do not present information regarding other aircraft and vehicles in the airport environment. To provide direct incursion mitigation tools for pilots, the FAA has been operationally testing the use of runway status lights (RWSLs) to warn taxiing aircraft that it is unsafe to cross an active runway, and final approach runway occupancy signal (FAROS) lights to warn landing aircraft if the runway ahead is occupied. The FAA has not fully evaluated the results of these ongoing operational tests and has not made any decisions regarding the operational deployment of these systems beyond the test phase at this point.

- **FAA Proposal.** While the FAA has been actively engaged in developing operational procedures, and deploying technologies to mitigate runway incursions, the FAA proposal does not include any specific language addressing the issue of runway incursions.
- **S. 1300.** S. 1300 would require the FAA to develop an installation and deployment schedule for systems to alert controllers and flight crews regarding potential runway incursions no later than December 31, 2008. The bill further stipulates that this schedule be integrated into the FAA's operational evolution plan, its roadmap for near-term system enhancements.
- **H.R. 2881.** H.R. 2881 contains a provision, similar to the S. 1300 provision, that would require the FAA to submit a report to Congress detailing its plan to install systems to alert controllers, flight crews, or both of potential runway incursions by December 31, 2008. The FAA would be required to integrate the plan into its annual Operational Evolution Partnership document. H.R. 2881 also explicitly authorizes, from the amounts authorized for overall Facilities and Equipment (F&E) spending,

the amounts specified in **Table 4** for runway incursion reduction programs and runway status lights (indicators for taxiing aircraft that a runway is occupied by a landing or departing aircraft and should not be used or crossed). The bill would also require the FAA to develop a strategic plan for runway safety within six months of enactment. The plan would be required to specifically address the effects of expected increases in air traffic on runway safety risk, and include specific goals to improve runway safety; near-term and long-term actions for reducing the number of runway incursions and their severity; a timeline and a list of resources needed for implementing these actions; and details of a continuous process for monitoring progress toward achieving stated runway safety goals.

Table 4. Specific Authorizations in H.R. 2881 for Runway Incursion Mitigation

(\$ in millions)

Program	FY2008	FY2009	FY2010	FY2011
Runway Incursion Reduction Programs	8	10	12	12
Runway Status Lights	15	27	12	20

# **Aircraft Fuel Tank Safety**

The safety of fuel tanks on transport category aircraft has been a central safety concern for over ten years following the 1996 crash of TWA flight 800 off the coast of Long Island, NY. Recent technology advances in fuel inerting systems have led to the development of small, light-weight fuel inerting pumps that extract oxygen from the air in fuel tanks, replacing it with a nitrogen-rich mixture that greatly reduces flammability potentially mitigating future accidents like the TWA flight 800 tragedy. In May 2002, the FAA announced an innovative lightweight prototype fuel inerting system.<sup>33</sup> This system — unlike earlier versions used by the military — weighs significantly less, uses no moving parts, is more reliable, and could be retrofitted into airplanes currently in service at a fraction of the industry-estimated cost.<sup>34</sup> Boeing is now shipping new aircraft from its factories with these systems already installed.

The FAA has proposed an approach that would require passenger airlines to take such steps to reduce fuel tank flammability in their aircraft fleets over the next eight years. The FAA issued proposed rulemaking in November, 2005 to require that operators of large transport category airplanes used in passenger airline service take steps to reduce fuel tank flammability, such as installing fuel inerting systems. The proposed rule does not specifically require the fuel tank inerting systems discussed above for all passenger airliners, but leaves the door open for alternative means of compliance. The proposal seeks to set a flammability exposure criterion for center

<sup>&</sup>lt;sup>33</sup> Federal Aviation Administration, *FAA and Airlines to Reduce Fuel Tank Flammability*, Press Release APA 02-04, February 17, 2004.

<sup>&</sup>lt;sup>34</sup> National Transportation Safety Board, *Most Wanted Transportation Safety Improvements, Federal Issues, Aviation, Eliminated Flammable Fuel/Air Vapors in Fuel Tanks on Transport Category Aircraft, Washington, DC.* (Undated.)

fuel tanks. The proposed rule, however, does not require fuel tank flammability reduction for wing tanks as it only establishes requirements for an aircraft's main fuel tank, and would exempt all-cargo aircraft. The rule would require that retrofitting of the fleet be phased-in between 2009 and 2014.

**FAA Proposal.** The FAA proposal does not include any legislative language addressing the issue of fuel tank safety.

- **S. 1300.** S. 1300 specifies that, no later than December 31, 2007, the FAA is to issue a final rule regarding the reduction of fuel tank flammability in transport category aircraft. The proposed rule which would require that operators of large transport category airplanes used in passenger airline service take steps to reduce fuel tank flammability was issued by the FAA on November 23, 2005, and the opportunity for public comments on the proposal closed on March 23, 2006.
- **H.R. 2881.** H.R. 2881 includes a provision identical to S. 1300 regarding aircraft fuel tank safety.

# **Pilot Fatigue**

Reducing accidents caused by fatigue across all modes of transportation by establishing working hour limits for transportation operators based on fatigue research, circadian rhythms, and sleep and rest requirements has been a longstanding priority of the NTSB. While existing federal regulations include flight time and rest requirements for flight crews that vary depending on the type of commercial flight operation being conducted, these regulations have often been criticized as not adequately reflecting scientific knowledge regarding human fatigue, alertness, and sleep needs. In airline operations, pilot organizations, through collective bargaining, have been able to negotiate schedules that provide longer rest periods than the minimum required under FAA regulations. However, there is still concern that airline pilots' rest periods do not adequately account for the time associated with transportation to and from the airport, and circadian disruption associated with crossing time zones over the course of a trip. However, concern over pilot fatigue tends to be even greater for other commercial operators, besides the airlines, where there are less stringent regulatory requirements for flight time and rest requirements, and fatigue issues are not typically addressed in pilot contracts to the extent that they are covered in contracts between major airlines and their pilots.

**FAA Proposal.** The FAA proposal does not include any specific language regarding the issue of pilot fatigue.

**S. 1300.** S. 1300 includes a provision that would task the National Academy of Sciences with conducting a study of pilot fatigue. The FAA would be required to consider the study's findings and recommendations in rulemaking regarding flight time limitations and crew rest requirements. However, the provision does not specifically require the FAA to propose any specific changes to existing flight time and crew rest regulations. The provision does, however, require that the FAA initiate a process to implement recommendations made by the FAA's Civil Aerospace Medical Institute (CAMI) regarding flight attendant fatigue.

**H.R. 2881.** H.R. 2881 includes a similarly worded provision that would task the National Academy of Sciences with completing a study of pilot fatigue, and would require the FAA to implement the recommendations of the CAMI study regarding flight attendant fatigue. H.R. 2881 includes an authorization of such sums as may be necessary to carry out this provision. H.R. 2881 would also require the FAA to rewrite current flight and duty time regulations for air carrier, commuter airline, and charter pilots to count flight time accumulated conducting non-revenue flight assignments for the operator toward pilot flight and duty time totals.

# **Helicopter Emergency Medical Service Safety**

The safety of helicopter emergency medical service (HEMS) operations has been in the spotlight over the past few years in response to increased accidents in this growing industry. The National Transportation Safety Board (NTSB) and other aviation safety experts are advocating the mandatory use of formal flight dispatch procedures and risk management practices among helicopter air ambulance operators as well as mandatory installation of terrain warning systems on HEMS aircraft. The NTSB also found that many air ambulance accidents occur when patients are not on board, such as en route to an accident scene. Present regulations allow air ambulances to operate under a less stringent set of rules with regards to weather minimums and pilot duty times when not carrying patients. However, the NTSB believes that air ambulance flights should operate under more stringent commercial operating rules at all times that medical personnel are carried on board.<sup>35</sup>

**FAA Proposal.** The FAA proposal does not include any specific language addressing the safety of HEMS operations.

- **S. 1300.** S. 1300 would require, within 18 months of enactment, that all HEMS operations comply with Part 135 commercial flight operating regulations whenever a medical crew is on board, regardless of whether or not a patient is on board. The bill would also require the FAA to create a standardized risk evaluation checklist and require HEMS operators to use the checklist in making "go/no-go" decisions for flight missions. The bill would also require the FAA to create standardized flight dispatch procedures for HEMS operations based on air carrier flight dispatch requirements contained in Title 14 CFR Part 121, and require all HEMS operators to use of these dispatch procedures.
- S. 1300 would also require HEMS operators to install and operate FAA-certified terrain awareness and warning systems (TAWS) on all helicopters acquired for use in emergency medical service operations after the date of enactment. The bill would also require the FAA to study the feasibility of requiring cockpit voice and data recorders on new and existing HEMS aircraft, and within two years of enactment, complete rulemaking to require these devices on board such helicopters.

**H.R. 2881.** H.R. 2881 does not include a provision addressing HEMS safety.

<sup>&</sup>lt;sup>35</sup> See CRS Report RL33430, *The Safety of Air Ambulances*, by Bart Elias, and National Transportation Safety Board, *Special Investigation Report on Emergency Medical Service Operations*, NTSB/SIR-06/01.

#### **Airline Pilot Age Restrictions**

Since 1960, airlines have been prohibited from using pilots age 60 and older on revenue passenger flights.<sup>36</sup> For most pilots, this has translated into a mandatory or forced retirement at age 60. The Age-60 Rule, as it is known in the industry, has been controversial since its inception, but has nonetheless withstood numerous reviews and legal challenges. While it has been long acknowledged that the designation of age 60 as a maximum in itself is arbitrary, the predicate of the rule — rooted in concerns over safety associated with a gradual decline in mental faculties and a gradual increased risk of incapacitation with advancing age — has been generally accepted.

Recent changes, however, have prompted action to modify this longstanding rule. In the late 1990s, the European Joint Aviation Authority (JAA), adopted a rule allowing airline pilots flying multi-crew aircraft to continue to serve up until age 65, provided that one of the pilots in the cockpit on any given flight is younger than age 60. While not all European Union member countries adopted this rule, it nonetheless provided the impetus for international change. In November 2006, the International Civil Aviation Organization (ICAO), adopted the European model as an international standard. The Age-60 rule in the United States is, nonetheless, still considered an acceptable international practice, because by limiting airline operations to pilots younger than 60, the United States maintains what is regarded as more conservative alternative from the standpoint of safety. Nonetheless, the FAA took recent action to review the Age 60 rule in recognition of these changes in ICAO standards.

In September 2006, the FAA organized an industry working group to examine whether the United States should alternatively adopt the new international standard. While the working group did not reach a consensus on this principal task, the FAA Administrator announced that the FAA would move forward with rulemaking to adopt the international standard allowing airline pilots to continue flying until age 65 based, in part, on the work of the committee.

The Fair Treatment for Experienced Pilots Act (P.L. 110-135). In December 2007, Congress acted on and the President signed into law stand-alone legislation raising the maximum age for airline pilots to 65, immediately nullifying the longstanding Age-60 rule. Since December 11, 2007, the date of enactment of the Fair Treatment for Experienced Pilots Act (P.L. 110-135), pilots have been permitted to continue flying in airline service up to age 65. To maintain consistency with international standards, the law specifies that one pilot in the cockpit must be under the age of 60 on international flights. The law also requires periodic evaluations, known in the industry as line checks, to be conducted every six months to assess pilots over the age of 60. The law is not retroactive in the sense that it explicitly excludes the use of its provisions as a basis for pilots that had reached the age of 60 prior to enactment to return to their former airline jobs. The law, however, does not preclude pilots that had left their pilot jobs upon reaching age 60 from being hired as an air carrier pilot. Although the law excludes such pilots from regaining

<sup>&</sup>lt;sup>36</sup> For further background, see CRS Report RL32960, *Age Restrictions for Airline Pilots: Revisiting the FAA's "Age 60 Rule,"* by Bart Elias.

any seniority status or longevity benefits based upon their prior airline service. The law requires the GAO to monitor and report on any impacts of this action on airline safety two years after enactment. The passage of this legislation largely makes moot provisions in S. 1300 and H.R. 2881, discussed below, that are similarly intended to increase the maximum age of air carrier pilots to 65.

- **FAA Proposal.** While the FAA has announced that it intends to change the regulations governing maximum age for airline pilots, it intends to do this through the regulatory process and has not requested any legislative language in its proposed bill related to this issue.
- **S. 1300.** S. 1300 includes a provision that mimics the new international standard and would allow pilots to operate multi-crew aircraft up to age 65, with the proviso that one of the required pilots be younger than age 60 on any given flight. If adopted, this provision would nullify the existing age 60 rule on the date of enactment. The provision, however, prohibits any pilot who reached age 60 prior to the effective date of enactment from using this change as the basis for a seniority claim for employment with an air carrier. In other words, the provision would prohibit pilots that had already reached age 60 prior to enactment but are younger than 65 from claiming any specific right or seniority privilege to return to the pilot position they previously held. This, however, would not prohibit pilots between the age of 60 and 65 from being rehired by their former airline or gaining employment with another air carrier.
- S. 1300 would task GAO with studying and reporting on whether this proposed change in the maximum airline pilot age has any impact on aviation safety after its implementation. GAO's report of its findings would be due to the congressional oversight committees within two years of the date that the proposed change in maximum airline pilot age becomes effective.
- **H.R. 2881.** H.R. 2881 contains a provision that would have the same effect as the provision in S. 1300, allowing pilots to fly in airline operations up to age 65 provided one pilot in the flight deck crew is under age 60, but includes additional mechanisms for monitoring and evaluating pilots over 60. Like S. 1300, H.R. 2881 includes language stipulating that this provision is not retroactive unless the individual over age 60 on the date of enactment is employed as a required flight deck crew member, or is newly hired after age 60 without any service credit or benefits given for prior employment with the airline.
- H.R. 2881 explicitly states that pilots over age 60 shall not be subject to different medical standards unless the Secretary of Transportation determines that additional standards are needed to ensure an adequate level of flight safety. The provision would, however, set in statute that first class medical certificates, needed to conduct airline operations, that are issued to pilots age 60 and older will expire after six months. Currently, by regulation, all first class medical certificates expire after six months and cannot be used for meeting the medical standards to fly as an airline pilot.

The provision would also require airlines to place a special emphasis on maintaining acceptable levels of pilot skill and judgment for pilots over 60 through initial and recurrent training, and FAA-approved qualification programs. Further airlines would be required to perform a line check of each pilot over age 60 within six months of enactment, and every six months thereafter. Pilots over 60 only flying as second-in-command, however, would be able to complete a simulator evaluation instead of a line check to fulfill this requirement. Like S. 1300, H.R. 2881 tasks GAO with completing a study of the effects, if any, on aviation safety of this modification to the airline pilot age standards.

### **Incorporating Unmanned Aircraft Operations**

Growing interest in the use of unmanned aerial vehicles (UAVs), or unmanned aerial systems (UASs) is spurring considerable debate over how to accommodate these unmanned systems and keep them safely separated from other air traffic. Over the next five to ten years, the FAA anticipates that civilian-use UAVs will rapidly transition to operational status, and users will seek permission to fly UAVs in all airspace throughout the United States in all weather conditions. The FAA and other federal agencies face a wide variety of complex issues related to integrating unmanned aircraft into the National Airspace System (NAS) including reliable technologies for detecting, sensing, and avoiding other aircraft; radio frequency spectrum needs for unmanned aircraft operations; technologies and procedures for systems safety; and training and certification requirements for unmanned aircraft operators.

On February 13, 2007, the FAA issued a notice of policy on unmanned aircraft operations in the national airspace system. That policy states that "no person may operate a UAS in the National Airspace system without specific authority."<sup>37</sup> For military unmanned aircraft and unmanned aircraft operated by federal, state, or local governments, the mechanism for such authority from the FAA is through application for and receipt of a Certificate of Waiver or Authorization (COA). The FAA has issued more than 50 such authorizations over the past two years, mostly to the Department of Defense, but also to other federal agencies such as Customs and Border Protection (CBP), and the National Oceanic and Atmospheric Administration (NOAA). For non-governmental entities seeking authorization to operate unmanned aircraft in the national airspace system, a special airworthiness certificate must be obtained from the FAA. The FAA has indicated that, at present, it is only issuing experimental airworthiness certificates for unmanned aircraft. By being designated as experimental, these vehicles are restricted to sparsely populated areas and away from routes used by manned aircraft. As of February 2007, the FAA had issued five such certificates to civilian organizations for unmanned aircraft research and development, marketing, and training.

However, the FAA is concerned that other civilian users have been operating commercial UAVs under guidelines issued in the early 1980s that were intended to apply only to hobbyists or recreational users of model aircraft. Those guidelines instruct such users to maintain altitudes lower than 400 feet above the ground, select sites away from populated and noise-sensitive areas, give right of way to full-scale

<sup>&</sup>lt;sup>37</sup> Federal Aviation Administration, "Unmanned Aircraft Operations in the National Airspace System," *Federal Register*, 72(39), February 13, 2007, 6689-6690.

aircraft, and advise airport operators and air traffic facilities if operating within three miles of an airport. The FAA statement of policy clarifies that these general guidelines alone are not sufficient for commercial operators of unmanned aircraft, regardless of the size of such aircraft. The FAA did, however, indicate that it has undertaken a safety review to determine whether certain small, slow-moving unmanned aircraft could be safely operated under a similar set of guidelines without requiring a special airworthiness certificate. At present, all such aircraft, except those flown by aircraft model hobbyists, must obtain a special airworthiness certificate as a means of FAA approval for UAV flight operations.

- **FAA Proposal.** The FAA proposal does not include any specific language addressing the issue of integrating or incorporating unmanned aircraft into the National Airspace System (NAS).
- **S. 1300.** S. 1300 includes a provision that would permit the FAA to engage in research to improve unmanned aircraft as well as manned aircraft, and would require the FAA to carry out research on unmanned aircraft safety. The provision further directs the FAA to conduct human factors simulations to better understand the role of the human operator in unmanned aerial systems safety, and develop large-scale models simulating the integration of all classes of unmanned aircraft into the NAS.
- S. 1300 would also require the National Academy of Sciences to enter into an agreement with the FAA to assess unmanned aircraft systems, including consideration of human factors; detect, sense, and avoid technologies; spectrum issues and bandwidth requirements; operations in suboptimal winds and adverse weather; dissemination of information regarding unmanned aircraft activity; airworthiness and system redundancy; flight termination systems to safety and security; privacy issues; flight control technologies; propulsion technologies; operator qualifications, medical standards, and training requirements; system maintenance and maintenance training requirements; and any other unmanned aerial systems issues that the FAA Administrator believes should be addressed.
- S. 1300 also would require the FAA to establish three two-year pilot projects addressing each of three categories of unmanned aircraft to collect data to accelerate the safe integration of unmanned aircraft into the NAS. These projects are to be conducted in low density airspace over sparsely populated areas, and costs of the projects are to be shared. The provision encourages the formation of consortia including public and private sector partners, educational institutions, and non-profit organizations to carry out these pilot projects. The bill would authorize such sums as may be necessary to carry out these projects.
- S. 1300 would also task the FAA with developing an unmanned aerial systems "roadmap": updating its existing policy on unmanned aerial systems; issuing proposed rulemaking regarding the process of issuing airworthiness certification and experimental certificates for operating unmanned aerial systems; and reporting to Congress on the potential of using existing ultralight aircraft certification standards as the basis for establishing certification standards for lightweight unmanned aerial systems. The bill would impose a deadline of April 30, 2010 for the FAA to have initiated all rulemaking regarding vehicle design, operational requirements, airworthiness requirements; and operator certification necessary for integrating all

categories of unmanned aerial systems into the NAS. The bill directs the FAA to fully consider the report from the National Academy of Sciences described above, and the three pilot projects that would be required under the bill, as well as ongoing work on unmanned aircraft systems being performed by the Radio Technical Commission for Aeronautics (RTCA, Inc.) in developing its regulations.

- **H.R. 2881.** H.R. 2881 includes a provision requiring the FAA to develop a comprehensive plan within nine months of enactment to safely integrate commercial unmanned aircraft systems (UASs) in the national airspace system. The bill further specifies that this integration is to be completed as soon as possible, but not later than September 30, 2012, and authorizes such sums as may be necessary to carry out the implementation plan.
- H.R. 2881 further requires the Secretary of Transportation to determine if certain UASs can be safely operated in the national airspace system before completion of the integration plan, and establish requirements for safe operation of such aircraft. The bill also requires the Secretary of Transportation to issue guidance within nine months of enactment regarding public unmanned aircraft, such as those operated by federal or state and local entities. The guidance is to expedite certification or authorization of public-use UASs; provide for collaboration with public agencies to allow for incremental expansion of UAS operations as technologies mature; and facilitate the capability of public agencies to develop and use test ranges to fly UASs. The bill also includes a provision directing the FAA, in coordination with other federal agencies, to develop: methods and technologies for assessing risk and preventing design and maintenance related failures of unmanned aircraft systems that could pose risks to other aircraft; a better understanding of human factors issues related to unmanned aircraft systems safety; and dynamic simulation models for assessing the integration of all types of UASs into the national airspace system without causing any degradation of existing levels of safety among all system users. The bill specifies slightly more that \$6 million per year for FY2008 through FY2011 for unmanned aircraft system research.

## Wake Turbulence Prediction, Detection, and Avoidance

Large transport aircraft generate wingtip vortices that can create turbulence, referred to as wake turbulence, for trailing aircraft. While wake turbulence can be encountered during any phase of flight, it presents a particular constraint on capacity in the airport environment because it is a principal factor in establishing separation standards for landing and departing aircraft. Wake turbulence is therefore a prominent issue with regard to both safety and capacity in the airport environment.

**FAA Proposal.** The FAA proposal does not include any language specifically addressing safety or capacity issues associated with wake turbulence.

**S. 1300.** S. 1300 includes a provision that would require the FAA to evaluate proposals for increasing capacity by reducing existing spacing requirements, including research on the nature of wake vortices. The provision also directs the FAA to implement procedures for avoiding volcanic ash, which can pose significant risks and cause substantial engine damage to jet aircraft, and deploy a volcanic ash warning and notification system. Also, S. 1300 directs the FAA to establish research

projects addressing in-flight icing and deicing techniques; oceanic weather risks; enroute turbulence prediction; and other hazards associated with oceanic flight operations.

**H.R. 2881**. H.R. 2881 authorizes such sums as may be necessary from FY2008 through FY2011 for development and analysis of wake vortex mitigation technologies and systems, including advisory systems. The bill specifies roughly \$14 million in FY2008, and slightly more than \$11 million in each of FY2009 through FY2011 specifically for wake turbulence research.

### **Safety of Airline Maintenance Practices**

Concerns over the potential safety implications of a variety of air carrier maintenance practices have been raised by some aviation safety experts and some Members of Congress. Two overarching concerns that have been identified are: the safety of maintenance work outsourced to third-party repair stations, especially repair stations located outside the United States, and the use of non-certificated maintenance providers for routine and extensive repair work and FAA oversight of these non-certificated maintenance providers.

- **FAA Proposal.** The FAA proposal does not include any provisions specifically addressing air carrier maintenance practices.
- **S. 1300.** S. 1300 does not include any provisions specifically addressing air carrier maintenance practices.
- **H.R. 2881.** With regard to airline maintenance, H.R. 2881 includes a provision that would restrict the use of non-certified maintenance providers, allowing only airline employees or employees of FAA-certified repair stations to carry out substantial and routine maintenance and complete required inspections of aircraft used in airline service. Air carriers would also be required to provide complete lists of their non-certificated maintenance providers, whose activities would be restricted to non-routine, non-substantial maintenance and repair work under this provision. The bill also adopts an amendment agreed to by the House that would extend the requirement for drug and alcohol testing programs to safety-critical positions at foreign repair stations working on air carrier aircraft or components. Drug testing programs are already required for safety-critical maintenance personnel working for airlines and repair stations servicing air carrier aircraft within the United States, and this extension to foreign repair stations agreed to by the House was widely regarded as closing a gap that could have potential safety implications. Implementation and oversight of such a requirement, however, may be complicated by specific privacy laws and rights in foreign countries that may limit the FAA's authority to impose drug and alcohol testing programs at facilities located in other countries that are comparable to existing programs in the United States.

## Occupational Safety and Health

The FAA, under its broad authority and responsibility for regulating aviation safety, has asserted its responsibility for regulating matters pertaining to the

occupational safety and health of aircraft crewmembers including pilots and flight attendants. In August 2000, the FAA entered into a Memorandum of Understanding (MOU) with the Occupational Safety and Health Administration (OSHA) to determine whether certain OSHA requirements could be applied to working conditions in the airline environment without compromising aviation safety and in a manner that would maintain the FAA's "complete and exclusive jurisdiction over aviation safety." OSHA's role in airline occupational safety, under this arrangement, remains strictly advisory in nature. Under the MOU, the FAA and OSHA established a joint Aviation Safety and Health Team. That team sought to identify occupational hazards in the airline setting and assess the feasibility of complying with OSHA requirements to mitigate those hazards. The team finalized an action plan in June 2002 for establishing voluntary Aviation Safety and Health Partnership (ASHP) programs with air carriers, but work has not been completed to implement these initiatives.

**FAA Proposal.** The FAA proposal does not include any language specifically addressing occupational safety and health standards for cabin crew.

**S. 1300.** S. 1300 includes a provision that would require the FAA to establish milestones for completing the work begun under the FAA/OSHA MOU, and initiate development of a policy statement regarding the circumstances in which OSHA requirements may be applied to crewmembers in the aircraft cabin. The provision notes that any standards adopted by the FAA shall clearly identify the circumstances under which an airline would be required to take action to address occupational safety and health hazards, as well as the measures required and compliance obligations.

**H.R. 2881.** The originally reported version of H.R. 2881 included a provision similar to the Senate language, except more specifically requiring the FAA to finalize its work with OSHA and issue its policy statement on airline cabin occupational safety and health within two years of enactment. However, the House-passed version of H.R. 2881 drops that language and instead includes a provision from the "manager's amendment" that would establish new statutory requirements for occupational safety and health standards for flight attendants onboard aircraft. The FAA, in consultation with OSHA, would be required to issue and enforce standards and regulations for air carriers within three years of enactment "to provide for an environment in the cabin ... that is free from hazards that could cause physical harm to a flight attendant...."40 The FAA would be specifically required to conduct rulemaking to address record keeping; blood-borne pathogens; noise; sanitation; hazard communication; anti-discrimination; access to employee exposure and medical records; and setting a standard for aircraft cabin temperature. The FAA would also be required to employ qualified Cabin Occupational Safety and Health Inspectors to oversee regulatory compliance among air carriers.

<sup>&</sup>lt;sup>38</sup> See Federal Aviation Administration, "Occupational Safety or Health Standards for Aircraft Crewmembers," *Federal Register*, *75-17859*, July 9, 1975.

<sup>&</sup>lt;sup>39</sup> p. 3.

<sup>&</sup>lt;sup>40</sup> H.R. 2881 (Engrossed as Passed by the House), Sec. 309.

## **Environmental and Energy Issues**

Aviation and airport operations have air quality, water quality, and community noise impacts.<sup>41</sup> To address issues associated with these impacts, and to assist airport operators with complying with local, state, and federal regulations related to those impacts, the FAA proposal and bills under consideration in the Senate (S. 1300) and the House (H.R. 2881) include similar proposals that would:

- Provide funding for research into technology or processes that would reduce noise, air emissions, water quality impacts, and energy use;
- Provide grants for programs or projects intended to mitigate or minimize regulated environmental impacts; and
- Provide grants or specify regulatory procedures to assist airports in complying with environmental requirements.

S. 1300 and H.R. 2881 also include provisions that would establish certain requirements to reduce noise.

H.R. 2881 includes two unique provisions. The first (§ 509) would require FAA, to the maximum extent possible, implement "sustainable practices" in the construction and major renovation of air traffic control facilities in order to reduce energy use and improve environmental performance at those facilities. Finally, each proposal includes provisions seeking to modify the Air Tour Management Program, a program designed to regulate commercial air tours over national park units primarily in an effort to mitigate noise and other adverse impacts. These provisions seek to narrow the scope of this program to park service units where noise or other adverse impacts from air tours has been identified or could become a more substantial issue. The second (§ 512) specifies the Sense of the Congress with respect to the European Union (EU) directive extending the EU's emission trading proposal to international civil aviation. The bill specifies that, by not working through the International Civil Aviation Organization in a consensus-based fashion, the EU directive is inconsistent with the Convention on International Civil Aviation; and that it is antithetical to building international cooperation to address greenhouse gas emissions from aircraft.

## **Research Funding**

**FAA Proposal.** Section 601 would permanently authorize the Airport Cooperative Research Program (ACRP).<sup>42</sup> Under § 601, the FAA proposes to increase funding from \$10 million to \$15 million for FY2008-FY2010 (specified under § 102). Five million dollars per year of the ACRP funds would be set-aside

<sup>&</sup>lt;sup>41</sup> For additional background see CRS Report RL33949, *Environmental Impacts of Airport Operations, Maintenance, and Expansion*, by Linda Luther.

<sup>&</sup>lt;sup>42</sup> The ACRP was authorized as a four-year pilot program under Vision 100 (49. U.S.C. 44511(f)). Funds for the program are authorized under the Airport and Airway Trust Fund Authorizations, under the Airport Planning and Development and Noise Compatibility Planning and Programs.

for research activities related to the airport environment, including reductions in noise and air emissions and addressing water quality issues.

The FAA proposal would also create a consortium to research aircraft technologies that would produce lower energy, air emissions, and noise. The FAA proposal (§ 606, "Research Consortium for Lower Energy, Emissions, and Noise Technology Partnership") would create the consortium by requiring FAA to work with the existing Partnership for Air Transportation Noise and Emissions Reduction (PARTNER)<sup>43</sup> to develop Continuous Low Energy, Emissions and Noise (CLEEN) engine and airframe technology. The proposal would establish the following performance objectives for the consortium:

- a 25% increase in aircraft fuel efficiency;
- a 50% reduction in nitrogen oxide emissions associated with aircraft landings and takeoffs;
- a 10 decibel (dB) reduction, compared to 1997 levels, in subsonic aircraft noise;
- a feasability determination regarding the use of alternative fuels in aircraft systems; and
- a determination regarding the ability to retrofit or re-engine aircraft to use new engine technologies.

Under the FAA proposal, funding would be authorized under the Next Generation Air Transportation System program at "sums as necessary to carry out [the program]."

**S. 1300.** Provisions regarding the ACRP (§ 601) are essentially identical to the FAA proposal, except that S. 1300 would also include \$15 million in funding for FY2011 (§ 601(b)). The bill also includes a proposal similar to FAA's that would create a research consortium (§ 602, "Reduction of Noise, Emissions, and Energy Consumption from Civilian Aircraft"). Funding for the research consortium would be made available from the Airport and Airway Trust Fund Authorizations for research and development. The bill directs the Administrator to designate an institution as a "Consortium for Aviation Noise, Emissions, and Energy Technology Research" to conduct research with NASA and other relevant industries. The performance objectives the consortium is directed to accomplish are the same as those in the FAA proposal.

Unique to S. 1300 is a provision regarding clean coal fuel technology. Section 603 would require the Department of Transportation to establish a research grant program to develop synthetic jet fuel from clean coal. (However, the bill does not provide a definition of "clean coal.") Funds would be authorized from the Airport and Airway Trust Fund. Section 603 would also require the FAA Administrator to designate an institution as a "Center of Excellence for Coal-to-Jet Research."

<sup>&</sup>lt;sup>43</sup> PARTNER is an aviation cooperative research organization sponsored by FAA, NASA, and Transport Canada, operating out of the Massachusetts Institute of Technology.

<sup>&</sup>lt;sup>44</sup> 49 U.S.C. § 48102(a).

- **H.R. 2881.** Under § 104 (Research, Engineering, and Development), H.R. 2881 would amend the Airport and Airway Trust Fund Authorizations for research and development for FY2008 through FY2011 by authorizing a total of approximately \$125 million for "environment and energy" projects and \$20 million for ACRP "environment" projects (as in the Senate and FAA proposals, H.R. 2881 would permanently authorize the ACRP (§ 907)).
- H.R. 2881 includes a provision (§ 505, CLEEN Engine and Airframe Technology Partnership) that is similar to the FAA proposal that would create a consortium to develop Continuous Low Energy, Emissions and Noise (CLEEN) engine and airframe technology. H.R. 2881 does not specify that the FAA must work with PARTNER to achieve the established performance goals. However, the goals are the same as those specified in the FAA proposal and S. 1300. H.R. 2881 specifies that from FY2008 through FY2011 not more than \$111 million may be appropriated, from the Airport and Airway Trust Fund Authorizations for this program.

H.R. 2881 also specifies certain environmental-related responsibilities of the Next Generation Air Transportation System Joint Planning and Development Office. Included is a directive to establish specific quantitative goals for, among other factors, the environmental impacts of each phase of Next Generation Air Transportation System. Those goals are required to take into account noise pollution reduction concerns of affected communities to the greatest extent practicable in establishing the environmental goals (§ 202).

Under Title IX, H.R. 2881 includes the following additional environmental-related research and development requirements (except where note, the bill does not specifically authorize funds for this research):

- Interagency research initiative on the impact of aviation on the climate (§ 903) directs the FAA Administrator, in coordination with NASA and the U.S. Global Climate Change Science Program, to establish a research initiative to assess the impact of aviation on climate and to evaluate approaches to mitigate that impact.
- Research program on space weather and aviation (§ 910) would require the FAA Administrator, in coordination with the National Science Foundation, NASA, National Oceanic and Atmospheric Administration, to initiate a research program on impacts of space weather to aviation. To conduct this research, the Administrator may use grants or cooperative agreements. Further, the bill would authorize \$1,000,000 to be appropriated for each of the FYs 2008 through 2011.
- Aviation gas research and development program (§ 911) would require the FAA to study technologies that would allow the use of unleaded gasoline in piston-engine aircraft (currently, piston-engine aircraft mostly general aviation aircraft use leaded gasoline). The bill would authorize \$750,000 to be appropriated for each of the FYs 2008 through 2010.
- Research reviews and assessments (§ 912) would require the FAA to contract with the National Research Council to assess the

- adequacy of FAA's energy- and environment-related research programs; and the impact of space weather on aviation.
- Research program on alternative jet fuel technology for civil aircraft (§ 914) this section is similar to the proposal in S. 1300 (§ 603) that would support coal research, except that the House proposal would also require research into the development of alternative fuels from additional sources, including natural gas, biomass, ethanol, butanol, and hydrogen. Funds for the program would be authorized from the Airport and Airway Trust Fund.

### **Mitigation Grants**

**FAA Proposal.** Section 604 would provide grants for up to six environmental mitigation demonstration pilot projects. Eligible projects would include those that would reduce or mitigate aviation impacts on noise, air quality, or water quality in the vicinity of the airport. The federal share of the projects would be 50% of the project costs, up to \$2.5 million, and would be apportioned under the AIP.

- **S. 1300.** Section 215 of S. 1300 includes provisions that are essentially identical to the FAA proposal providing grants for environmental mitigation pilot programs.
- **H.R. 2881.** Section 507 of H.R. 2881 includes provisions that are essentially identical to the FAA proposal and those in S. 1300 providing grants for environmental mitigation pilot programs.

## **Grants and Procedural Changes** to Assist with Environmental Compliance

The FAA proposal and provisions in S. 1300 include almost identical proposals that would amend the state block program, address methods of implementing and/or expediting requirements of the National Environmental Protection Act (NEPA), and amend certain noise compatibility program requirements.

**FAA Proposal.** Section 602 would amend the state block grant program<sup>45</sup> by specifying that federal environmental requirements would apply to the program. Both proposals also specify that any federal agency that must grant any approval (i.e., permit or license) to a state must consult with that state during the approval process. Further, the federal agency would be required to use any state-prepared environmental analysis associated with that approval.

Sections 603 and 605 address methods of implementing and/or expediting requirements of the National Environmental Protection Act (NEPA)<sup>46</sup> and airport

<sup>&</sup>lt;sup>45</sup> 49 U.S.C. § 47128.

<sup>&</sup>lt;sup>46</sup> Among other provisions, NEPA requires airport operators to consider the environmental impact of any proposed action that may require federal funding or approvals. It also requires (continued...)

noise compatibility planning requirements (Title 14 Code of Federal Regulations (CFR), Part 150, commonly referred to as Part 150 requirements). Section 603 would amend current requirements that allow FAA to accept funds from an airport sponsor to hire additional staff or obtain the services of consultants to expedite the processing, review, and completion of environmental activities associated with an airport development project.<sup>47</sup> The proposal would allow FAA to accept funds to hire additional staff to: conduct "special environmental studies" related to a federally funded airport project; conduct studies or reviews to support noise compatibility measures approved under the Part 150 requirements; or implement environmental mitigation efforts specified in a project's final decision and delineated at the completion of the NEPA process.

Section 605 would amend the existing noise compatibility program requirements<sup>48</sup> to allow grants to airport operators to assist them with meeting environmental review requirements applicable to proposals to implement flight procedures. Further, the proposal would allow a project sponsor to provide FAA with funds to hire additional staff as necessary to expedite completion of the environmental review necessary to implement flight procedures.

**S. 1300.** Section 210 of S. 1300 is essentially identical to § 602 of FAA's proposal regarding the state block grant program. Unique to S. 1300 is a provision that would establish a pilot program for up to three states that do not already participate in the block grant program.

Sections 211 and 212 of S. 1300 are essentially identical to §§ 603 and 605 of FAA's proposal regarding methods of implementing and/or expediting requirements of NEPA.

**H.R. 2881.** Section 502 of H.R. 2881 is essentially identical to the FAA proposal and S. 1300 (except for pilot program proposal in S. 1300) regarding the state block grant program.

Sections 503 and 504 of H.R. 2881 are similar to the FAA proposal and S. 1300 provisions regarding methods of implementing and/or expediting NEPA requirements.

Unique to H.R. 2881 is a requirement to fund an "aircraft departure queue management pilot program" (§ 508) at five public-use airports. The programs would be required to develop, and test new air traffic flow management technologies to better manage the flow of aircraft on the ground and reduce ground holds and idling times for aircraft to decrease emissions and increase fuel savings.

them to look at all reasonable alternatives to meet a given project's purpose and need, before final decisions are made. For more information, see FAA's "NEPA Implementing Instructions for Airport Projects," Order 5050.4B, April 2006, at [http://www.faa.gov/airports\_airtraffic/airports/resources/publications/orders/environmental\_5050\_4/].

<sup>46 (...</sup>continued)

<sup>&</sup>lt;sup>47</sup> 49 U.S.C. § 47173.

<sup>&</sup>lt;sup>48</sup> 49 U.S.C. § 47504.

Also unique to H.R. 2881 is a directive to review the current regulatory responsibilities of the FAA and EPA with regard to establishing engine noise and emission standards (§ 510). The review would be required to consider, among other factors, the degree to which those standards could be evaluated and addressed in an integrated manner.

## **Requirements to Address Noise Issues**

In 1990, Congress mandated a phase out of non-Stage 3 aircraft over 75,000 pounds by December 31, 1999.<sup>49</sup> This has allowed Stage 1 and Stage 2 aircraft *under* 75,000 pounds, primarily corporate and private-use aircraft, to continue to operate. In 2006, such aircraft represented a relatively small number of all operational turbojet aircraft under 75,000 pounds (approximately 1,330 or 13%). However, at some airports, particularly smaller commercial and general aviation airports, their use makes a disproportionate contribution to noise exposure contours. For example, the Massachusetts Port Authority (Massport) reported that at the L.G. Hanscom Field in Bedford, MA, non-Stage 3 aircraft accounted for less than one percent of the airport's annual traffic in 2005, yet were responsible for 23 percent of the noise energy produced by civil aircraft.<sup>50</sup> Also, some airport operators have reported that between 50 and 80% of noise complaints lodged with the airport have been related to non-Stage 3 aircraft. As a result, several airports have sought to ban or restrict access to such aircraft. Those efforts have generally been prohibited by FAA.

**S. 1300.** Section 711 of S. 1300 would address this issue by prohibiting the operation of aircraft under 75,000 pounds, with certain exceptions, unless it complies with Stage 3 noise levels. The prohibition would take effect five years after the bill's enactment.

Section 714 of the bill proposes the creation of an exploratory program for the redevelopment of property purchased with noise mitigation funds or passenger facility charge funds, to encourage airport-compatible land uses. The trial program would involve up to four airport operators that have submitted a noise compatibility program to FAA. Provisions in this section would also amend the list of allowable noise compatibility measures<sup>52</sup> to include land use planning that will prevent the introduction of additional incompatible land uses.

<sup>&</sup>lt;sup>49</sup> Airport Noise and Capacity Act of 1990 (P.L. 101-508).

<sup>&</sup>lt;sup>50</sup> Massport December 19, 2006, press release: "Massport Endorses Congressional Efforts To Ban Stage 2 Aircraft; Less than one percent of Hanscom Field's traffic accounts for 23 percent of aircraft noise," at [http://www.massport.com/about/press06/press\_news\_hanst. html].

<sup>&</sup>lt;sup>51</sup> See the statement of Mr. Robert L. Bogan, Deputy Director of the Morristown Municipal Airport on behalf of "The Sound Initiative," presented to the House Transportation and Infrastructure Committee's Subcommittee on Aviation hearing on "The FAA's Airport Improvement Program," March 28, 2007, at [http://transportation.house.gov/hearings/hearingdetail.aspx?NewsID=59].

<sup>&</sup>lt;sup>52</sup> 49 U.S.C. 47504(a)(2).

Section 214 of the bill would expand passenger facility fee eligibility for noise compatibility projects at Los Angeles International Airport (LAX). The section specifies that the funds may be used for a project for the Lennox School District, adjacent to LAX, pursuant to a settlement agreement reached between the airport and the school district in February 2005.<sup>53</sup>

**H.R. 2881.** Like the Senate bill (§ 711), § 506 of H.R. 2881 would prohibit the operation of aircraft under 75,000 pounds, unless it complies with Stage 3 noise levels. The prohibition would take effect, with generally the same exceptions specified in S. 1300, after January 1, 2013.

Also, H.R. 2881 specifies that it is the sense of the House that the Port Authority of New York and New Jersey undertake an airport noise compatibility planning study<sup>54</sup> — with particular attention to the impact of noise on affected neighborhoods, including homes, businesses, and places of worship surrounding LaGuardia Airport and JFK Airport.

### The Air Tour Management Program

The National Parks Air Tour Management Act of 2000 (Title VIII, P.L. 106-181, hereafter Air Tour Act) regulates commercial air tours over most units of the National Park System. It requires the FAA and the National Park Service (NPS) to create management plans for air tours at individual park units and within a half-mile of their boundaries. The purpose of a plan is to mitigate or prevent any significant adverse impacts of commercial air tours to natural and cultural resources, visitor experiences, and adjacent tribal lands.

The Air Tour Act final rule<sup>55</sup> requires air tour operators to apply for authority to fly over national park and adjacent tribal lands. The FAA received applications for commercial air tours over 106 of the 391 park units, and has granted interim operating authority to all applicants. An application triggers development of an Air Tour Management Plan (ATMP) by the FAA and NPS for each unit where there is no existing plan.<sup>56</sup> Development of an ATMP requires an environmental analysis under the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. §§4321-4370f). The FAA and NPS currently are developing their first ATMPs for five park units. A January 2006 Government Accountability Office (GAO) report addressed

<sup>&</sup>lt;sup>53</sup> LAX and the Lennox School District are not specifically identified in the bill. However, the bill refers to a settlement agreement that involved these parties. For more information, see Representative Jane Harman's March 28, 2007 press release: "Harman, Feinstein Introduce Bill to Reduce Aircraft Noise in Lennox Schools," at [http://www.house.gov/list/press/ca36 harman/03 27.shtml].

<sup>&</sup>lt;sup>54</sup> Pursuant to Airport Noise Compatibility Planning requirements under 14 C.F.R. 150.

<sup>&</sup>lt;sup>55</sup> 67 Fed. Reg. 65661 (October 25, 2002).

<sup>&</sup>lt;sup>56</sup> The FAA provides ATMP information on its website at [http://www.atmp.faa.gov/default.htm].

the impact of the delay in implementing the Air Tour Act.<sup>57</sup> The report concluded that the delay has limited the ability of tour operators to make major business decisions. GAO identified four areas to improve implementation, including amendment of the Air Tour Act, to give the agencies discretion in determining which park units may need ATMPs.

**FAA Proposal.** The FAA proposal included several suggested changes affecting commercial air tours over park units (codified in 49 U.S.C. §40128) that seek to expedite and streamline agency actions, in part due to the difficulty in completing ATMPs. One change would allow that in lieu of an ATMP, the NPS Director and FAA Administrator (hereafter in this section "the Administrator") could enter into a voluntary agreement with a commercial air tour operator that would govern commercial air tours over a park unit. An agreement would address protection of park resources and visitor use of parks in the context of aviation safety. It would be prepared with public review and consultation, and implemented "without further administrative or environmental process." The NPS and FAA heads could rescind a voluntary agreement if it did not adequately protect park resources, visitor experiences, or aviation safety. A second change would exempt park units with 50 or fewer annual air tour flights from the development of an ATMP or voluntary agreement and other requirements covering air tour operations over park units. However, the NPS Director could disallow an exemption for any park unit for which an ATMP or voluntary agreement would be necessary to protect park resources and values or park visitor use and enjoyment. These provisions on voluntary agreements and exemptions could be opposed as lessening public participation in the decision making process and weakening environmental analysis of agency decisions.

Other provisions in the FAA proposal could provide more interim operating authority because interim conditions have prevailed for longer than had been anticipated. One change would allow the agencies to modify interim operating authority — for instance, to allow more tours — and another would allow new entrant air tour operators provided that certain conditions were met (e.g., FAA agreement of no adverse impact on aviation safety.) These decisions could be made "without further environmental process," and thus also could raise objections as reducing environmental analysis of agency actions. Still another provision in the FAA proposal would establish a reporting requirement for commercial air tour operators with regard to the number of air tours over park units and other data requested by the FAA and NPS.

**S. 1300.** The Senate Committee on Commerce, Science, and Transportation amended S. 1300 to include a section on commercial air tours over national parks. The bill seeks to make changes affecting commercial air tours over park units on topics covered by the FAA proposal as well as in additional areas. While both the bill and proposal contain provisions on voluntary agreements, exemptions from air tour requirements, operating authority, and reporting requirements, the provisions differ. S. 1300 contains additional sections, for instance on fees and safety guidance, as discussed below.

<sup>&</sup>lt;sup>57</sup> The report is available on the GAO website at [http://www.gao.gov/new.items/d06263.pdf].

S. 1300 would allow the Secretary of the Interior (hereafter in this section "the Secretary") to waive the requirements regarding the development of an ATMP and other requirements for park units with 100 or fewer annual air tour flights, without further administrative or environmental process, unless the Secretary determines that an ATMP is needed to protect park resources and values. The Secretary also could waive the requirements if an air tour operator enters into a voluntary agreement with a park unit to manage air tours over the park. The purpose of the agreement would be to protect park resources and visitor experiences without compromising aviation safety. It would require the approval of the Secretary and the Administrator. An agreement could be rescinded by the Secretary if it does not adequately protect park resources or visitor experiences, and by the Administrator if it adversely affects aviation safety or management of the national airspace system.

Several provisions of the bill pertain to operating authority. For instance, one provision would allow the agencies to modify interim operating authority, without further environmental process, provided certain conditions are met. Another provision would allow an air tour operator that obtains operating authority for commercial air tours to transfer that authority to another air tour operator. Within 180 days of enactment, the FAA is to issue regulations allowing transfers of operating authority. This provision may be directed at a recent FAA opinion that interim operating authority is not transferable, on the grounds that transferability is not consistent with the provisions and overall goals of the Air Tour Act. Interim operating authority was not intended to be a "valuable right to be bought and sold," but a temporary solution to allow continuation of tours pending development of an ATMP, according to the FAA.<sup>58</sup>

Further, S. 1300 would establish an annual reporting requirement for commercial air tour operators, to include the number of air tours over the park; any relevant characteristics of tours, such as routes and altitudes; and other information requested by the Administrator and the Secretary. The Administrator is to rescind the operating authority of any tour operator that fails to file a report within a certain time period. The Inspector General of the Department of Transportation is to audit the reports periodically.

The Secretary would be authorized to assess a fee on commercial air tour operators, and is to consider the cost of developing ATMPs in setting the fee. The Administrator is to revoke the operating authority of a tour operator that does not pay the fee within a certain time period. Fees have been charged at three park units with air tours, based on criteria in existing law. In May 2006, GAO concluded that expanding the fee to other park units could generate additional revenue for the Park Service, but would require a legislative change and should be evaluated in the context of potential impacts on tour operators.<sup>59</sup>

The Administrator would be required to provide guidance (to agency district offices) on safety issues, including the ability of commercial air tour operators to

<sup>&</sup>lt;sup>58</sup> 72 Fed. Reg. 6802-6803 (February 13, 2007).

<sup>&</sup>lt;sup>59</sup> The report is available on the GAO website at [http://www.gao.gov/new.items/d06468.pdf].

obtain increased safety certifications as well as exemptions from regulations requiring safety certifications. The FAA recently issued a final rule to standardize and consolidate safety provisions for commercial air tours nationally.<sup>60</sup>

S. 1300 seeks to identify the Secretary as the authority working in cooperation with the FAA on overflights of national park units; current law specifies that the NPS Director is the cooperating authority. The bill would authorize \$10 million to the Secretary for the development of ATMPs.

**H.R. 2881.** H.R. 2881 is quite similar, but not identical, to the FAA proposal.

# **Airline Industry Issues**

A wide array of aviation industry issues are being considered in the context of FAA reauthorization. Modifications to the Essential Air Service (EAS) program that provides subsidy incentives to airlines for servicing small, rural, or otherwise isolated communities are contentious as the FAA proposal seeks to set more stringent criteria for participation, whereas S. 1300 and H.R. 2881 seek increased funding and other program enhancements. Also, H.R. 2881 seeks to clarify foreign ownership issues related to operational control of U.S. flag airlines, a central issue for potentially expanding "Open Skies" arrangements with the European Union (EU) in the future. Also, H.R. 2881 includes a provision addressing union issues among express carriers in language that would limit applicability of the Railway Labor Act (RLA) to employees engaged in airline operations, placing other employees under the terms of the National Labor Relations Act (NLRA). These issues are further discussed below.

## The Essential Air Service Program

The FAA proposal includes language that would significantly modify the existing Essential Air Service Program (EAS), a DOT-managed program that subsidizes air carrier service to small and isolated communities, primarily by setting more stringent criteria for program eligibility and restricting further expansion of the program. Some modifications to the EAS program are also likely to be considered by the House and the Senate.

The EAS program provides subsidies to air carriers for providing service between selected small communities and hub airports. The program was originally established in 1978 as part of airline deregulation to ensure a minimum level of air service to smaller communities that might otherwise lose service because of economic factors.

As part of its annual budget recommendations over the last few years the Bush Administration has suggested limiting EAS funding to \$50 million and requiring local cost-sharing as a condition for a community's continued participation in the

<sup>&</sup>lt;sup>60</sup> 72 Fed. Reg. 6884 (February 13, 2007). The rule was effective on March 15, 2007, except that certain provisions became effective on September 11, 2007.

program. The program nonetheless has grown as Congress has provided additional funding for EAS, appropriating \$110 million in both FY2006 and FY2007.

Vision 100 included several mechanisms and incentives designed to move communities out of the standard EAS program. Communities have not sought to participate in these incentive regimes, however, suggesting that the incentives themselves may need to be reconsidered if they are to be effective. Vision 100 also included a somewhat controversial provision that created a trial program that would have required community financial participation as a condition for continued access to EAS funding in some instances. Each annual appropriations bill since passage of Vision 100, however, has prevented the use of any appropriated funds to implement the cost-sharing trial program.

**FAA Proposal.** The FAA produced bill includes provisions to substantially modify the EAS program, primarily by setting more stringent criteria for program eligibility and restricting further expansion of the program. Specifically, the FAA proposal would limit participation to only those airports that were receiving EAS subsidy on the date of enactment of reauthorization legislation. At present, additional airports may enter into the EAS program, provided they previously had scheduled air carrier service as specified in statute.<sup>61</sup> The FAA also proposes to eliminate from participation any airports located less than 70 highway miles from a large or medium hub airport. Further, the FAA proposal would eliminate from the EAS program any airports that are less than 210 miles from the nearest medium or large hub whose perpassenger subsidy exceeds \$200. The proposal also includes language intended to simplify the process involved in terminating air carrier service to an EAS-eligible community.

The provisions in the FAA proposal to modify the EAS program may be particularly controversial because the program has historically been viewed favorably by Congress, particularly among members representing rural states and districts. However, from a practical standpoint, the program may be difficult to justify given that per-passenger subsidies are quite high for service to certain locations receiving service, and airlines often have difficulty filling seats on many EAS routes. Therefore, while provisions in the FAA proposal to restrict expansion of the program may be particularly controversial, other options to increase EAS program flexibility and alternatives to traditional basic EAS service may be considered during congressional debate.

**S. 1300.** S. 1300 modifies the EAS program primarily at the margin, largely ignoring the Administration's proposals. Most importantly the bill increases annual funding for the program. It does this by continuing to link EAS funding to overflight fee collections, but instead of limiting funding from this source to \$50 million annually it makes any additional fee collections available for the program as well. In addition the bill raises the annual authorization of appropriated fund portion of the EAS funding scheme from \$77 million to \$83 million.

<sup>&</sup>lt;sup>61</sup> See 49 U.S.C. §41731.

There are several additional EAS provisions in the bill. These include a requirement that DOT allow code sharing by EAS participant airlines, a requirement that a final order establishing mileage adjustment eligibility be extended until the end of FY2011, a provision including the use of financial incentives to improve EAS service — as part of long-term contracts awarded by DOT — and a program to aid the conversion of former EAS eligible airports to GA status.

**H.R. 2881.** Similar to S. 1300, H.R. 2881 reserves \$50 million in overflight fee collections for the EAS program and increases the additional amount available from annual appropriations to \$83 million. The bill, however, does not reserve overflight fee collections in excess of \$50 million for EAS, but instead splits eligibility between EAS and the Small Community Air Service Program. H.R. 2881, like S. 1300, encourages the use of financial incentives and long term contracts as part of the EAS program.

### **Airline Ownership**

Existing law specifically limits non-U.S. ownership of United States certificated airlines. These provisions are viewed by many as exclusionary, preventing all but limited foreign investment in the U.S. domestic airline industry, and absolutely preventing any real non-U.S. control over an airline's business decisions. These laws are seen by proponents of the industry's internationalization as major barriers to a fully open international aviation market. A recent initiative by the Bush Administration to lift some of the existing ownership and control restrictions through the regulatory process was opposed by Congress and ultimately abandoned by the Administration. A recently concluded "Open Skies" agreement with the European Union (EU) suggests that the discussion about airline ownership and control issues could be reopened at some later date.

**H.R. 2881.** Only H.R. 2881 addresses this issue. It has done so by including language to be inserted in Title 49, U.S.C. Section 40102(a)(15) that further defines the legal meaning "actual control."

## **Railway Labor Act Modifications**

The Railway Labor Act ("RLA") governs labor-management relations for most carriers in the rail and air industries. Section 2, First, of the RLA requires all carriers and their officers, agents, and employees to "exert every reasonable effort to make and maintain agreements concerning rates of pay, rules, and working conditions, and to settle all disputes ... in order to avoid any interruption to commerce...." The National Mediation Board ("NMB"), which administers the RLA, has recognized the application of the statute to some employees of express carriers who would otherwise seem to be subject to the National Labor Relations Act

<sup>&</sup>lt;sup>62</sup> For a full discussion of airline ownership issues, see CRS Report RL33255, *Legal Developments in International Civil Aviation*, by Todd B. Tatelman.

<sup>63 45</sup> U.S.C. § 151 et seq.

<sup>&</sup>lt;sup>64</sup> 45 U.S.C. § 152, First.

("NLRA"), the federal statute that governs labor-management relations in other private sector industries. In *Re: Federal Express Corp.*, for example, the NMB concluded that ground service employees of Federal Express were subject to the RLA rather than the NLRA.<sup>65</sup>

The NMB found the RLA's stated application to "every air pilot or other person who performs any work as an employee or subordinate official" of a "common carrier by air engaged in interstate or foreign commerce" to be compelling. 66 The NMB stated:

The couriers, tractor-trailer drivers, operations agents and other employees ... are employed by Federal Express directly. As the record amply demonstrates, these employees, as part of Federal Express' air express delivery system, are supervised by Federal Express employees. The Board need not look further to find that all of Federal Express' employees are subject to the Railway Labor Act.<sup>67</sup>

While both the RLA and the NLRA recognize collective bargaining rights for most employees in the private sector, they prescribe different organizational requirements. For example, under the RLA, employees must organize by craft or class on a company-wide basis. In contrast, under the NLRA, an appropriate bargaining unit may be an employer unit, a craft unit, a plant unit, or a subdivision thereof. 9

**FAA Proposal.** The FAA proposal does not include provisions that would affect the collective bargaining rights of express carriers.

- **S. 1300.** S. 1300 does not include provisions that would affect the collective bargaining rights of express carriers.
- **H.R. 2881.** Section 806 of H.R. 2881 would amend the RLA to subject some employees of an express carrier to the RLA and other employees to the NLRA. Employees who perform duties for an express carrier in positions that are eligible for certification under 14 C.F.R., parts 61, 63, and 65, would be subject to the RLA. All other employees of the express carrier would be covered by the NLRA. Section 806 would amend the RLA to define an "express carrier" to mean "any person (or persons affiliated through common control or ownership) whose primary business is the express shipment of freight or packages through an integrated network of air and surface transportation." The measure is supported by labor unions and United Parcel

<sup>65 23</sup> N.M.B. 32 (1995).

<sup>66 45</sup> U.S.C. § 181.

<sup>&</sup>lt;sup>67</sup> 23 N.M.B. *supra* note 19 at 72-72.

<sup>&</sup>lt;sup>68</sup> See 45 U.S.C. § 152, Fourth.

<sup>&</sup>lt;sup>69</sup> See 29 U.S.C. § 159(b).

<sup>&</sup>lt;sup>70</sup> These parts of title 14, Code of Federal Regulations, prescribe certification requirements for pilots, flight crewmembers, airmen, and other employees.



 $<sup>^{71}</sup>$  Ian Swanson, "UPS Works to Hobble Its Rival, FedEx," *The Hill*, July 11, 2007.