Order Code RL33789

CRS Report for Congress

Federal Aviation Administration: An Abridged Look at Reauthorization Issues in the 110th Congress

January 9, 2007

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Federal Aviation Administration: An Abridged Look at Reauthorization Issues in the 110th Congress

Summary

This report provides a brief overview of the more detailed CRS Report RL33698, *Reauthorization of the Federal Aviation Administration: Issues for Congress.* Reauthorization of the Federal Aviation Administration (FAA) and other aviation programs is likely to be a high priority in the 110th Congress as funding authorizations for aviation programs and the aviation tax structure that provides revenue for the aviation trust fund will expire at the end of FY2007. Congress may consider a variety of financing options to provide a sufficient revenue stream for ongoing operational costs and planned infrastructure improvements. One particularly controversial option under consideration is a more direct user fee system, which is supported by the airlines but strongly opposed by many other system users. Congress may also examine airport financing mechanisms including airport improvement program (AIP) grants, passenger facility charges (PFCs), bonds, and other revenue sources.

Faced with growing operational costs and fiscal needs to support system expansion, airport capital improvements, and modernization efforts, options to control costs within the FAA and the Air Traffic Organization (ATO) may be a particular focus of reauthorization. Cost control options generally revolve around two overarching strategies: consolidation of facilities and functions, and competitive sourcing. Some have recommended that a formal process, similar to the military's Base Realignment and Closure (BRAC) process, be implemented to assess how the FAA could best consolidate its functions to control costs and address future system needs. Further, options to maintain and balance air traffic controller staffing levels are likely to be of interest, as the FAA is facing a large wave of controller retirements over the next five years. Options for improving and streamlining training, increasing productivity, better balancing staffing needs, and perhaps consolidating air traffic facilities over the long-term may be considered during reauthorization.

Congress may also examine a variety of aviation safety issues during debate over FAA reauthorization. Options for preventing runway overruns and for reducing the risk of runway collisions may be of particular interest. The adequacy of FAA safety oversight has been a continuing concern, and recent accidents may draw particular attention to oversight of contract repair facilities, smaller passenger service operators, as well as air charter and air tour operators. Other safety issues that may arise include longstanding concerns, such as mitigating the risks of fuel tank explosions, addressing concerns over aging aircraft, and addressing the unique safety issues affecting all-cargo operations. Issues regarding airliner cabin health and safety may also be considered during the reauthorization process.

Growing international pressures to regulate aircraft emissions may prompt debate on aviation's environmental impacts, and growing interest in alternatives to petroleum fuel may generate some debate over alternative fuel technologies for aircraft and airport ground vehicles. Longstanding aircraft noise policies may also be examined to assess whether quiet aircraft technologies and policy changes could further mitigate the community impacts of aircraft noise. This report will be updated.

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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	— FAA Financing and Aviation Taxes — Airport and Airways Trust Fund (AATF) — Essential Air Service and Small Community Air Service Development Programs — Airline Economic Issues	RSI	7-7766
Bob Kirk	— FAA Financing and Aviation Taxes — Airport and Airways Trust Fund (AATF) — Airport Improvement Program (AIP) — Airport Finance	RSI	7-7769
Jim McCarthy	— Aircraft Emissions	RSI	7-7225
Jon Shimabukuro	— Labor Law and Policy — FAA Labor Relations	ALD	7-7990
Todd Tatelman	— Aviation Law (Domestic and International)	ALD	7-4697
Brent Yacobucci	— Aviation Fuels — Alternative Fuels for Aircraft and Ground Support Vehicles	RSI	7-9662
Linda Luther	— Airport Environmental Issues (Streamlining)	RSI	7-6852

Federal Aviation Administration: An Abridged Look at Reauthorization Issues in the 110th Congress

The pending debate over reauthorization of the Federal Aviation Administration (FAA) is likely to be a high priority in the 110th Congress. Funding authorizations for aviation programs set forth in Vision 100 - the Century of Aviation Reauthorization Act (P.L. 108-176, hereafter referred to as Vision 100), as well as authorization of the existing aviation tax structure that provides revenue for the aviation trust fund, are set to expire at the end of FY2007. CRS has identified nine broad categories of issues among those Congress may address in the context of FAA reauthorization. These include FAA budgeting and finance; airport development and finance; FAA cost control measures; system-wide demand and capacity issues; modernization of national airspace system (NAS) infrastructure; aviation safety; airliner cabin issues; energy, environment, and noise issues; and international civil aviation issues. This report summarizes major issues facing Congress during the upcoming FAA reauthorization cycle. It parallels the overview section of CRS Report RL33698, *Reauthorization of the Federal Aviation Administration: Background and Issues for Congress*, which provides a more in-depth examination of the issues briefly discussed in this report.

FAA Budget and Finance Issues

Authorization of the existing aviation tax structure that provides revenue for the aviation trust fund will expire at the end of FY2007. While such tax authorizations have expired in the past, the current deliberations over FAA funding are considered particularly critical. This, in part, is because uncommitted balances in the airport and airways trust fund (AATF), commonly referred to as the aviation trust fund, have declined in recent years, leaving a relatively small reserve to pay for aviation programs in the event that tax collection authorities are allowed to expire. Also, major initiatives to develop and deploy the Next Generation Air Transportation System (NGATS) by 2025, initiated during the last reauthorization process, are reaching a stage where they will require additional funding resources if these plans are to be realized. While no official projections are yet available on the total cost for NGATS, early estimates indicate that it will require an average of $200 million to $1 billion annually in facilities and equipment costs over the next several years to keep NGATS development initiatives on track.

Congress may consider a variety of financing options to maintain the ability of the aviation trust fund to provide a sufficient revenue stream for ongoing operational costs and planned infrastructure improvements, in the near-term and to support the long-term NGATS development efforts. In the course of this debate, Congress may consider the appropriate cost allocation between aviation system users, the share of

the cost burden to be borne by the aviation trust fund, and the share to be derived from Treasury general funds (the so-called public interest contribution).

The relative tax burden placed on various industry participants has been a source of controversy for over 36 years, since the aviation trust fund was created. The airlines argue that they have been paying a disproportionately larger share of the system costs compared to general aviation[1] users since the largest revenue sources for the aviation trust fund are derived from passenger ticket taxes. The airlines claim that in their highly competitive industry, they must absorb some of the tax-related costs in their fare pricing schemes. The airlines have identified general aviation users, and business jet operators in particular, as a segment of the aviation industry that, in their opinion, is not paying its fair share of the costs to maintain and improve the national airspace system (NAS). General aviation users argue, on the other hand, that the NAS has largely been developed to support the airline industry, that the incremental costs to accommodate general aviation users is not that large, and that existing fuel taxes are sufficient to compensate for their impact on the system.

One alternative to the existing tax structure supported by the airlines is a fee-for-service system that would be more of a direct user fee system than what is in place now. Some industry observers claim that the FAA has been mulling the idea of a direct user fee structure to replace existing aviation taxes and fees, and an administration proposal has reportedly been under review by the Office of Management and Budget (OMB) for some time.[2] While the details of the proposal are unknown, speculation is that it will conform more closely to international standards that stipulate user fees be computed as some function of the specific impact on air traffic facilities and services, such as the commonly used fees based on aircraft weight and distance flown used by many nations.

During the reauthorization debate, Congress may consider a variety of aviation trust fund revenue alternatives that may include keeping the existing passenger ticket and fuel taxes largely or completely intact, moving to a tax revenue scheme based solely on fuel taxes, adopting a user fee-based system, or developing a hybrid scheme that consists of some combination of these alternatives. One hybrid approach that has been discussed is to charge fee-for-service type user fees for airlines and operators of larger general aviation aircraft, while small general aviation users would continue to contribute solely by means of a fuel tax, although these fuel tax rates and structure could differ from what currently exists.

Airport Development and Finance Issues

The Airport Improvement Program (AIP) provides federal grants for airport development. Its funding is derived from the airport and airways trust fund, and it is

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[1] General aviation refers to all aviation activity except for commercial airline, all-cargo airline, and military operations.

[2] Paul Lowe, "Alphabet Groups Ready To Wage User-Fee Battle," *Aviation International News*, The Convention News Co., Inc., Midland Park, NJ, April 2006.

one of five major sources of funding for airport development and improvement. Airports also fund capital projects using tax-exempt bonds, passenger facility charges (PFCs; a local tax levied on each boarding passenger), state and local grants, and airport revenue. The preeminent reauthorization issue for AIP is whether its funding levels will be increased substantially, held steady/increased modestly, or reduced. The outlook for AIP funding will be influenced by the resolution of the debate concerning taxes and fees supporting the aviation trust fund as well as any decision concerning the scope of the general fund share of the FAA budget. A failure to secure more revenue for the FAA budget, in light of the recent decline in the uncommitted balance of the trust fund, could constrain any attempts to significantly increase the AIP budget.

During the reauthorization process, Congress may also examine a wide variety of other issues pertaining to the AIP program including airport eligibility and apportionments among various sizes of airports; discretionary funding levels and uses of discretionary grants; the scope of grant assurances to protect federal interests in airport projects; funding levels set aside for noise-related projects; the appropriate federal share of funding for airport projects at airports of various sizes; possible expansion of or modification to the airport privatization pilot program; partial defederalization of airport funding allowing airports to use PFCs instead of AIP as a primary or sole source for project funds; limitations on the use of AIP funds for airport security projects; the possible impacts of accommodating new users classes such as very light jets (VLJs) and the Airbus A380 super-jumbo jet on airport infrastructure needs and airport financing; and the use of earmarks or "place naming" in legislation regarding airport infrastructure projects. In addition to AIP funding and related issues, Congress may consider options to raise the cap on PFC levels to provide additional funding availability outside of AIP, and options to make airport bonds more attractive to investors, although some may argue the latter may be more appropriately addressed through tax reform legislation rather than FAA reauthorization.

Cost Control Issues

Besides consideration of a revenue system for funding the aviation trust fund, controlling the costs of operating and maintaining the existing national airspace system has been an ongoing concern for the FAA and for congressional oversight. Cost control measures may be a particular issue of interest during the FAA reauthorization debate as Congress grapples with the prospect of escalating operational costs that must be balanced with the fiscal needs to support planned infrastructure development, both over the near-term to fund ongoing and planned system expansion and over the long-term to support the NGATS development.

Outsourcing has been seen as a viable alternative for controlling costs in some instances, such as the FAA's federal contract tower (FCT) program and the recently privatized automated flight service stations (AFSSs). Expanded outsourcing of various FAA functions, such as further expansion of the contract tower program and privatization of the FAA's aeronautical charting functions, are possible options that both the FAA and Congress may examine. Also, the FAA and Congress may look to

increase the use of designees[3] to carry out certain aviation oversight functions. However, some critics argue that these outsourcing options are likely to yield relatively small cost savings in comparison to the overall FAA operations budget. Further, these options are likely to be highly contentious and face strong opposition from labor and some other industry organizations. Whether these outsourcing measures potentially compromise safety in any way remains a specific point of contention. While some have advocated large scale privatization of air traffic services — as has been done in Canada, Australia, the United Kingdom, and parts of mainland Europe — this approach would be highly complex to carry out, and this option has failed to garner much support in Congress to date. The current administration has indicated previously that it has no plans to privatize en route and terminal air traffic control facilities, but may opt to expand the contract tower program.

Consolidation of facilities and functions has also been viewed as a possible way to control operational costs at the FAA. The FAA is currently in the process of consolidating administration and support functions in its regional service areas, and has plans to consolidate weather services provided at en route centers. Also, under the privatized AFSS program, an extensive consolidation of flight service facilities is currently in process. Some have proposed that the FAA implement a systematic process, perhaps using something akin to the military's Base Realignment and Closure (BRAC) process, to address future consolidation plans for facilities and functions. Congress may debate the merits of this proposal during the pending FAA reauthorization.

In the long term, under NGATS, consolidation of air traffic services and air traffic facilities may be possible. With increased reliance on automation and by increasing the autonomy, flexibility, and authority granted to individual flights operating in the national airspace system (NAS), the ratio of air traffic controllers to aircraft operating in the system is likely to drop. In the near term, this will likely be offset by the growth in air traffic operations, so that a modest increase in the overall number of air traffic controllers is expected. In the long-term, however, the changing nature of controller responsibilities and functions may result in a need for fewer controllers, and may allow for considerable consolidation in air traffic control facilities across the United States. The FAA has also expressed interest in consolidation of air traffic facilities as a possible means to address ongoing staffing issues, particularly among en route centers, where there is currently a shortage of fully qualified controllers to handle the most complex airspace sectors. The FAA believes that facilities consolidation could help in its efforts to better match controller skills and levels of experience with airspace complexity and provide controllers with better job advancement opportunities while, at the same time, reducing infrastructure and relocation costs.

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[3] Designees are individuals that are neither government employees nor government contractors, that are authorized or designated by the FAA to carry out regulatory functions. Examples include designated medical examiners that issue medical certification, pilot examiners that issue pilot certificates and ratings, and manufacturing representatives that certify the airworthiness of production aircraft.

With regard to controlling operational costs, air traffic controller pay remains a contentious issue as controller compensation and benefits make up a sizable proportion of the FAA's operational costs, comprising roughly 35% of total operating costs.[4] Under a 1998 contract agreement between the FAA and controllers, controller compensation and benefits grew about 64% in eight years,[5] outpacing the increase in labor costs for other FAA employees and federal workers. During contract renegotiations in 2005 and 2006, the FAA looked to obtain sizable concessions from controllers, but the two sides could not come to agreement. As called for in statute, the impasse was referred to Congress. However, Congress did not act on the impasse submittal, thus allowing the FAA to implement its final contract proposal, which became effective in September 2006. While the law giving the FAA authority to negotiate compensation and benefits in labor contracts, a rarity in the government sector, was enacted largely for the purpose of improving the FAA's ability to attract and retain a high quality professional workforce, it has been criticized by management for leading to escalating operating costs and by both management and labor for straining relations between the two sides.

Congress may wish to examine whether options to improve the law are available to control escalating operational costs and maintain more positive and constructive management-labor relations within the FAA. With regard to labor negotiations, one legislative option offered during the 109th Congress proposed to add an additional phase, requiring management and labor to enter into binding arbitration, after the period of congressional review that follows an impasse in the contract negotiation process.[6] While Congress did not take up formal debate on this proposal in the midst of the recent FAA/controller labor dispute, this proposal may resurface during debate over FAA reauthorization. Other options to streamline the labor negotiations process within FAA may also be considered in the context of FAA reauthorization, as recent labor negotiations have been viewed as being rather disruptive and highly contentious.

Controller staffing is also likely to be a key focus in the reauthorization debate, as the FAA seeks to effectively manage its controller workforce in preparation for an expected surge in retirements over the next several years. Some available options that Congress may consider include dedicated funding authorizations marked for new controller hiring and training; authorization for new hires from accredited collegiate air traffic programs to enter directly into on-the-job training; funding authorization for initiatives to enhance controller training using advanced simulation technologies; and consolidation of certain air traffic facilities and functions to provide for greater flexibility in meeting staffing needs.

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[4] CRS calculation based on FAA budget documents and statements regarding average air traffic controller workforce compensation and benefits.

[5] "Soaring Controller Pay Looms Large in Discussions on ATC," *Air Transport World Daily News,* May 16, 2005.

[6] See S. 2201 and H.R. 4755, which were introduced during the 109th Congress.

System Demand and Capacity Issues

The current FAA reauthorization cycle comes at a critical time with respect to addressing increasing capacity needs at high-volume airports, in airspace around many major metropolitan areas, and along certain highly congested routes. While recent stopgap measures implemented by the FAA have served to stave off unacceptable congestion and delays thus far, long-term solutions are likely needed in consideration of future air traffic growth projections. Many believe that technology is needed to reduce low visibility aircraft spacing standards to those allowable in good visibility in order to accommodate projected future growth at busy airports. However, some experts caution that even with the implementation of these proposed options and the completion of planned airport expansions across the country, certain very busy airports, including both major commercial airports and busy general aviation reliever airports, may experience peak hour demand levels that exceed airport capacity limitations.

Besides addressing expected capacity needs, a significant challenge facing Congress and the FAA in the years ahead is accommodating new classes of airspace users in a manner that optimizes safety and efficiency for all users. New users will consist of the very big, such as the Airbus A-380 super-jumbo jet, as well as the relatively small, very light jets (VLJs). The most talked-about class of new system users are the VLJs, which are expected to begin operations in small numbers in 2007 and are projected to experience rapid growth over the next ten years. VLJs are seen by some as a possible solution to provide small communities improved access to the national air transportation system. Therefore, their introduction may spur renewed public policy debate over approaches to enhance air transportation in small communities. Also, because these VLJs would share high altitude airspace and congested airspace around major metropolitan areas with commercial passenger jets, their impact on system capacity and air traffic control workload is likely to be of particular interest. Besides VLJs, the introduction of pilotless Unmanned Aerial Vehicles (UAVs), or Unmanned Aerial Systems (UASs), also poses significant challenges to maintaining safety and not impeding access to airspace for other users such as small general aviation aircraft.

Due to persisting capacity limitations in certain locations, the FAA and Congress may be faced with difficult choices regarding how best to maintain access and address demand in an equitable manner at capacity constrained airports. Vision 100 provided the FAA with limited authority to implement negotiated scheduling among air carriers at a few capacity-constrained airports on a trial basis. This approach, along with other options such as peak-period pricing, slots, and quota systems have all been examined as possible options. The FAA's approach to addressing capacity constraints at New York's LaGuardia Airport is likely to be an issue of particular interest during the debate over reauthorization as the statutorily imposed slot system for LaGuardia expired on January 1, 2007, and the airline industry has expressed some dissatisfaction with FAA regulatory proposals for demand management at LaGuardia.

While capacity constraints are posing challenges at major metropolitan airports, several trends, including the continuing loss of commercial air carrier service in rural America, are making the essential air service (EAS) air carrier subsidy program more

attractive to many rural communities. However, even with increased funding for this program in recent years, it is becoming increasingly difficult for the EAS program to generate additional air service. Against this backdrop the EAS program faces a number of issues that are likely to be addressed in forthcoming reauthorization legislation. Primary among these is how to prioritize access to the program so that EAS funds are used in the most efficient manner possible. It is likely, however, that without a significant increase in funding, additional limitations on the use of EAS program funding may have to be considered. In addition to the EAS program, the Small Community Air Service Development (SCASD) Program was established to develop solutions for improving air carrier service to communities that are experiencing insufficient access to the national air transportation system. While an initial review of the program found mixed results, it has been noted that it is still too early in the program's history to fully assess its potential effectiveness.

System Modernization Issues

Present initiatives to modernize air traffic facilities and services have been channeled into a unified effort to develop the Next Generation Air Transportation System (NGATS) under a provision in Vision 100. Vision 100 created the Joint Planning and Development Office (JPDO), a multi-agency entity headed by the FAA and charged with the task of conceptualizing and integrating the development of the NGATS. The DOT envisions NGATS as a system capable of tripling effective system capacity by 2025. By some estimates, air traffic levels throughout the United States could increase at that pace thereby necessitating these system enhancements. The specifics of these efforts and future funding and management challenges facing the JPDO and the FAA in carrying forth the plans to build the NGATS are likely to be a major focus during the current FAA reauthorization process. A significant issue facing Congress during the upcoming FAA reauthorization process is obtaining working estimates of what building the NGATS will cost. CRS analysis of available preliminary cost estimates indicates that the prospective total cost to build the NGATS by 2025 is estimated to be between $69 billion and $76 billion, which is roughly $5 billion to $12 billion above baseline facilities and equipment (F&E) spending levels.

Another significant issue that may be addressed during the reauthorization process is how to best manage the NGATS development effort. One major hurdle is that while the JPDO can set objectives, goals, and strategies for the NGATS framework, the funding stream for carrying out these plans will ultimately come from the budgets of the various agencies involved, primarily the FAA and NASA. In recognition of this, Congress may examine options to align budget elements of the various agencies involved within the NGATS framework. Another potential issue is the appropriate scope of the JPDO's efforts. While some consideration of various ancillary functions and issues — such as security and environmental impacts — may improve the overall system design for the NGATS, too much emphasis on these various issues could impede progress on the central issue of improving the efficiency and capacity of the air traffic system.

Besides the scope of the JPDO's efforts, another issue of interest is the JPDO's management approach. Some observers contend that the JPDO has remained too

focused on policy and establishing a paradigm for collaboration among agencies and stakeholders, and it has not yet translated these general objectives into a cohesive blueprint, with a high degree of engineering specification regarding timelines and contingencies among the various component elements of the NGATS. One possible option being discussed for streamlining NGATS system development is the use of an overarching lead systems integration (LSI) contract for overseeing the NGATS project.

While many questions still remain regarding the management approach to developing NGATS, there is a growing consensus among experts in the field regarding the technological objectives and likely technologies that will comprise the core functionality of the NGATS system. The core technologies needed to meet these objectives include (1) precision navigation capabilities to pinpoint aircraft locations, project flight paths or flight trajectories, and predict future aircraft positions with a high degree of accuracy; and (2) highly integrated information networks to enable a shared situation awareness regarding traffic, weather, airport conditions, and other factors affecting flights and provide tools to facilitate distributed, adaptive decision-making and information-sharing about operational changes, such as flight path deviations and their potential impacts on other system users. The investment strategy for these technologies that is adopted and carried forth over the next three to five years is likely to have a lasting impact on both the end-state of NGATS and the path to reaching that end state.

In addition to deciding on a technology investment and deployment strategy for the NGATS, a challenging and potentially contentious issue is the phasing out of existing facilities and equipment for air traffic communications, navigation, and surveillance. Phasing out of existing systems must be addressed carefully because, on the one hand, maintaining legacy systems while deploying new technologies can be costly and resource intensive. On the other hand, phasing these systems out too quickly could place an undue burden on system users to equip aircraft and could pose safety concerns if adequate backups and redundancies are not in place. Congress may express particular interest in the FAA's efforts to assess how proposals envisioning new navigation and surveillance technologies will address the issue of providing equivalent safety to the current radar-based air traffic surveillance system. Congressional interest regarding the phase-out of legacy systems may also focus on how these plans may impact airspace system users, particularly smaller operators who may face a greater challenge in equipping aircraft to keep pace with the evolution from the existing national airspace system to NGATS-compliant avionics and aircraft systems.

While advances in precision navigation and information sharing show great promise for reducing aircraft spacing in all weather conditions thereby increasing system capacity, wake turbulence produced by large transport aircraft currently imposes practical limitations on aircraft spacing, even under ideal weather conditions. Current air traffic procedures specify separation standards for aircraft departing behind large and heavy jets to allow their wake vortices to dissipate. Some view these standards as overly conservative and argue that accurate wake vortex prediction capabilities could allow for decreased separation, thereby increasing airport capacity in many weather conditions. Others argue that the limited capability of available technology and the complexities of wake vortex propagation make it difficult to

predict wake turbulence or to use such predictions to significantly reduce arrival and departure spacing without compromising safety. Vision 100 authorizes the expenditure of such sums as may be necessary for the development and assessment of wake vortex advisory systems. Promising emerging technology for wake turbulence detection may be able to increase effective landing capacity at airports, perhaps by as much as 20%, but is still at an early stage of research and development.

Safety Issues

Since the last reauthorization, major airlines have maintained an impressive safety record. Congressional oversight of FAA safety initiatives and programs has not been a major focus of Congress in several years, as concerns over aviation security since September 11, 2001 have been a much more dominant issue. However, there are many aspects of safety where there is still room for improvement in an industry that is, for the most part, very safe. One area of growing concern is the safety of the airport environment. Recent runway overrun accidents have highlighted concern over the adequacy of runway safety areas and the level of attention the FAA has given to mitigating the risk of catastrophic runway overrun accidents. Also with regard to runway safety, the FAA has identified mitigating runway incursions, or potential ground collisions with departing or landing aircraft, as one of its highest priorities. However, the FAA's approach to addressing this issue has been criticized by the National Transportation Safety Board (NTSB) and other aviation safety advocates who maintain that improving pilot situation awareness of the airport environment is a critical need for effectively mitigating runway incursions.

A long-running safety concern is the adequacy of the FAA's oversight of air carrier operations and maintenance. The growing trend of outsourcing maintenance to third party maintenance, repair, and overhaul facilities has raised questions over the adequacy of these facilities' compliance with air carrier and FAA standards for work conditions and quality assurance. Particular concerns over repair facilities that service commuter aircraft and work performed on air carrier aircraft by small repair shops that are not required to be certified by the FAA are two particular issues where Congress may consider options to enhance regulatory requirements and FAA oversight of these maintenance activities.

Another continuing safety concern that Congress may again examine during this reauthorization process is the continued airworthiness of aging aircraft, which was highlighted by the ongoing investigation of a commuter seaplane built in 1947 that crashed while departing Miami for the Bahamas on December 17, 2005. A particular issue of interest is the FAA's approach to continued airworthiness and safety monitoring of the fleet of small commuter aircraft and the aging general aviation fleet, which are not covered under the aging aircraft inspections program established for large airliners.

The 10-year anniversary of the crash of TWA flight 800 on July 17, 2006, has renewed interest in measures being taken to mitigate the risk of fuel tank explosions on large transport-category aircraft. While technological advances in fuel inerting systems have been made in recent years and the FAA has proposed fuel tank

flammability reduction requirements for new and existing passenger airliners, critics have expressed frustration that steps to prevent another catastrophe attributable to a fuel tank explosion are moving too slowly, in their opinion.[7] Congress may debate available alternatives to accelerate safety initiatives to reduce fuel tank flammability and, perhaps, options to mitigate the financial impact of complying with proposed aircraft modifications on air carriers.

Airliner Cabin Issues

Issues related to passenger safety, comfort, and public health in aircraft cabins have often been of interest in past FAA reauthorization processes, and may again generate considerable debate during the current reauthorization cycle. One particular concern is the potential for spread of a deadly infectious disease, such as a communicable strain of avian flu, among airline passengers. The risk of such a threat was highlighted a few years ago when the deadly Sudden Acute Respiratory Syndrome (SARS) virus caused widespread concern over the public health risks posed by airline travel. Congress may debate whether more research is needed on methods to prevent the spread of infectious diseases in the aircraft cabin, and how to effectively deploy available methods to detect and mitigate the spread of disease among airline travelers. With regard to cabin occupant safety, Congress may once again consider whether infants and toddlers under two years of age should be restrained in child seats on airline flights, or whether the current practice of allowing "lap children" should be continued. The FAA recently rescinded its plans to require child restraints for these children, as advocated by the NTSB, citing fears that families would opt to instead travel by car — an arguably riskier mode of travel — if faced with the prospect of paying for an additional ticket for their infant or toddler to fly. The NTSB maintains that the failure to restrain all aircraft occupants is an unsafe practice, and the FAA's cross-modal safety comparisons detract from the central issue of whether such a practice should be allowed to continue.

Also, with regard to issues of passenger comfort, safety, and convenience in the airliner cabin, the use of cell phones and portable electronic devices (PEDs) has been an issue of growing interest. Technological advances in wireless voice and data communications are far outpacing the FAA's ability to study the safety implications of using these radio frequency (RF) emitting devices on board aircraft and make sound policy decisions regarding the in-flight use of these devices. While vendors are pushing for approval of onboard systems to make cell phone and wireless Internet access available in flight, researchers have expressed continuing concern that cell phones and other PEDs may interfere with aircraft instrumentation. During the current reauthorization debate, Congress may consider whether more focused research on this issue is needed to determine if, and under what circumstances, these devices can be used in flight without any foreseeable safety consequences.

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[7] "10 Years After Flight 800, Just Hot Air," *Air Safety Week, 20*(31), August 7, 2006.

Energy, Environment, and Noise Issues

Issues related to energy and the environment may play a larger than usual role during the current reauthorization debate. Energy and fuel issues in particular have been part of the larger public policy debate in recent years, and may spur consideration of alternative fuels for aircraft and airport vehicles. Growing concerns over global warming and environmental impacts may also prompt debate over options for reducing aircraft emissions. Historically high fuel costs are driving much of the current push for more efficient aircraft, which also can be cleaner and quieter. However, Congress may debate available options to study alternative aircraft fuels, monitor international approaches to mitigating aircraft emissions and noise, sponsor research on aircraft emissions-reduction and quiet aircraft technologies, and provide incentives for manufacturers and operators to develop and utilize aircraft technologies that reduce dependence on fossil fuels and environmental impacts.

International Civil Aviation Issues

Although not technically within the jurisdiction of the FAA, there are at least three major international aviation issues, falling under the jurisdiction of the Department of Transportation (DOT), that may arise as Congress considers FAA reauthorization legislation. First, observers now consider it somewhat likely that the "Open Skies" agreement with the European Union will remain unsigned and unimplemented, which is a major concern for many U.S. airlines seeking greater flexibility to operate flights in European markets. Second is the closely related issue regarding DOT's rulemaking on foreign ownership and control of domestic carriers. Although the administrative process has been completed, the DOT has not to date issued a final rule. The delay in moving forward has been due in part to strong congressional opposition during the 109th Congress, in the form of both introduced legislation and attempts to prevent the final rule through appropriations riders. According to some commentators, as comprehensive as the proposed agreement appears to be, there cannot be meaningful reform in the international aviation market until Congress repeals the so-called "citizenship test," which limits foreign ownership and control of U.S. air carriers. Finally, there is the longstanding issue of cabotage, which is defined as the transportation of passengers or cargo by foreign air carriers from one point in the United States to another and is, with a couple of narrow exceptions, generally prohibited by U.S. law. A limited statutory exception to this prohibition, allowing international carriers to carry certain cargo shipments between airports within the United States and destinations in Alaska while en route to foreign destinations, was included in Vision 100. In light of these various ongoing international aviation issues, the FAA reauthorization process may provide Congress with a unique opportunity to legislate and play a major role with respect to these developments in international civil aviation.