

CRS Report for Congress

U.S. Airline Industry: Issues and Role of Congress

April 30, 2008

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**Prepared for Members and
Committees of Congress**

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Summary

Mergers, airline bankruptcies, aircraft safety and maintenance concerns, extensive flight delays and cancellations, \$100-plus-per-barrel oil prices, and a litany of other issues define congressional interest in the airline industry at present. Congress does not play a day-to-day role in any of these issues. Most ongoing oversight of the industry, to the extent that it does occur, takes place within the executive branch. Congress periodically addresses airline issues through legislation, but for the most part the congressional role occurs primarily through oversight.

The authority to approve or disapprove airline mergers rests entirely with the Department of Justice (DOJ). The Office of the Secretary of Transportation (OST) makes recommendations to DOJ based on its evaluation of the effect of a proposed merger on airline industry competition. Congress has no specific statutory role in the airline merger review and approval process, having legislatively charged the executive branch with that task. Members of Congress can, and do, file statements with DOJ expressing their views on a proposed merger. Congressional interest going forward is likely to focus on the proposed merger between Delta Airlines and Northwest Airlines.

Recent incidents, including passengers being held in aircraft for eight or more hours awaiting takeoff, passengers being stranded by the shutdown of bankrupt air carriers, as well as deteriorating airline on-time arrival performance, have led to increasing congressional interest in airline passenger consumer issues. Currently, most passenger rights are set forth in the airlines' "contract of carriage" language. Existing law does, however, provide procedures and compensation rules for "bumping" and lost or damaged baggage. The main power the Department of Transportation (DOT) has to protect consumers is the department's power to take action against air carriers for "deceptive trade practices."

Despite impressive airline safety statistics in recent years, some aviation safety professionals and some Members of Congress have expressed concern that the industry and regulators have been lulled into complacency with regard to safety. This concern has been heightened recently in response to various findings that airlines have failed to fully comply with aircraft inspections and repairs mandated by the Federal Aviation Administration (FAA). Congressional oversight has focused on the relationship between the FAA and the airlines and the manner in which the FAA carries out its safety mandates.

This report provides an overview of selected airline related issues currently subject to congressional oversight and/or possible legislation. Many of the issues discussed here are also addressed in some fashion as part of the ongoing congressional debate about reauthorization of the FAA. Those seeking additional information on reauthorization should refer to CRS Report RL33920, *Federal Aviation Administration Reauthorization: An Overview of Selected Provisions in Proposed Legislation*. This report will be updated as warranted by events.

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Deregulation of the airline industry in 1978 eliminated most governmental control over the business practices of airlines. Residual regulation over antitrust matters (merger approval/disapproval) and oversight of certain competitive practices remain, however, within the Department of Justice (DOJ) and Department of Transportation (DOT), respectively. Oversight of airline consumer practices, while limited in scope, also occurs at DOT.

As part of its authority over certain competitive practices, the Office of the Secretary of Transportation (OST) reviews airline operating agreements and marketing alliances, especially as regards non-U.S. airlines. It also has the responsibility of “certificating” airlines — meaning it determines whether a new airline is “fit, willing, and able” to provide the type of service it is seeking to provide.

Safety has never been deregulated. DOT’s Federal Aviation Administration (FAA) exercises total oversight over the airline industry’s safety activities. It is responsible for the licensing of all airline aircrew and mechanics, and for the certification of all aircraft and their appropriate maintenance and operating procedures, proscribes the operation of aircraft within the FAA operated air traffic control (ATC) system, and provides active oversight of airline compliance with maintenance and operating procedures.

This report provides an overview of selected airline related issues currently subject to congressional oversight and/or possible legislation. It should be pointed out that many of the issues discussed here are also addressed in some fashion as part of the ongoing congressional debate about reauthorization of the FAA. These relationships will be noted briefly as part of this discussion. Those seeking additional information on reauthorization should refer to CRS Report RL33920, *Federal*

¹ Title 49 of the United States Code enumerates in extensive detail most of the legal powers that the federal government exercises over airlines.

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

Economic Issues

Airline Mergers/Acquisitions

Congressional interest going forward is likely to focus on the proposed merger between Delta Airlines and Northwest Airlines. Although structured legally as an acquisition — Delta is the acquirer in the combination and the CEO of Delta would manage the combined firm — the proposal is most clearly viewed as a merger. It is widely believed in the aviation community that this merger could be the first of several in the industry. Press speculation, for example, focused until recently on a possible United and Continental combination as a competitive response.² Although a United-Continental agreement failed, United is continuing merger talks with US Airways. Future proposed mergers will also likely be of interest to Congress.

The authority to approve or disapprove airline mergers rests entirely with DOJ. The OST makes recommendations to DOJ based on its evaluation of the effect of a proposed merger on airline industry competition. Congress has no specific statutory role in the airline merger review and approval process, having legislatively charged the executive branch with that task. Members of Congress can, and do, file statements with DOJ expressing their view of a proposed merger. During previous merger discussions individual Members of Congress have taken positions both for and against proposed mergers, hearings have been held, and some legislation has been introduced and considered. For the most part, however, merger related legislation has not been enacted, especially vis-a-vis a specific merger proposal. This does not mean, however, that congressional opinions about mergers do not matter.

Historical Perspectives. As **Figure 1** shows airline mergers and acquisitions began occurring in the early to mid-1980s. During that period many of the so-called “local service carriers” of the regulated era, such as Ozark, Republic, Southern, and PSA, were combined into larger airlines. A second wave of consolidation occurred in the later 1980s at least in part driven by the “leveraged buyout” (LBO) phenomena. The effects of the First Persian Gulf War, which depressed international airline travel for the first time in post World War II history, put an end to most consolidation discussions at least for a time. Since then merger activity has been sporadic, with some notable activity around the beginning of the new Century, a significant combination in 2005, and the now proposed merger of Delta and Northwest.

During the 1980s most congressional interest in mergers seems to have been focused on service issues and on insuring that airline employees were fairly treated as firms were acquired and/or combined. Some members of Congress expressed

² Carey, Susan, and Melanie Trottman. “Continental Rejects Merger Overtures.” *Wall Street Journal*. April 28, 2008; Maynard, Micheline. “United Said to Restart Talks with US Airways.” *New York Times*. April 29, 2008.

their views on many of the combinations of that time period. Congressional concern was also expressed about how the merger approval process was exercised at the federal level. Many felt that the Reagan Administration DOT was too friendly to mergers, approving at least two mergers that DOJ had questioned. Ultimately, in response to these concerns Congress acted to strip DOT of its preeminent role in the merger approval process and moved it to DOJ beginning in 1989.

Recent Merger Discussions. Between 2000 and the end of 2007 there were three significant merger/acquisition proposals. Two, American's acquisition of TWA (2001) and America West's acquisition of US Airways (2005), were approved without major congressional opposition. In each instance, the airline being acquired (TWA and US Airways) was in significant financial difficulty, and the acquisition was viewed by many as a way of preserving jobs and air service.

This was not the case for the May 2000 proposal by United to acquire US Airways. That proposal engendered considerable public opposition which was very much reflected by many Members of Congress. The merger proposal had some novel features, including a proposal to create a new airline based at Reagan National Airport, and later a link to the American and TWA merger, that were designed to deflect possible anti-trust concerns related to the market power of a combined United and US Airways. These proposals, however, were insufficient to ward off considerable concern about the anti-competitive nature of the proposed combination. Ultimately, DOJ would reject the merger in July 2001 and United withdrew its offer.

Congress played a very active role in the consideration of the proposed United/US Airways merger. Although there were individual Members of Congress who were in favor of the merger, there seems to have been significantly more congressional opposition to the merger. These anti-merger positions were especially apparent during several hearings held to examine the potential competitive effects of the merger. Although no legislation blocking or otherwise altering the merger was passed, several pieces of legislation that would have required these results were introduced and considered.

Delta-Northwest. Executives of the merging carriers argue that this combination is necessary for competitive reasons. In addition to creating the nation's largest airline, they believe the new airline will be "more stable and be better able to grow to meet the challenges of the future" in what they view as a highly competitive world airline industry and a difficult economic environment.³ From their perspective the new combination, which will keep the name Delta, will provide synergies that could reduce the firms' operating costs by up to a \$1 billion from the costs that would be incurred by the two firms as separate entities. As part of their merger, they are promising not to close airport hubs, reduce air service, or fire large numbers of employees. They are also suggesting numerous other benefits that are described in detail at [<http://www.newglobalairline.com/>].

³ Anderson, Richard and Doug Steenland. "Some Myths About Airline Mergers." *The Wall Street Journal*. April 16, 2008. p. A19.

Many airline industry observers are dubious of the claims made above. They find it hard to understand, for example, how a firm that plans not to cut employees and close hubs will be able to come up with the cost savings stated above. Also, the track record of airline mergers in the United States is spotty at best, with some airline analysts believing that there has never been an indisputably successful merger in the industry.⁴ Even those who believe the merger might be positive question the likelihood that the transition from two airlines to one will be smooth for fliers and employees, by pointing to the ongoing difficulties at US Airways caused by merger related employee and infrastructure integration issues.⁵

Approval of the merger is no foregone conclusion. DOJ has stated its intention to closely examine the attributes of the merger, and DOT has begun its analysis of the competitive effects of the merger. These reviews will likely take months to complete, making it impossible to forecast when DOJ might announce its decision on the merger.

Several Members of Congress, including the Chairman of House Committee on Transportation and Infrastructure (T&I), Representative James Oberstar, and the Chairman of T&I's Subcommittee on Aviation, Representative Jerry Costello, have reportedly expressed skepticism about the supposed positive aspects of the merger.⁶ They have stated an intent to hold hearings on the merger. Additional congressional committees, Senate Commerce, Senate Judiciary, and House Judiciary, are also expected to hold hearings on the issue.

Airline Bankruptcies/Failures

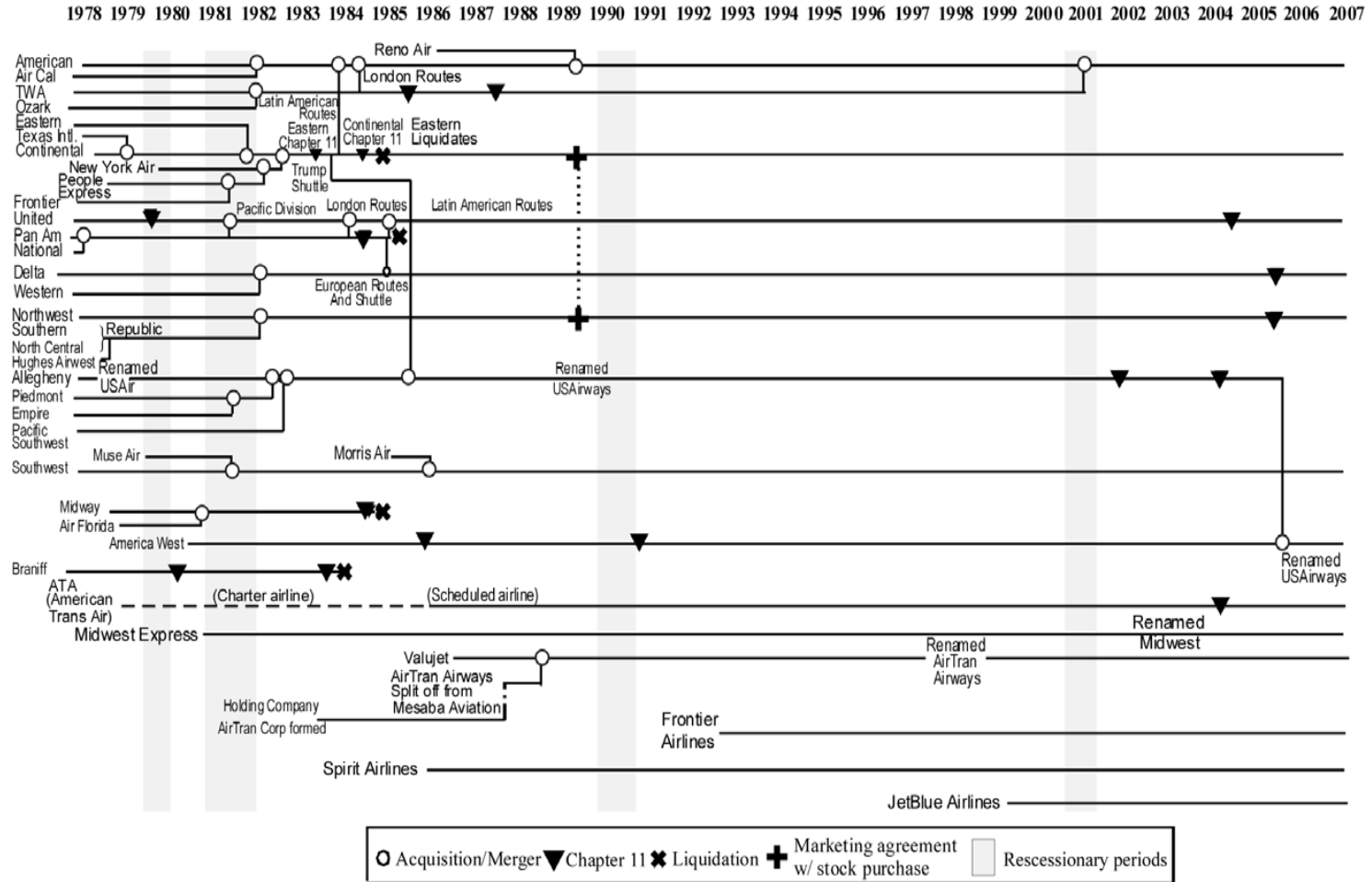
Failure is a normal feature of the U.S. business system. The failure of some firms, however, is more notable than for others. This is the case for the airline industry. In early spring 2008, four airlines filed for bankruptcy protection. Three, Skybus, Aloha, and ATA, filed for Chapter 7 bankruptcy, have stopped flying and are in the process of liquidating. Frontier filed for bankruptcy under Chapter 11 of the Bankruptcy Code and is to continue to operate while it attempts to reorganize. All of these failures have attracted some level of congressional interest. This is especially true for Aloha, which provided a significant portion of Hawaii's inter-island transportation network.

⁴ Baily, Jeff. "In the Math of Mergers, Airlines Fail." *The New York Times*. January 17, 2008 and McCartney, Scott. "The Middle Seat: What's in a Merger? For Fliers, Not Much — History Doesn't Bode Well For Delta - Northwest Combo; A Legacy of Dropped Routes." *The Wall Street Journal*. April 16, 2008. p. D1

⁵ Reed, Dan. "US Airways highlights drawbacks of consolidation." *USA Today*. March 6, 2008.

⁶ *Aviation Daily*. "Delta-NWA Merger Obstacles Include Labor, Competition." April 16, 2008. p. 1

Figure 1. Selected Airline Mergers, Acquisitions, and Bankruptcies, 1978-2007



Source: CRS analysis of various sources.

Bankruptcy is far from rare in the airline industry. It can almost be viewed as an accepted business practice. As can be seen in **Figure 1**, several major airlines have gone through multiple Chapter 11 reorganizations since 1978. For example, Continental (1983 and 1990), US Airways (2002 and 2004), and America West, which purchased US Airways in 2005, (1985 and 1991). In fact, more than 150 airlines, mainly start-up firms not shown in **Figure 1** (known in airline terminology as “new entrants”), but also some well known firms, have filed for bankruptcy in the last 30 years. In the vast majority of these cases the bankruptcy led ultimately to a departure from the industry. Where a Chapter 11 process ultimately led to a successful reorganization, the airline often looked very different from the airline that had filed for protection. There is no single reason why airlines go bankrupt. Recessions, fuel prices, bad management decisions, and labor problems, can all play a role. Unanticipated events like the first Persian Gulf War and September 11th, which led to significant declines in flying, have led straight to the bankruptcy court.

Congressional interest in bankruptcy is generally focused on several issues. Primary among these is the loss and/or prospective loss of air service at an airport, in a community, or sometimes in a region. Of immediate interest is the consumer fallout that accompanies a bankruptcy filing. Constituents who have been stranded or find they no longer hold valid tickets, frequently turn to congressional offices in search of redress. Also of interest to many Members is the fate of airline industry employees. Employees may lose their jobs, have their salaries reduced or see their pensions eliminated or reduced. The loss of airline pensions by former employees, for example, were a major issue following the round of airline bankruptcies that occurred after September 11th. In some hub airline cities, an airline’s workforce can make up a sizable portion of the local electorate.

Congress does sometimes act to assist the airline industry in times of need. Most notably this occurred immediately after September 11th when Congress passed the Air Transportation Safety and System Stabilization Act (ATSA, P.L. 107-42). ATSA provided immediate financial assistance and long term loans to the airlines to keep them operating. ATSA did not preclude bankruptcies, but it arguably prevented additional airline failures beyond those that occurred anyway. ATSA, as the event it responded to, represented the extreme in terms of a congressional response. The more typical congressional response over time to airline bankruptcies could be characterized as disappointment combined with acceptance.

Passenger Rights Issues

Recent incidents including passengers being held in aircraft for eight or more hours awaiting takeoff, passengers being stranded by the shutdown of bankrupt air carriers, as well as deteriorating airline on-time arrival performance, 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.⁷ Historically, the DOT role in consumer protection has been limited.⁸ However, existing law does provide procedures and compensation rules for “bumping” and lost or damaged baggage.⁹ 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.

Although airline deregulation was enacted 30 years ago, some observers believe that some of the perceived protections of the regulated era should be reintroduced. There are two major differences in the unregulated environment versus the regulated environment for air passenger transportation that are important to keep in mind when examining airline passenger issues. First, under regulation, air carriers did not set their prices; the Civil Aeronautics Board (CAB) did. This meant that air carriers, for the most part, competed on service and frequency rather than price. In addition, with prices fixed by the CAB, interline agreements among airlines to accept each others’ delayed passengers were simple to manage, because all the major carriers had very similar fare structures. Since deregulation, and especially with the advent of low-cost carriers as major players in the industry, the primary means of competition has become price, not service.

Second, because the CAB used a cost-plus basis for setting fares, this encouraged air carriers to maintain a significant amount of extra capacity. Air carriers could have passenger load factors as low as 55% and still make money. This meant that when there were flight delays or cancellations, most carriers had seats available to accept transfers from other airlines. In recent years, air carriers have undergone a period of intense price competition at the same time that fuel costs have risen rapidly. Most air carriers have responded by pursuing higher passenger load factors, which are now often above 80% for some airlines and are even higher on some popular routes. Such high average passenger load factors mean that, during flight delay or cancellation situations, there may be limited available seats for transferred passengers.

⁷ With the deregulation of aviation, the airline contract of carriage took the place of rules “tariffs” that were, under regulation, adopted and published by the airlines and that became effective upon Civil Aeronautics Board approval. For a discussion of passenger rights tariffs under regulation see, Senate, Judiciary Committee, *Oversight of Civil Aeronautics Board Practices and Procedures, Hearing*, v. 2, February 19, 1975, Washington, GPO, 1975.

⁸ For a discussion of consumer rights see the DOT’s Aviation Consumer Protection Division’s “Fly Rights,” available at [<http://airconsumer.ost.dot.gov/publications/flyrights.htm>].

⁹ On April 16, 2008, Secretary of Transportation Mary Peters announced finalized changes to the “bumping” rule, which doubles the compensation for passengers that are involuntarily bumped to \$400 if they reach their destination within two hours of their original arrival time and to \$800 if they do not arrive within two hours. U.S. Dept. of Transportation. *U.S. Transportation Secretary Peters Announces New Measures to Improve Air Travel Experience*. Washington, DC: DOT, April 16, 2008. The current ceiling for lost and damaged passenger baggage is \$3,000 per passenger.

Issues of Congressional Interest

During Congress's current consideration of the reauthorization of the FAA, most of the interest in passenger rights has been focused on issues related to schedules and capacity: flight cancellations, delay, and transfers between airlines.¹⁰ Under airline contracts of carriage, consumers face a major caveat: many of a passenger's contractual rights regarding schedules and cancellations are limited to delays and cancellations that are under the control of the airlines. All contracts of carriage have "force majeure," exclusions for events such as weather conditions, war, strikes, and in some cases shortages of labor, fuel, and facilities, that cannot be reasonably anticipated by the airlines. Both the House-passed and Senate-reported FAA reauthorization bills include passenger rights provisions. For a summary of these provisions see CRS Report RL33920, *Federal Aviation Administration Reauthorization: an Overview of Selected Provisions in Proposed Legislation*.

Passenger Access to Services on Delayed Aircraft and the Right to Deplane. The treatment of passengers onboard delayed aircraft is contractual, not legislative, and varies from air carrier to air carrier depending on the text of their contracts of carriage. Recent reports of passengers being stuck in an aircraft that is stranded on the tarmac without access to adequate food, water and toilet facilities has led to calls for federal action to mitigate the impact of these situations on passengers. Options suggested include requiring the airlines to develop contingency plans to assure that passengers' onboard needs are met during delays, requiring airlines to set a clear time frame under which they will be permitted to deplane, or mandating a specific number of hours after which any passenger has the right to get off the aircraft.¹¹ The airlines oppose setting a standard benchmark for the number of hours that passengers can be held on a plane for a variety of reasons. They argue that most passengers would rather wait and arrive late rather than have the flight cancelled and, that being forced to return to the gate would likely be against the wishes of the majority of passengers. They also point out that the most egregious incidents involve weather that impacts an entire airport, making the deplaning of delayed plane passengers operationally difficult due to gates filled with other delayed aircraft and terminal waiting areas already crowded with passengers awaiting other departures.

Delayed, Cancelled and Diverted Flights: Refunds and Rerouting. The refund and routing options, as well as the amenities offered to passengers, are also governed by the individual airlines' contracts of carriage. Airline schedules are not guaranteed. Passenger options vary from airline to airline. The consumer issues of recent interest include providing up-front cancellation and delay statistics on flights and also the re-booking and transferability of tickets of delayed or cancelled flights. In general, a passenger on a cancelled flight may request a refund for the unused part of the ticket or accept the offer of a seat on a later flight of the ticketed airline. There is no federal requirement, however, that the airlines arrange for a seat on a different airline. Delayed passengers may request transfer to a different flight

¹⁰ During the previous period of interest in passenger rights, 1999-2001, pricing issues, such as access to the lowest fares, were also a major focus of legislative efforts.

¹¹ See "Aid for Stranded Travelers," by James Bernstein, *Newsday*, June 22, 2007; "Ice Pellets and Passenger Rights," by Les Abend, *Flying*, v. 134, July 2007, 92-95.

of the same airline but may be required to pay a cancellation fee on the original ticket or a higher fare to make the change. To transfer from one airline's flight to another airline's flight without paying full fare for the second airline's ticket, passengers need to persuade the first airline to endorse the ticket to the second airline. Airlines generally will only endorse tickets to or accept endorsed tickets from airlines with whom they have negotiated interline agreements regarding the treatment of transferred passengers. In recent years the major airlines have narrowed the scope of their interline agreements, often only negotiating them with their code share partners. Low-cost carriers generally do not have interline agreements. Even in cases where interline agreements exist, making such arrangements is up to the airline's personnel on the scene. Some argue that the federal government should require airlines to accept transfers from other airlines' delayed or cancelled flights. However, outside of a regulated environment, others say this could be problematic, especially given the differences between the fare structures of the low-cost and legacy airlines. It also would mean that the original ticketing airline would, in effect, be pricing the fare for a seat on another airline.¹²

Honoring Tickets of Airlines that Shut Down. The recent shutdown of ATA Airlines, Aloha Airlines, and Skybus has raised the issue of whether operating airlines should honor the tickets of shutdown carriers. Since November 2006, there has been no requirement that airlines must honor the tickets of an airline that has ceased operations. The Aviation and Transportation Security Act of 2001 (P.L. 107-71, Section 145), enacted November 19, 2001, included provisions that required airlines providing service on a route to provide, "to the extent practicable," service on that route to passengers ticketed by an air carrier that discontinued service on that route due to insolvency or bankruptcy. Passengers had 60 days, from the date of the suspension of service, to make the transportation arrangements, and the airline providing the service was allowed by DOT to charge a one-way fee of \$25. The provision lapsed on November 30, 2006. There has been some interest in introducing legislation that would include provisions similar to Section 145.¹³

Expansion of DOT Airline Consumer Complaint Investigations. Within DOT, the Office of Aviation Enforcement and Proceedings (OAEP) is responsible for enforcing the DOT's consumer protection rules. The OAEP has significant authority, under the Airline Deregulation Act of 1978 (P.L. 95-504), to investigate and take enforcement action against air carriers that engage in unfair or deceptive practices and unfair methods of competition. This power is broader than might be assumed at first glance. For instance, if a particular flight is consistently off

¹² "Canceled Flight? Your Inn Trouble," by Scott McCartney, *Wall Street Journal*, April 15, 2008, D1, D10; also see *Statement of James C. May, President and CEO, Air Transport Association of America, Inc., Before the Subcommittee on Aviation of the House Committee on Transportation and Infrastructure*, April 20, 2007, (Washington, Air Transport Association), 2007, 7p.

¹³ See Dept. Of Transportation. *Honoring Tickets of Insolvent Airlines Pursuant to the Requirements of Section 145 of the Aviation and Transportation Security Act: Notice, June 1, 2005*, (Washington, DC, 2005), p. 16. Includes a question and answer appendix. See also McCartney, Scott. "When Airlines Fail, Fliers Have Few Protections," *Wall Street Journal*, April 8, 2008, p. D1.

its schedule, advertising its rarely met scheduled departure and arrival times could be investigated as a deceptive practice. OAEP can also investigate the availability of seats under advertised fares or for frequent flyer awards. The OAEP's staffing level has been an issue. The staffing level peaked at 40 in 2003 and dropped to 33 in 2006. Also, much of the office's resources have been directed to civil rights violations such as disability-related issues, leaving limited resources for its consumer protection responsibilities.¹⁴

Airline Safety

Since the early days of commercial aviation in the 1920s, Congress has maintained a keen interest in the safety of airline operations. Over the past six years, however, congressional oversight of airline safety has not been as extensive, largely because the airlines have maintained an impressive safety record during this period. Between 2002 and 2006, there were nine fatal accidents involving commercial air carriers, four of which involved passenger fatalities. The accident rate over this period was roughly one fatal accident for every ten million hours flown (0.01 fatal accidents per 100,000 flight hours). By comparison, a decade earlier, during the period from 1992 through 1996, fatal airline accidents were occurring at a rate of about one every 3.7 million flight hours (0.027 fatal accidents per 100,000 flight hours). Thus, the fatal airline accident rate has been reduced by a factor of about 2.7 over the past decade. Preliminary data for 2007 indicate that it too was a very safe year, with no fatalities among the 766 million passengers enplaned on aircraft that were flown a cumulative total of over 19 million flight hours.¹⁵

Despite these impressive statistics, some aviation safety professionals and some Members of Congress have expressed concern that the industry and regulators may have been lulled into complacency with regard to safety. This concern has been heightened recently in response to various findings that airlines have failed to fully comply with aircraft inspections and repairs mandated by the FAA.¹⁶ Congressional oversight and investigation of these incidents have focused on the relationship between the FAA and the airlines and the manner in which the FAA carries out its mandate to regulate safety within the airline industry.

¹⁴ See DOT, Office of the Inspector General, *Follow-up Review: Performance of U.S. Airlines in Implementing Selected Provisions of the Airline Customer Service Commitment*, (Washington, DOT), 2006.

¹⁵ All statistics are derived from National Transportation Safety Board (NTSB) Air Carrier Accident Data statistical summaries and include both scheduled and non-scheduled airline operations flown under 14 C.F.R. Part 121 regulations.

¹⁶ See, e.g., Matthew Wald, "U.S. Inspectors Tell of Willful Neglect of Airline Inspection," *The New York Times*, April 3, 2008; Micheline Maynard and Matthew Wald, "U.S. Airlines Face Prospect of More Chaos over Inspections," *The International Herald Tribune*, April 10, 2008.

FAA Authority

By statute, the FAA has been given broad authority to regulate and promote safety within the airline industry. The FAA exercises this authority by establishing minimum safety standards regarding the maintenance and operation of aircraft to prevent or eliminate future accidents.¹⁷ The FAA issues operating certificates to air carriers that provide specific terms for ensuring safety. Domestic air carriers and airlines operating as U.S. flag carriers on international routes are governed by FAA regulations codified in Title 14, Code of Federal Regulations, Part 121, and are therefore known among aviation professionals as Part 121 carriers. Part 121 carriers generally have the most stringent safety requirements, and receive the highest level of scrutiny by FAA inspectors.

Congressional Involvement

While Congress has primarily relied on congressional oversight to press for aviation safety improvements, at times it has legislated on airline safety matters. For example, amid growing frustration over the FAA's slow progress and airline resistance to equipping aircraft with cockpit collision avoidance systems, Congress included in the Airport and Airway Safety and Capacity Expansion Act of 1987 (P.L. 100-223) language establishing specific time lines for the advancement of this technology and deadlines for the mandatory operational deployment and use of Traffic Collision Avoidance Systems (TCAS) on passenger airliners. Also, as part of the FY1992 Transportation Appropriations Act (P.L. 102-143), Congress included a set of provisions referred to as the Aging Aircraft Safety Act of 1991, directing the FAA to establish a regulatory framework for assuring the continuing airworthiness of aging aircraft. Under the provisions of the act, the FAA was directed to provide its inspectors with specific training in corrosion and metal fatigue auditing inspections. The act resulted in the FAA's creation of an aging aircraft inspections program to study age-related structural issues in the air carrier fleet through a process of inspections and systematic record keeping.¹⁸

FAA oversight of the airline industry came under intense congressional scrutiny in the 1990s following a string of accidents involving USAir in the early 1990s, a fatal crash of a commuter turboprop after encountering in-flight icing conditions in October 1994, and the fatal crash of a Valujet DC-9 in the Florida Everglades in May 1996. Largely as a result of congressional findings following the Valujet crash, Congress included two significant changes to FAA safety oversight in the Federal Aviation Reauthorization Act of 1996 (P.L. 104-264). First, the act eliminated the FAA's dual mandate to promote the aviation industry while at the same time regulating its compliance with safety mandates, and it specifically designated in statute safety as the highest priority for air commerce.

Second, the act mandated that the FAA establish a system for protecting voluntarily submitted safety-related information to encourage employees with first

¹⁷ See 49 U.S.C. Sec. 44701.

¹⁸ See 49 U.S.C. §44717.

hand knowledge of unsafe conditions or practices to report their observations without fear of reprisal. This initiative was considerably expanded by a provision in AIR-21 (P.L. 106-181) that established a formal whistleblower protection program for aviation industry employees that come forward with information regarding air safety.

The Safety Management Approach

The Aviation Safety Action Program (ASAP) was established by the FAA to meet these mandates and to encourage air carrier and repair station employees to voluntarily report safety-related information by protecting their confidentiality and providing certain safeguards against disciplinary or punitive actions.¹⁹ To complement the voluntary reporting by airline employees, the FAA has also established a Voluntary Disclosure Reporting Program (VDRP) for airlines, allowing them to disclose safety information to the FAA, including notification regarding possible regulatory violations.²⁰ To encourage openness in the exchange of this safety-related information, the FAA provides certain protections to the airlines against civil actions in accordance with the guidelines of the program. The ASAP and VDRP programs are an integral part of a broader airline Safety Management System (SMS) concept designed to create a systemwide framework for identifying and correcting safety-related problems in maintenance and flight operations.²¹ The FAA regards the SMS concept as being a proactive approach to airline safety, in contrast to the more classical rule-based regulatory enforcement approach, which it regards as being more of a reactive approach.²² In this regard, the SMS concept is viewed as one of several approaches to aviation safety that respond to criticisms that the FAA has historically been reactive in its approach, rather than proactive, stepping in only after festering unsafe conditions have resulted in notable incidents or tragic accidents.

The SMS approach does not, however, replace formal safety reporting processes, compliance with FAA directives, and regulatory oversight, inspections, and enforcement, but is meant to complement these aspects of safety regulation. Nonetheless, some critics of the approach caution that a potentially unintended effect of an SMS approach is the de-emphasis of these more traditional regulatory oversight functions which, in their view, may erode important checks and balances designed to ensure that a high level of safety and regulatory compliance is maintained.²³ Others argue, however, that as a result of technology advances, safety monitoring has

¹⁹ See Federal Aviation Administration, Advisory Circular AC120-66B - Aviation Safety Action Programs (ASAP), November 15, 2002.

²⁰ See Federal Aviation Administration, Advisory Circular AC-00-58A - Voluntary Disclosure Reporting Program, September 8, 2006.

²¹ For further reading, see Federal Aviation Administration, Advisory Circular AC-120-92: Introduction to Safety Management Systems for Air Operators, June 22, 2006.

²² Clark, Rick. Federal Aviation Administration (AFS-220). *The "Why" and "What" of Safety Management Systems*. Presented at Training Center Program Manager Conference, March 26, 2008.

²³ *Air Transport World Daily News*. "US FAA's 'collaborative' relationship with airlines questioned." April 7, 2008.

become much more of a data-driven activity that relies on near real-time assessment of operational conditions that have necessitated significant changes in the manner in which airlines monitor safety and the FAA conducts its oversight activities. Under this line of reasoning, advocates argue that meeting the changing nature of the industry requires FAA oversight functions to be more directly focused on safety-related processes and functions, rather than the more specific details of regulatory compliance.

A somewhat related concern has recently been raised, however, over the FAA's Customer Service Initiative. The initiative was first launched in late 2003 with the intent of creating a more uniform and consistent approach to regulatory oversight nationwide and be more responsive to concerns about the interpretation or application of regulatory matters by the FAA.²⁴ The FAA contends that misinterpretation of this initiative led some inspectors to treat airlines more as business clients of the FAA rather than regulated entities, resulting in lax enforcement. The FAA has vowed to fix this misunderstanding and emphasize that while inspectors should be respectful and responsive to airline concerns, they should not be treating them as customers or clients.²⁵

Data-Driven Safety Processes. To address the needs for data-driven safety monitoring, airlines include various safety data collection and analysis tools as part of their overall SMS approach. For example, in addition to ASAP, most major airlines conduct some form of flight operational quality assurance (FOQA) program to review electronically recorded data from flights to identify potentially unsafe operational conditions as part of their overall safety management approach. To encourage the use of these data-driven processes for identifying potential safety issues, FOQA data is afforded nondisclosure protections, and the FAA is generally prohibited against using FOQA data in carrying out enforcement action against an airline or its employees, except in cases involving criminal or deliberate acts.²⁶ The SMS concept relies on data-driven processes, like FOQA, to target and correct safety deficiencies, hazards, and other unsafe conditions in maintenance and flight operations. The SMS framework serves as the airline counterpart to the FAA's data-driven approach to oversight: the Air Transportation Oversight System (ATOS).

The Air Transportation Oversight System (ATOS). The FAA's ATOS system has been phased in over the past 10 years, and is now the primary tool for managing and administering FAA oversight and inspections of Part 121 operators. As compared to more traditional inspection methods that rely heavily on individual inspector expertise and focus on regulatory compliance issues, ATOS is a data-driven program that relies on risk assessments and analysis to focus inspection activities on particular areas where safety deficiencies might be expected at a specific air carrier. While the program's objectives and principles are generally viewed as a positive change for aviation safety by many, reviews of the program have revealed that its effective implementation has been hindered by a lack of standardization; a lack of

²⁴ Ibid.

²⁵ Ibid.

²⁶ See 14 CFR §13.401.

adequate tools to help inspectors track safety deficiencies and corrective actions; insufficient training; and inefficient allocation of human resources. A provision in Vision 100 (P.L. 108-176) mandated that the FAA develop an action plan to correct existing problems with the ATOS system and extend the program to oversight at more than 100 smaller air carriers in addition to the major passenger air carriers currently in the program. These provisions required the FAA to: develop inspection checklists for FAA inspectors and safety analysts; provide training in systems safety, risk analysis, and auditing to FAA safety inspectors; ensure that inspectors are physically located where they are most needed; and establish a strong central leadership for ATOS that will ensure that the system is consistently implemented and expanded. Since 2003, when Vision 100 was enacted, the ATOS program has expanded considerably and is now in use for monitoring most Part 121 operators.

The Aviation Safety Process As A “Partnership”. Data from the ASAP and VDRP report systems, along with airline service difficulty reports (SDRs), FAA incident investigations, and NTSB accident investigation findings and recommendations, complement the FAA’s primary system for air carrier oversight, ATOS, in achieving the objective of identifying and ultimately correcting unsafe conditions in the airline industry. A formal mandatory process exists for airlines to notify the FAA of safety-related findings through service difficulty reports (SDRs). Also, FAA and NTSB investigations of air carrier incidents and accidents may lead to findings and formal safety recommendations. These can result in the direct issuance of airworthiness directives (ADs) by the FAA outlining methods to correct unsafe conditions, or may be communicated to the aircraft or aircraft component manufacturer to identify a fix. Often, the manufacturers will issue a service bulletin, which may then be incorporated by reference into an FAA-issued AD that all operators of a particular aircraft type must fully comply with, or seek an approved alternative method of compliance, in order to continue flying affected aircraft in accordance with the timetables and details provided in the AD (see **Figure 2**). With regard to maintenance, all civil aircraft operators, including Part 121 air carriers, are required to maintain operational aircraft in an airworthy state by complying with all FAA-issued ADs specifying compliance requirements to correct identified unsafe conditions in an aircraft, aircraft engine, or other aircraft components.

The model is, and has always been, a model of shared responsibility: the airlines have the responsibility to identify and report suspected unsafe conditions associated with the design of an aircraft, the manufacturer has the responsibility to work toward correcting conditions related to the design of an aircraft or aircraft component determined to compromise safety, and the FAA has the ultimate responsibility to regulate the process and ensure safety across the entire airline industry. The addition of safety management systems concepts in recent years has provided an element of increased “partnership” between the FAA and industry, providing specific tools for encouraging the reporting of unsafe conditions and practices and technological advances allowing airlines to conduct detailed data-driven analyses of operational safety.

airworthiness requirements related to the above mentioned incidents.²⁸ Under intense media scrutiny following this action, Southwest grounded several aircraft and cancelled numerous flights to conduct additional inspections across portions of its fleet.

On March 13, 2008, the FAA issued a notice directing a nationwide audit of Part 121 air carrier compliance with ADs.²⁹ This has resulted in a recent spate of airline flight cancellations and schedule disruptions, as the FAA uncovered various cases of nonconformity with required maintenance procedures to comply with various ADs as a result of this audit. In particular, various operators of Boeing McDonnell Douglas MD-80 aircraft have cancelled flights to reinspect and correct work done to comply with an AD issued in 2006 to address concerns over potential shorts and arcing of electrical wiring in the airplanes' wheel wells that could cause a fire. Some have raised concerns that these actions — coming at a time when airlines are facing rising fuel costs and economic conditions that make raising ticket prices to offset these rising costs difficult — is placing significant strain on the airline industry. Also, some noted safety experts have questioned whether these actions have had any bearing on improving safety or whether the lapses in AD compliance constituted any significant risk to the safety of the traveling public.³⁰

Maintenance Outsourcing. In addition to the current focus on FAA oversight, concerns over the degree to which air carriers outsource maintenance to third party certificated repair stations and other facilities, including non-certificated aircraft maintenance facilities, and the level of FAA oversight of these various facilities has been an ongoing concern. U.S. air carriers are increasingly outsourcing maintenance to third-party repair stations, and outsourced maintenance now accounts for more than 50% of air carriers' total maintenance costs.³¹ For airlines, maintenance outsourcing has largely been viewed as a cost saving approach. In many instances, airlines have contracted with foreign repair stations which can often offer considerably lower costs because of lower labor rates in other countries. However, outsourcing practices, both domestically and internationally, raise concerns over the qualifications of maintenance personnel and the ability of the FAA to conduct effective regulatory oversight. Across the contract maintenance industry, the ratio of workers to supervisors is not regulated and often exceeds 10 to 1, raising questions over the adequacy of supervision in contract maintenance operations. Further, contracted maintenance workers, many of whom work part-time at repair facilities alongside full-time regular employees, often are not required to obtain FAA

²⁸ Jeff Bailey, "After Fine, Southwest Suspends 3 and Hires Specialist," *The New York Times*, March 12, 2008.

²⁹ U.S. House of Representatives, Committee on Transportation and Infrastructure. *Summary of Subject Matter*.

³⁰ Pasztor, Andy, Susan Carey, and Paulo Prada. "Airline Experts Vouch for Industry's Safety." *The Wall Street Journal*, April 11, 2008, p. A4.

³¹ *Consumer Reports*. "An Accident Waiting to Happen?" March 2007, pp. 16-19.

certification, and the screening and selection processes for these workers has been described as minimal.³²

With regard to the potential implications for airline safety, concerns over FAA inspector oversight of contract maintenance practices surfaced during the NTSB's investigation of the March 16, 2003 crash of a US Airways commuter flight operated by Air Midwest in Charlotte, NC. The investigation found that elevator control cables were improperly rigged by subcontracted maintenance workers at a non-certificated facility, and it has been suggested that FAA had a limited understanding of the contract arrangements and minimal knowledge of the work conditions and supervision of work being performed at this maintenance facility.³³ The crash investigation, in conjunction with growing concerns over FAA oversight of maintenance at facilities not required to be certificated as designated repair stations, prompted a DOT Office of Inspector General (OIG) audit of air carrier use of these non-certificated maintenance facilities. The DOT OIG found that while these facilities operate outside the scope of regulations pertaining to certificated repair facilities, there are no specific limitations regarding the type and scope of work they perform, and maintenance performed at these facilities is largely unmonitored by FAA inspectors.³⁴ The safety implications of outsourced maintenance work and the FAA oversight of vendors that perform this work remains an issue of considerable interest to Congress.

Some have also alleged that the increased use of outsourced maintenance is contributing to flight delays, because airplanes are sometimes being returned to service by these repair stations with work performed incorrectly resulting in additional delays and cancellations to pull these aircraft out of service and fix them properly.³⁵ Analysis of airline-caused delays and maintenance outsourcing data among 14 major air carriers in 2005 tabulated by *Consumer Reports* indicated a correlation of 0.47 (on a scale with 0 indicating no relationship and 1 indicating a perfect relationship) between the percent of maintenance outsourced by an airline and the percent of airline-caused delays.³⁶ While this relationship provides some indication of a possible link between outsourcing and delays, the correlation alone cannot establish a causal link, and the strength of the correlation only weakly supports the notion that outsourcing and delays go hand-in-hand. Nevertheless, faced with increasing concerns of air carrier service delays, this is another aspect of outsourcing that may warrant further examination.

³² Crotty, Bart. "Aviation Contracted Maintenance Workers, Are They Safe Enough?" *Aviation Maintenance*, July 2006, pp.14-17.

³³ *Ibid.*

³⁴ Department of Transportation, Office of Inspector General. *Air Carriers Use of Non-Certificated Repair Facilities*. Report Number AV-2006-031, December 15, 2005.

³⁵ *Consumer Reports*. "An Accident Waiting to Happen?"

³⁶ CRS analysis of data presented in *Consumer Reports*, "An Accident Waiting to Happen?"

Related Legislation and Possible Options for Congress

Related congressional oversight and legislative activity have centered on options for improving the FAA air safety inspector workforce, the manner in which this workforce carries out its compliance audits of the airline industry, and possible safeguards to reduce potential conflicts of interest that may compromise the regulatory role of FAA inspection activities. Additional options are being pursued for increasing regulatory requirements and oversight of foreign repair stations and airline use of non-certificated repair facilities. Most of these options are being considered within the context of pending FAA reauthorization legislation.

Specifically, the FAA Reauthorization Act of 2007 (H.R. 2881) as passed by the House 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. The Senate began consideration of the FAA reauthorization on April 28, 2008. It has taken up consideration of H.R. 2881, as amended by the text of The Aviation Investment and Modernization Act of 2007 (S. 1300) and the American Infrastructure Investment and Improvement Act of 2007 (S. 2345). This legislation does not include similar provisions regarding regulations or oversight of repair stations or third-party air carrier maintenance providers.

The prior FAA reauthorization act, Vision 100 (P.L. 108-176), enacted in 2003, directed the GAO to examine FAA inspector training and tasked the National Academies with conducting a study of FAA inspector workload and staffing standards. This study identified a variety of trends affecting the nature of FAA oversight of air carriers including evolving technologies, industry trends toward maintenance outsourcing, the increasing use of designees, and the shift to a system safety approach.³⁷ The study also concluded that the inspector workforce is expected to change considerably over the next several years with increasing numbers of retirements expected. Language in House-passed H.R. 2881 directs the FAA to

³⁷ National Research Council, Committee on Federal Aviation Administration Aviation Safety Inspector Staffing Standards. *Staffing Standards for Aviation Safety Inspectors*. National Academies Press: Washington, DC, 2006.

implement the inspector staffing model called for in this study, and it would authorize specific appropriations to carry out the implementation of this staffing plan. The version of S. 1300 reported in the Senate and incorporated into the Senate version of H.R. 2881 struck out an earlier provision of the introduced bill that would have required the FAA to develop a staffing model for its inspector workforce. However, language inserted into the Senate version of H.R. 2881 would authorize the FAA to hire 200 additional aviation safety inspectors.

The Senate version of H.R. 2881 contains several provisions intended to enhance FAA air carrier oversight activities. First, the bill calls for improvements to the VDRP that would require inspectors to evaluate an air carrier's proposed corrective actions to ensure that they encompass all affected aircraft and adequately correct the disclosed problem within an acceptable timeframe. The bill would also require the FAA to establish a secondary review process to ensure that issues disclosed under the VDRP have not been previously identified by an FAA inspector or previously disclosed by the air carrier within the past five years. The bill would also establish a two year post-employment moratorium on FAA inspectors. Under this provision, FAA inspectors would be barred from representing or negotiating on behalf of an airline that they were responsible for inspecting in matters before the FAA for a period of two years after leaving their FAA post. The bill would also require the FAA to establish a system for tracking field office reviews of air carrier compliance with ADs. It would require a full audit of all air carriers covered under ATOS to undergo a comprehensive 100% AD compliance review every five years. As part of these compliance reviews, FAA inspectors would be required to conduct physical inspections on a sampling of aircraft at each air carrier to ensure proper methods of AD compliance. The bill would also require the FAA to establish a means for ensuring that appropriate local and regional FAA offices and the FAA Administrator are alerted of air carrier noncompliance with an AD. The bill also calls for an independent GAO review and investigation of safety issues identified and reported by FAA employees, and it would require the FAA to establish a national review team to conduct periodic, random reviews of FAA air carrier oversight and provide annual reports of its findings and recommendations. The bill would also require the DOT OIG to provide progress reports on the effectiveness of the FAA's national review team.

Legislators in both the House and the Senate are reportedly contemplating the introduction of legislation to establish a "cooling off" period that would restrict former FAA inspectors from seeking employment with air carriers for some period after leaving their positions at the FAA,³⁸ as reflected by the provision in the Senate version of H.R. 2881 mentioned above. This "cooling off" period is intended to reduce potential conflicts of interest for inspectors who may go easy on air carriers they oversee in hopes that doing so could improve their chances of landing an airline job. Various post-employment restrictions already exist for civil service employees, including FAA inspectors. However, under these post-employment conflict-of-interest laws, non-senior level federal employees generally have a broad range of employment options within regulated industries they had direct dealings with as a

³⁸ Carlstrom, Gregg. "Bills Would Slow Revolving Door Between FAA, Airlines," *Federal Times*, April 15, 2008.

federal employee, so long as their post-government activities do not involve representing or advocating for a private employer before the federal government regarding matters that the individual had personally and substantially worked on as a federal employee (see CRS Report 97-875, “*Revolving Door,*” *Post-Employment Laws for Federal Personnel*, by Jack Maskell). The FAA has indicated that it too is contemplating specific post-employment rules that would establish a “cooling off” period for FAA inspectors, as recommended by the DOT OIG.³⁹

³⁹ Hohmann, James. “FAA Chief Defends Cooperation With Airlines,” *The Los Angeles Times*, April 18, 2008.