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Report to the Chairman, Subcommittee on Investigations and Oversight, Committee on Public Works and Transportation, House of Representatives

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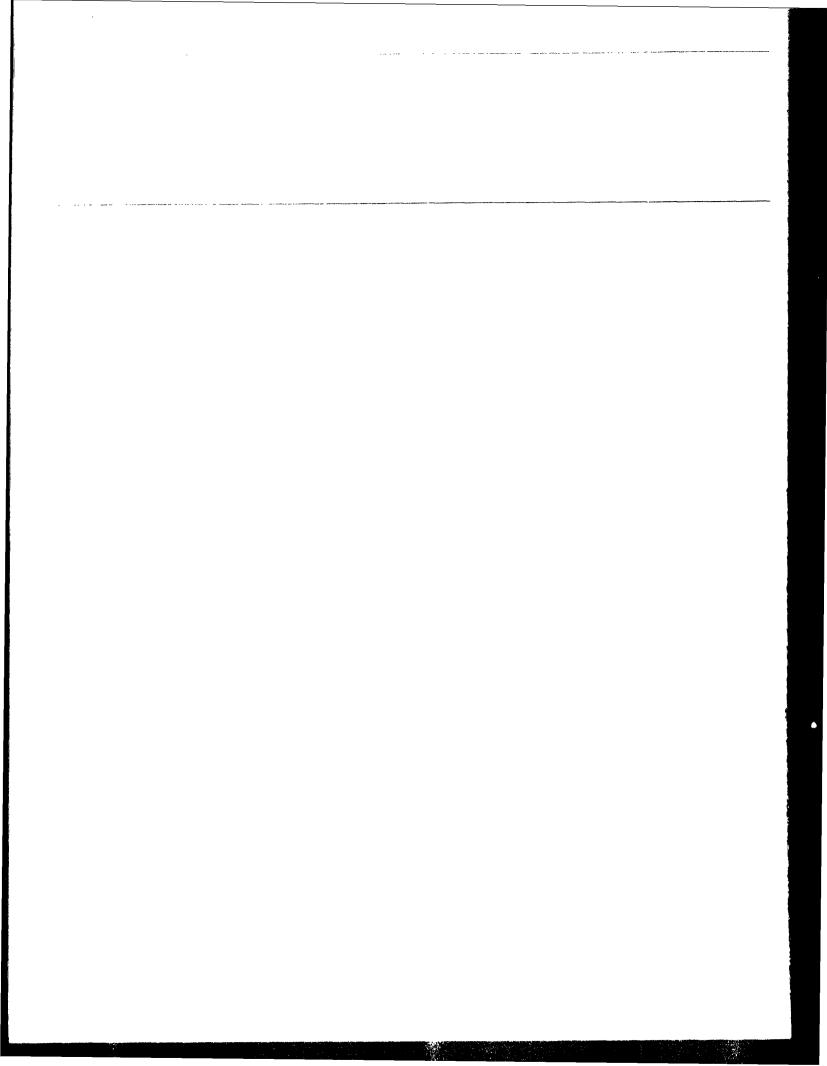
AVIATION SAFETY

Air Taxis—The Most Accident-Prone Airlines—Need Better Oversight





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United States General Accounting Office Washington, D.C. 20548

Resources, Community, and Economic Development Division

B-246219

January 21, 1992

The Honorable Robert A. Borski Chairman, Subcommittee on Investigations and Oversight Committee on Public Works and Transportation House of Representatives

Dear Mr. Chairman:

Air taxis have the highest commercial airline accident rate in the United States per 100,000 hours flown. For example, from January 1990 through July 1991 air taxis had about 13 times and 5 times more accidents than air carriers and commuters, respectively. Both the Federal Aviation Administration (FAA) and the Office of the Secretary of Transportation (OST) are responsible for airline oversight. FAA is responsible for inspecting airlines to ensure compliance with safety regulations, while OST is responsible for reviewing the economic factors pertinent to airline operations.

A June 1990 hearing held by your Subcommittee disclosed that Northeast Jet, Inc., an air taxi, committed serious safety violations, such as falsifying aircraft maintenance and pilot training records, over a 3-year period despite FAA inspections. This raised concerns that oversight of the air taxi industry might not be adequate. As a result, you asked us to (1) determine FAA's level of inspection effort for air taxis and (2) provide information on OST's economic fitness standards as applied to air taxis.

Results in Brief

Despite the fact that air taxis have a higher accident rate than other commercial airlines, FAA's information shows that 27 percent of air taxis did not receive required inspections in fiscal year 1990. In contrast, only 8 percent of air carriers and commuters did not receive required inspections. Also, FAA's routine inspections generally did not detect the violations that led to emergency orders revoking air taxis' operating certificates. Inspectors told us that a heavy work load affected their

¹The three basic types of commercial airlines include air carriers, commuters, and air taxis. Under FAA regulations, air carriers operate aircraft having more than 30 seats, while commuters and air taxis operate aircraft having 30 seats or fewer. Commuters provide scheduled passenger service of at least five round trips per week, while air taxis provide on-demand service. For purposes of OST oversight, air carriers operate aircraft having more than 60 seats, while commuters and air taxis operate aircraft having 60 seats or fewer.

ability to perform inspections and that even when inspections are done, some violations are difficult to detect.

FAA's special inspections are generally more comprehensive than routine inspections and have been more effective in identifying air taxis' safety violations. For example, in 1985 FAA performed a special inspection on a sample of the air taxi industry and discovered numerous safety violations, such as failure to maintain adequate emergency equipment and adequately train flight crews and pilots. FAA concluded that its inspection oversight for air taxis was inadequate and recommended improvements that have not been fully implemented. Specifically, FAA has not performed (1) all required annual routine inspections or (2) an industry-wide special inspection since 1985 because it considers air carriers, commuters, and other aviation-related activities to have a higher inspection priority.

In some cases, air taxi operators' financial distress and poor compliance attitude contributed to safety violations. Air taxis do not have to meet ost economic fitness standards, such as having sufficient financial resources to operate and a satisfactory compliance attitude. Ost officials stated that they believe requiring air taxis to meet these standards would place an undue burden on the industry.

Background

About 3,200 air taxis operated in the United States during 1990. Air taxi operators provide on-demand passenger and cargo service, range in size from 1 aircraft to a fleet of 25 or more aircraft, and carry about 5 million passengers a year. The Federal Aviation Act of 1958 and implementing regulations provide that anyone who intends to engage in air transportation for compensation or hire must obtain both (1) a certificate of public convenience and necessity from ost and (2) an operating certificate from FAA. Air taxis are required to register with ost in lieu of obtaining a certificate and meet liability insurance requirements. Subsequently, ost relies on the insurance company or the air taxi operator to notify it of any change in insurance coverage. Ost has three analysts at its Washington, D.C., headquarters and two analysts at its Anchorage, Alaska, office to confirm and monitor air taxi insurance coverage.

To obtain an FAA operating certificate, air taxis must demonstrate that they can operate in accordance with safety requirements. To make this determination, FAA reviews the air taxis' equipment, facilities, personnel, and manuals. Subsequently, FAA is responsible for performing periodic inspections to ensure that air taxis are complying with aviation

regulations and operating safely. FAA has about 2,600 field inspectors in 90 district offices located throughout the United States to perform inspections of all airlines, as well as other such aviation-related activities as repair stations, pilot training schools, and general aviation aircraft. FAA divides airline inspections into three categories—avionics, maintenance, and operations. Avionics inspections focus on aircraft electronic components. Maintenance inspections examine an airline's overall maintenance program, including personnel training, policies, and procedures. Operations inspections focus on such items as pilot certification and performance, flight crew training, and in-flight record-keeping.

Air Taxis Have the Highest Airline Accident Rate

Air taxis have the highest commercial airline accident rate in the United States per 100,000 hours flown. National Transportation Safety Board (NTSB) data for the 3-1/2 year period ending July 1991 show that air taxis have had a higher rate of both accidents and fatal accidents than air carriers and commuters.³ For example, from January 1990 through July 1991 air taxis had about 13 times and 5 times more accidents than air carriers and commuters, respectively.⁴ Furthermore, although air taxis carry far fewer passengers than air carriers or commuters, 88 people died in air taxi accidents during this period—the same number of people who died in air carrier accidents and 31 more than those who died in commuter accidents. Appendix II shows airline accident statistics.

According to FAA officials, aviation experts, and air taxi industry representatives, several reasons exist for this poorer accident record. First, air taxi pilots are generally less experienced and have less strict licensing requirements than air carrier and commuter pilots. Second, air carrier and commuter pilots may routinely fly into the same airport, which provides them with familiarity with the area, while an air taxi pilot may fly into many different and unfamiliar airports. Third, air taxis often fly into smaller airports that are not staffed with air traffic controllers and have fewer support facilities. Finally, air taxis, as with

²FAA performs both routine and special inspections. Routine inspections are generally spot checks performed by individual inspectors as part of ongoing surveillance. Special inspections are usually performed by a team of inspectors and provide a more comprehensive review.

³We used the number of hours flown to compare airlines' accident and fatal accident rates because other data that might provide a more appropriate measure, such as accidents per aircraft departure, either were not available or were insufficient to make reliable calculations.

⁴Calculations are based on dividing air taxis' accident rate by air carrier and commuter airlines' accident rates for the period from January 1990 through July 1991.

other airlines, will sometimes cut corners and violate safety regulations, which might lead to an accident.

FAA Inspection Oversight of Air Taxis Is Limited

FAA provides limited oversight of air taxis despite their poorer accident record. FAA's policy states that special attention must be given to air taxi operators' compliance with safety regulations. To accomplish its policy, FAA sets annual required avionics, maintenance, and operations inspections for air taxis. Inspectors in FAA's 90 district offices perform these inspections. FAA has the same annual inspection requirements for air carriers and commuters.

We recently reported that air taxis were the most prevalent type of airline that did not receive required inspections. Specifically, our analysis of FAA's fiscal year 1990 inspection data showed that 855 (27 percent) of about 3,200 air taxis did not receive at least one required avionics, maintenance, or operations inspection. In contrast, 31 (8 percent) of about 400 air carrier and commuter airlines did not receive at least one of these inspections. We also reported that FAA allocates some work hours for required inspections while other work hours can be shifted among airline or other aviation-related inspections, including required inspections. We further reported that (1) FAA had not analyzed its inspection data to determine whether its required annual inspections were achieved and (2) the inspection data base was inaccurate. Because of inaccurate data, the number of FAA's accomplished required inspections may be lower or higher than our analysis found. FAA recognizes its data base problems and is examining the reliability of the information.

FAA inspection oversight has had limited effectiveness in discovering air taxi operators' safety violations leading to emergency revocation

⁵Air taxis that operate aircraft under visual flight rules are not required to receive avionics inspections.

⁶Aviation Safety: Problems Persist in FAA's Inspection Program (GAO/RCED-92-14, Nov. 20, 1991). Since this report was issued, FAA provided us information resulting in a reduction of air taxis that did not receive the required avionics inspection. For additional information on FAA's data base problems see Aviation Safety: Needed Improvements in FAA's Airline Inspection Program Are Underway (GAO/RCED-87-62, May 19, 1987) and Aviation Safety: FAA's Safety Inspection Management System Lacks Adequate Oversight (GAO/RCED-90-36, Nov. 13, 1989).

orders. In October 1991 we reported that from January 1987 through May 1991 FAA issued 52 emergency revocation orders against airlines—38 against air taxi operators. Our analysis of the 38 cases showed that FAA became aware of the safety violations that led to revocation in 23 cases (61 percent) as the result of tips from company employees, competitors, and consumers, or from investigations initiated as a result of air taxi accidents, rather than through routine or special inspections.

For example, in one case an air taxi crashed into a residential area on approach to Logan International Airport in Boston, Massachusetts. The pilot was killed and three people on the ground were severely injured. NTSB found that the pilot was not qualified. Prior to the accident, FAA had had no indication of problems. However, as a result of the accident, FAA conducted a special inspection of the company. The inspection revealed numerous serious safety violations that led to the emergency revocation order, including using unqualified pilots, falsifying maintenance records, and flying with improperly secured cargo. In another case, an air taxi employee provided a tip to FAA that the owner had falsified an airplane's maintenance records and used an aircraft for air ambulance service when not authorized to do so. Following the tip, FAA inspectors performed an investigation that provided evidence in support of the allegations and resulted in the emergency revocation order.

FAA's policy states that inspectors should discover violations and potential violations at the earliest possible time to ensure safe airline operations and regulatory compliance. However, despite periodic inspections, in 7 of the 38 cases the violations occurred a year or more before FAA inspectors discovered them. The violations included using pilots who had not passed competency tests, operating unairworthy aircraft, and operating an aircraft in a careless manner.

FAA officials and inspectors told us that it is sometimes difficult to plan and perform certain types of inspections because air taxis provide unscheduled service. Furthermore, officials and inspectors informed us that some violations, such as falsifying records or using unauthorized

⁷FAA issues an emergency revocation order when it determines that an immediate safety need exists to prevent an airline from conducting flight operations. An emergency revocation order takes effect immediately on issuance. Emergency revocation of a domestic airline's operating certificate is the most severe enforcement action FAA can take. Other enforcement actions include revoking certificates on a nonemergency basis, suspending them, or amending them; civil (financial) and criminal penalties; and aircraft seizure.

⁸Aviation Safety: Emergency Revocation Orders of Air Carrier Certificates (GAO/RCED-92-10, Oct. 17, 1991).

aircraft and pilots, are difficult to detect. Additionally, some inspectors said that a heavy work load affected their ability to perform inspections. We recently reported that FAA does not have the information needed to determine whether inspection resources are effectively used. We also found that FAA performs inspections on the basis of airlines' fleet size rather than performance data. Targeting is important because FAA may never have enough resources to inspect the total operations of all airlines all the time. Recently, FAA has begun developing a system—the Safety Performance Analysis Subsystem—that would assess airlines' safety risk, including air taxis, so that it can more effectively target its inspection resources. FAA plans to develop and evaluate a prototype system for airlines by fiscal year 1993.

According to Department of Transportation officials, air taxis carry less than 1 percent of the flying public and the inspection resources dedicated to air taxi operators are adequate relative to the risk they present. However, 1 percent of the flying public represents about 5 million passengers. Also, as with any airline crash, risk goes beyond those on board aircraft. For example, an April 1991 midair collision between an air taxi and another aircraft resulted in the deaths of not only those on board—Senator John Heinz and four pilots—but also two children who were playing in a schoolyard. NTSB's accident investigation found that because of a heavy work load, the FAA inspectors' oversight of the air taxi pilots' training and proficiency checks was inadequate and contributed to the accident. NTSB had noted the problem of inadequate inspector oversight in previous accident investigations and had recommended that FAA study the adequacy of its inspector staffing. FAA plans to complete this study in May 1992.

FAA Found Air Taxi Safety Violations Not Detected by Routine Inspections In 1985 FAA conducted a special inspection of 843 randomly selected air taxis—22 percent of the total number at the time. FAA's 1986 report summarizing the results cited 10,869 unsatisfactory inspection findings, including 6,266 (58 percent) that were considered to have significant adverse safety effects, such as failure to maintain adequate emergency equipment and adequately train flight crews and pilots. As a result, 89 air taxi operators voluntarily surrendered their operating certificates, and FAA revoked three certificates and suspended three others. FAA concluded that its air taxi surveillance was inadequate because the safety

⁹Aviation Safety: Problems Persist in FAA's Inspection Program (GAO/RCED-92-14, Nov. 20, 1991) and Department of Transportation: Enhancing Policy and Program Effectiveness Through Improved Management (GAO/RCED-87-3, Apr. 13, 1987).

violations leading to the certificate surrenders, revocations, and suspensions had not been discovered by routine inspections. On the basis of the inspection results, FAA estimated that 400 more air taxi operators from the unsampled population would have voluntarily surrendered their certificates if FAA had inspected them.

As a result of the special inspection, FAA recommended that it perform routine inspections of all air taxis to ensure compliance with the regulations and initiate a systematic program that, over several years, would provide for special inspections of all air taxis. According to headquarters officials, FAA's annual air taxi inspection requirements satisfy the recommendations. However, FAA's annual inspections fall short of meeting the recommendations because 27 percent of air taxis did not receive at least one of the required avionics, maintenance, or operations inspections in fiscal year 1990. Also, FAA has not conducted an air taxi industry-wide special inspection since 1985, although, according to FAA, special inspections are more likely to identify and resolve long-standing safety problems sooner than routine inspections.

FAA's special inspection program, the National Aviation Safety Inspection Program (NASIP), includes air carriers and commuters but only those air taxis that provide helicopter emergency medical service. 10 Each year FAA selects NASIP candidates but has not included other air taxi operators because it considers air carriers, commuters, and other aviation-related activities, such as pilot and aviation maintenance technician schools, to have a higher inspection priority. Since NASIP started in 1986, FAA has inspected only four emergency medical service air taxis—all in fiscal vear 1988—and found serious problems. Of the 312 findings, FAA determined that 257 (82 percent) were regulatory violations. These safety violations included inadequate maintenance and preventive maintenance programs and exceeding pilot and flight crew flying time limitations and rest requirements. Inspectors filed 65 enforcement actions against the four emergency medical service air taxis. According to the Director. Flight Standards Service, these enforcement actions are complete.

¹⁰According to FAA guidance, NASIP complements routine inspections by providing the flexibility to focus inspection efforts where they are most needed, including circumstances that indicate a need for immediate additional surveillance.

Air Taxis Are Exempt From OST Economic Fitness Reviews

While FAA issues operating certificates that have air safety as their central function, ost reviews the economic factors pertinent to airline operations and issues certificates of public convenience and necessity to potential air carriers. Before ost can issue a certificate, it must find an applicant "fit, willing, and able" to properly perform air transportation in conformance with applicable rules and regulations. Commuters and air taxis are statutorily exempt from obtaining an ost certificate and undergoing the related economic fitness review.¹¹ Air taxis are required only to register with ost and meet liability insurance requirements.

Air carriers and commuters that have to meet ost economic fitness requirements must demonstrate, among other things, that they have (1) sufficient financial resources to operate and (2) a satisfactory compliance attitude. Subsequently, ost is required to conduct periodic reviews to ensure that these airlines continue to meet the established economic fitness criteria. According to the former Assistant Secretary for Policy and International Affairs, ost's economic fitness reviews, combined with FAA's inspections, provide complementary safety oversight.

According to ost officials, imposing economic fitness requirements on air taxis would present several problems. First, ost would have to significantly increase its staff to review the large number of air taxis. Ost has eight staff members to perform initial and continuing fitness reviews on air carriers and commuters. Second, ost believes that air taxis would incur significant costs to meet fitness requirements and many companies might go out of business. Third, imposing economic fitness requirements on air taxis might be a barrier to entry in this most basic category of air service. Ost believes that requiring air taxis to meet economic fitness standards would not provide a cost-effective safety benefit. However, ost could not provide documentation supporting this position.

Financial Distress Contributed to Safety Problems

The results of several statistical studies that we reviewed of the relationship between financial conditions and safety are mixed—some found a weak relationship and others found none. As a result, the research has not demonstrated a clear relationship between finances

 $^{^{11}\}mathrm{A}$ separate statutory provision requires that commuter airlines providing service on certain routes be subject to an OST economic fitness review.

¹²To obtain a favorable fitness finding, an applicant must demonstrate the financial capacity to cover start-up and the first 3 months of operating expenses. After receiving OST authority, air carriers and commuters under financial distress, including bankruptcy, are subject to increased monitoring but do not lose their operating authority unless they are unable to operate safely.

and safety. However, all but one of the studies used accidents, incidents, or maintenance expenditures, but not safety violations, as the measure of safety. Furthermore, because of limited data, none of these studies focused on air taxis.

Despite the lack of strong evidence from these studies, FAA officials and inspectors told us that the air taxi industry is very competitive and some companies will cut corners to save money and gain a competitive edge. Furthermore, according to FAA inspectors and documents we reviewed, in 18 (47 percent) of the 38 air taxi emergency revocation cases, financial distress adversely affected how the companies operated. For example, one air taxi was in financial distress following a breakup of the company's partnership and a loss of customers. The partner who remained with the company had his pilot's license suspended because, to save money, he disconnected equipment on an aircraft, which had the effect of delaying a required engine overhaul. In addition, to save the costs of paying another pilot, the partner flew with a suspended license and falsified pilot flight and duty time records to show that the other pilot was making the flights that he made.

In 1988 NTSB determined that a commuter airline's financial distress contributed to a fatal accident. As a result, NTSB recommended that FAA provide inspectors with indicators of airlines' financial distress that suggest when increased surveillance is warranted. In response, FAA's fiscal year 1989 inspection program guidance instructed inspectors to be alert to an airline's financial problems. However, the fiscal year 1992 inspection program guidance does not include this instruction. Furthermore, FAA's inspection handbook includes guidance and procedures for inspectors to follow only when airlines merge, acquire other airlines' assets, file for bankruptcy, or change ownership. However, an airline can be under financial distress and not meet these specific circumstances.

Poor Compliance Attitudes Led to Safety Violations in Most Emergency Revocations We found that a poor compliance attitude was a factor that led to violations resulting in air taxi emergency revocations. In 32 (84 percent) of the 38 cases, the air taxi owners or managers intentionally violated safety regulations. For example, in one case, despite repeated requests by FAA inspectors to make repairs, a company's president flew an aircraft with a faulty wing component that could have caused loss of control during flight. In another case, managers coerced pilots to operate aircraft in unsafe weather conditions and with improperly loaded and secured cargo. The company fired pilots who refused to accede to its demands to violate safety regulations.

Conclusions

FAA finds its inspection oversight adequate, but air taxis' higher accident rate and FAA's frequent inability to detect serious safety violations is cause for concern. Although most air travelers fly on air carriers and commuters, millions of people fly on air taxis and depend on FAA to ensure their safety. FAA's providing adequate and effective inspection oversight would reduce the potential risk of air taxi accidents. Furthermore, NTSB has found that inadequate inspection oversight has contributed to airline accidents, including a recent air taxi fatal crash. As a result, FAA is studying whether its inspector staffing level is adequate to meet its oversight requirements.

Given the accident risk air taxis' pose, FAA's ensuring the safe operations of this portion of the aviation industry should be a high priority. However, FAA's routine air taxi inspections have been limited, and the inspections that were conducted generally did not discover serious safety violations of air taxis that subsequently had their operating certificates revoked. In addition, despite limited resources, FAA does not target inspections on the basis of airline performance data. Although special inspections have been more effective than routine inspections in discovering safety violations, FAA has not performed industry-wide special inspections since 1985 and has included only a few air taxis in NASIP. Because of the limited degree of FAA's inspection oversight, air taxis can operate with violations that pose a safety risk to the public.

The financial distress and poor compliance attitude of some air taxi operators were factors that contributed to committing safety violations that led to emergency revocation orders. Since FAA has not analyzed its air taxi inspection data or performed special industry-wide inspections, it cannot determine the extent to which financial distress and a poor compliance attitude have contributed to safety violations across the industry. Furthermore, although air taxis are not required to obtain an ost certificate and undergo an economic fitness review, the costs and safety benefits of additional oversight have not been determined. In our view, air taxis' poorer safety record justifies additional scrutiny of the costs and safety benefits of economic oversight.

In addition, FAA's guidance and procedures do not ensure that special surveillance will be done on all financially distressed airlines. FAA's guidance provides only for surveillance of airlines that are undergoing bankruptcy, mergers, acquisitions, or ownership changes. However, an airline may not meet these specific circumstances but still be in financial distress that could result in safety problems.

Recommendations

To improve oversight of the air taxi industry, we recommend that the Secretary of Transportation direct the Administrator, FAA, to perform (1) a minimum level of required inspections and (2) periodic, industry-wide special inspections. We also recommend that FAA revise its inspector handbook to provide guidance and procedures that would allow for special surveillance of any airline in financial distress. We further recommend that the Secretary study the extent to which air taxi operators' financial distress and poor compliance attitude contribute to safety violations and report the results to the Congress.

Matters for Congressional Consideration

On the basis of information in this report, the Secretary's study, and any oversight hearings, the Congress may wish to consider whether air taxis' exemption from ost certification and economic fitness review remains appropriate in light of air taxis' poorer safety record. Furthermore, if the Secretary does not perform the recommended study, the Congress may wish to mandate that it be done.

As requested, we did not obtain written agency comments on this report. However, we discussed the facts presented with FAA and OST officials, who generally agreed with the information provided, and incorporated their views as appropriate. Our work was conducted between May 1991 and September 1991 in accordance with generally accepted government auditing standards. Details on our objectives, scope, and methodology are contained in appendix I.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will provide copies of this report to the Secretary of Transportation; the Administrator, FAA; the Director, Office of Management and Budget; and other interested parties. We will also make copies of the report available to others upon request.

Our work was performed under the direction of Kenneth M. Mead, Director, Transportation Issues, who can be reached at (202) 275-1000. Other major contributors to this report are listed in appendix III.

Sincerely yours,

J. Dexter Peach

Assistant Controller General

B-246219

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Abbreviations

FAA	Federal Aviation Administration
GAO	General Accounting Office
NASIP	National Aviation Safety Inspection Program
NTSB	National Transportation Safety Board
OST	Office of the Secretary of Transportation
PTRS	Program Tracking and Reporting System
RCED	Resources, Community, and Economic Development Division

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Objectives, Scope, and Methodology

The Chairman, Subcommittee on Investigations and Oversight, House Committee on Public Works and Transportation, asked us to (1) determine the Federal Aviation Administration's (FAA) level of inspection effort for air taxis and (2) provide information on the Office of the Secretary of Transportation's (OST) economic fitness standards as applied to air taxis. To meet these objectives, we performed work at FAA and OST headquarters in Washington, D.C.; FAA's Eastern Region in New York and Southwest Region in Texas; and FAA district offices in Maryland and Pennsylvania. We interviewed FAA district and regional office inspectors and managers and OST officials who are responsible for air taxi oversight. We also interviewed National Air Transportation Association officials.

In addition, we reviewed FAA's and OST's regulations, policies, and procedures governing oversight of air taxi operators. We analyzed FAA's emergency revocation orders on 38 air taxis and other documents, including air taxi operating certificates, maintained in district and regional office files. We also analyzed FAA inspection records contained in its Program Tracking and Reporting System (PTRS) and its predecessor Work Program Management System data bases. We did not assess the reliability of FAA's data bases. FAA is assessing the reliability of PTRS, but officials could not estimate when they would complete this activity.

We supplemented data from FAA data files and data bases with information obtained through discussions with FAA inspectors knowledgeable about each air taxi emergency revocation order to include information on the effect of the company's financial condition and compliance attitude. Because of the age of some revocations, FAA's data bases did not show inspection information on the air taxi operator. Therefore, we relied solely on inspectors' recall of previous inspection activity that, in some cases, occurred 4 or 5 years ago. We discussed with OST officials the issues concerning requiring air taxis to meet economic fitness standards.

We reviewed several studies that used statistical analysis to determine the relationship between an airlines' financial condition and safety performance. All but one of these studies used accidents, incidents, or maintenance expenditures rather than violations to measure safety. Also, none of the studies examined the relationship between air taxi financial distress and safety.

We conducted our work from May 1991 through September 1991 in accordance with generally accepted government auditing standards.

Airline Accident Statistics

	Calendar year						
	1988	1989	1990	1991*			
Accidents	-						
Carrier	29	30	26	16			
Commuter	19	17	14	10			
Taxi	96	113	104	53			
Accident rate ^b							
Carrier	.26	.27	.23	.25			
Commuter	.91	.76	.63	.77			
Taxi	3.38	3.61	3.28	2.84			
Fatal accidents							
Carrier	3	11	6	3			
Commuter	2	5	2	4			
Taxi	27	26	26	18			
Fatal accident rate ^b							
Carrier	.03	.10	.05	.05			
Commuter	:10	.22	.09	.31			
Taxi	.95	.83	.82	.96			
Fatalities							
Carrier	285	278	39	49			
Commuter	21	31	4	53			
Taxi	58	88	40	48			

^a1991 data are through July 31, 1991.

Source: NTSB.

^bBased on 100,000 hours flown.

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C. John H. Anderson, Jr., Associate Director Mary Ann Kruslicky, Assistant Director Roy K. Judy, Assignment Manager Charles R. Chambers, Evaluator-in-Charge

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