
Office of Inspector General

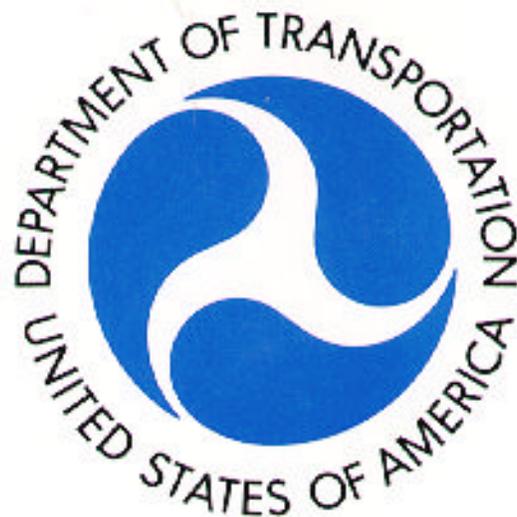
Audit Report

Oversight of the Air Tour Industry

Federal Aviation Administration
Department of Transportation

Report Number: AV-1999-099

Date Issued: May 28, 1999





**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Office of Inspector General

Subject: **ACTION:** Report on Oversight
of the Air Tour Industry, AV-1999-099

Date: May 28, 1999

From: Alexis M. Stefani
Deputy Assistant Inspector General for Aviation

Reply to
Attn of: JA-10 X60500

To: Federal Aviation Administrator
Assistant Secretary for Transportation Policy
General Counsel

This report summarizes our review of the Federal Aviation Administration's (FAA) oversight of the Air Tour industry. We are providing this report for your information and use. In preparing this report, we considered FAA's May 13, 1999 and the Office of the Secretary's (OST) April 29, 1999 comments to our draft report. A synopsis of the report follows this memorandum.

In commenting on our draft report, FAA concurred with our recommendations to complete publication of the proposed air tour rule and begin to develop a universe of air tour operators using information from safety inspections. FAA partially concurred with our recommendation to direct FAA district offices to implement the air tour surveillance procedures as required by the Inspector's Handbook. Based on FAA's reply, we do not consider the three recommendations to be resolved.

OST provided verbal comments to the draft report, agreeing to promptly complete their review of the proposed rule. They also made technical comments which we have incorporated in the final report. On April 30, 1999, FAA recalled its proposed rule for modification. This will delay OST's review. Therefore, we request that OST provide us a target time frame for completing its review once FAA resubmits the draft rule.

We appreciate the cooperation and assistance provided by your staff during the review. If you have any questions or need further information, please contact me at x60500 or Alan D. Robson, Director for Aviation Safety Audits, at 404-562-3770.

Attachment

Oversight of the Air Tour Industry

Federal Aviation Administration Department of Transportation

AV-1999-099

May 28, 1999

Objectives

Our objectives were to determine whether (1) the Federal Aviation Administration (FAA) implemented permanent regulations and guidelines for air tour operators, (2) the Department of Transportation established an accurate database of air tour operators nationwide, and (3) FAA implemented annual surveillance programs for air tour operators.

Background

Air tours are commercial sightseeing flights, usually using small airplanes or helicopters. Approximately 2,100¹ air tour operators provide commercial sightseeing flights to an estimated 2,000,000 passengers annually.

The air tour operating environment is very different from other small commercial air operations. Approximately 80 percent of air tour operators are **not** certificated² for commercial passenger service by FAA. These small operators must operate within a 25-mile radius of their take off point and may not make any interim landings. The airspace near popular scenic areas may be congested and is often limited in geographic size. Unlike other commercial operators, air tour flights are usually not under the control of an FAA air traffic control facility. Air tours also fly at relatively low altitudes in close proximity to water, ground obstructions, and varied height terrain.

The National Transportation Safety Board (Safety Board) has been urging FAA to improve its oversight of air tour operators since the Safety Board's 1987 accident report on a midair collision over the Grand Canyon in which 25 people died. FAA issued special temporary regulations for the Grand Canyon (in 1988) and Hawaii

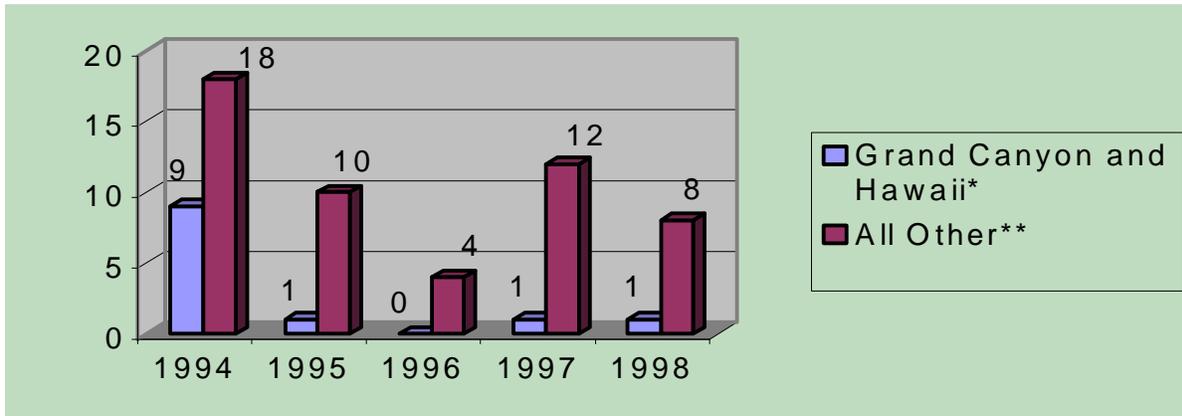
¹ Although there is no database of air tour operators in the United States, FAA provided an estimate on the number of operators and passengers in its draft rule for nationwide air tour standards.

² FAA is responsible for ensuring that an operator's programs, systems, and intended methods of compliance with Federal aviation regulations are thoroughly reviewed, evaluated, and tested prior to issuance of an operating certificate. Ongoing oversight by FAA inspectors through an annual surveillance plan is intended to ensure continued compliance after certification.

(in 1994) in response to Safety Board investigations of specific fatal accidents in those locations. FAA also established specialized air tour surveillance units for the Grand Canyon and Hawaii. Since the regulations and specialized FAA oversight of air tour operators were implemented, the number of air tour accidents in the Grand Canyon and Hawaii have declined significantly. In the rest of the United States, there were 31 air tour accidents, resulting in 25 fatalities and 52 injuries between April 1995 and June 1998.

Figure 1 shows the decline in accidents in the Grand Canyon and Hawaii after new regulations went into effect for Hawaii in October 1994, compared to the number of accidents occurring in the rest of the United States.

Figure 1. Air Tour Accidents Nationwide Compared to Grand Canyon and Hawaii (1994 through 1998)



* The 9 accidents in Hawaii in 1994 preceded the additional regulations and FAA oversight; there were no air tour accidents in the Grand Canyon from 1994 through 1998.

** Alaska, Arizona, and Florida have the most accidents outside of the Grand Canyon and Hawaii.

In a 1995 special report on air tours, the Safety Board recognized the safety improvements in the Grand Canyon and Hawaii resulting from FAA's special regulations and recommended that FAA develop and implement *national* standards by December 31, 1995. The report stated "...the Safety Board must reiterate that a permanent nationwide policy for air tour operations is appropriate to define the industry, track its performance, and ensure equal treatment regardless of the points of tourist interest or the location of the operator." FAA's July 1997 response to the report promised a rule on national air tour standards by December 1997.

Results in Brief

FAA's Involvement Improved Air Tour Safety

FAA's regulatory and surveillance efforts in the Grand Canyon and Hawaii have shown that air tour accidents can be reduced through increased FAA oversight of the industry. Since special regulations went into effect for those two locations, the Grand Canyon has had no air tour accidents over the regulated area. Hawaii's air tour accidents dropped from 24 to 3, and fatalities dropped from 24 to 6 for comparable time periods before and after the special regulations.

Our review of accident reports for the 31 air tour accidents that occurred from April 1995 to June 1998 in areas not covered by special air tour regulations, showed that 17 accidents with 22 injuries and 23 fatalities resulted from operator or operational errors. Mechanical problems with the aircraft contributed to 13 of the 31 accidents, resulting in 27 injuries and 2 fatalities. Safety Board records did not identify the cause of the remaining accident.

Slow Progress on Air Tour Rules

Although recommended by the Safety Board in 1995, and promised by FAA to be implemented by December 1997, FAA has yet to complete actions to improve air tour safety nationwide. In our opinion, the air tour rulemaking to improve air tour standards and the air tour database to aid FAA in better identification and oversight of air tour operators nationwide has been delayed too long and should be moved forward quickly.

FAA's draft proposed rule, submitted to the Office of the Secretary of Transportation (OST) for review in December 1998, is modeled after the special regulations in the Grand Canyon and Hawaii. It should positively impact air tour safety in other scenic areas across the country, but it has not yet been published for comment. Until the OST review of the rule is complete, it cannot be published. In addition, a lengthy comment period (6 months) and the possibility of changes based on comments received means that a final rule and improved air tour safety requirements nationwide are a year or more away.

On April 30, 1999, subsequent to the issuance of the draft report, FAA recalled the proposed rule from OST to amend it. This will cause additional delays to the issuance of the air tour operator rulemaking.

Until the rule is implemented, the majority of air tour operators will conduct sightseeing flights under less demanding safety regulations. For example,

noncertificated air tour operators can use pilots without limitations on the amount of time the pilots can be in flight, whereas other commercial pilots cannot be scheduled for more than 8 hours of flight time in any consecutive 24-hour period. The permanent rule would bring all air tour pilots under these flight time restrictions. In addition, FAA would review operator records to ensure that pilots comply with these requirements.

Air Tour Database Not Developed

The Department is committed to achieving safer skies and reducing aviation fatalities. In support of this commitment, FAA intends to focus its oversight by analyzing commercial air operations data, but sufficient data on nationwide air tour operations are not presently available. The Safety Board also recognized the need for data on which to base decisions when it recommended in 1995 that an air tour database be established.

In response to that recommendation, OST planned to propose an alternative solution that would allow FAA to collect the needed data. However, OST did not take action to collect the necessary information because it was waiting for a definition of “air tour” in the proposed FAA rule. In a January 1999 letter, the Department advised the Safety Board that FAA was nearing publication of a draft rule that would define “air tour.” According to the letter, FAA will develop a stand alone air tour survey to collect the necessary data, provided this solution is acceptable to the Office of Management and Budget. Therefore, the Department requested that the Safety Board change the addressee for this recommendation to FAA. Since the rule has not been finalized, it could be a year or more before data collection can begin.

Without an air tour database, FAA’s ability to provide nationwide oversight to the estimated 2,100 air tour operators is limited because the agency does not know who all the air tour operators are or where they are located. Identification of the universe of air tour operators is an essential first step in effectively identifying air tour risks and targeting FAA surveillance.

FAA Has the Means to Begin Oversight and Data Collection

Although the proposed rule and the establishment of a database have both been delayed, FAA has had nationwide requirements since 1992 that could improve oversight of air tours until the proposed rule is finalized and the database is created. Nationwide requirements on surveillance of air tour operators were provided to FAA district offices first as a Handbook Bulletin in 1992 and then added to FAA Order 8400.10, the Air Transportation Operations Inspector's

Handbook (the Handbook) in late 1994.³ The Handbook makes principal operations inspectors⁴ responsible for a number of specific air tour oversight functions, including establishing recommended flight parameters such as routes, altitudes, and direction of flight; and identifying the need for special regulations.

FAA also identified non-certificated air tour operations as an emphasis area in its 1998 and 1999 National Flight Standards Work Program Guidelines (National Work Program). These Guidelines were not mandatory, but suggested that district offices include inspections of non-certificated air tour operators in their work program. Implementation of both the Handbook and the Guidelines on air tours has been inconsistent. A search of FAA's 1998 inspection records for the special emphasis air tour code found only three inspections of this type of operators.

We contacted nine district offices identified as having air tour operations and found that additional inspections were done but identified under different inspection codes. Four of the nine offices have done air tour inspections either under the Handbook, the National Work Program emphasis, or because of local concerns. The remaining five offices either do not give air tours a high priority in their work under the National Work Program, have not implemented all Handbook requirements, or believe they have few air tour operators.

The Handbook also makes principal operations inspectors responsible for identifying actual or potential air tour operators. FAA could use this universe as a first step in developing a database to target air tour surveillance at those locations with the highest risk factors. Officials in FAA's Office of Regulation and Certification are concerned that requiring inspectors to initiate activities to identify air tour operations could place undue burdens on an already stretched inspector workforce for what is, in their opinion, a relatively low risk area.

Recommendations

To improve air tour safety nationwide, FAA should:

- complete publication of the proposed rule in the Federal Register no later than July 30, 1999.
- direct district offices to implement the air tour surveillance procedures required by the Handbook; and

³ FAA Order 8400.10, Change 10, Volume 3, Chapter 12, Section 1867, December 20, 1994

⁴ Principal operations inspectors are experienced pilots who evaluate the qualifications and training of air crews; perform en route cockpit inspections; and determine the adequacy of operator facilities, equipment, procedures, and overall management to ensure safe operation of aircraft.

- develop a universe of air tour operators using information obtained from FAA safety inspectors.

To enable FAA to complete publication of the rule, we recommend that OST:

- promptly complete their review of the proposed rule.

Management Position

FAA concurred with two of our three recommendations and concurred in part with the third recommendation. FAA agreed to complete publication of the air tour rule but did not commit to a publication target date. FAA concurred with development of an air tour database and noted that it had begun work on this effort through its operations specifications database. FAA concurred in part to our recommendation to direct district offices to implement air tour surveillance procedures, stating it would not be reasonable to apply this guidance to district offices that have no air tours.

In commenting on our draft report, FAA asserted that 80 percent of air tours are highly regulated. While agreeing that data are scarce and estimates on air tours are rough, FAA believes the majority of air tours are conducted by larger operators that are subject to its oversight. Further, FAA noted that the proposed rule was submitted to OST on December 15, 1998, but had been recently recalled by FAA to clarify its application to special air tours such as charity events.

OST agreed with our recommendation to promptly complete its review of the FAA proposed rulemaking for the air tour industry. The recall of the rule by FAA will delay OST's review.

Office of Inspector General Comments

Development and publication of a rule to improve air tour safety has been delayed 4 years and postponed important safety improvements. In our opinion, it is critical that FAA establish and commit to a target date for prompt publication of the rule. We recognize that the rule has been recalled from OST for changes relating to special operators. If the July 30, 1999 date we recommended for publication of the proposed rule cannot be met, we request that FAA expeditiously establish a target date that is realistic but does not slow down this important safety initiative. We request this information be provided to us.

On our recommendation that existing air tour surveillance guidance be implemented at all district offices, we agree that additional oversight is not needed in district offices where air tours do not operate. However, we believe implementation of the Handbook's provisions is necessary to establish which offices do not have air tour operations in their areas of responsibility and heighten awareness of the issue throughout the inspector workforce. As stated in our report, minimal inspector resources would be required to make such a determination.

FAA is beginning to develop an air tour database. However, we are concerned that this effort may not include all air tour operators. The effort is being done through the operations specifications database. Because only the larger, certificated air tour operators are required to have operating specifications, small, less regulated operators would be excluded. We request that FAA clarify whether small, less regulated operators will be included in this database.

Without a determination of the population of air tour **operators**, the assertion that the majority (80 percent) of air tours are highly regulated cannot be accurately supported. FAA's premise is based on the fact that a large percentage of the population of air tour **operations** occur in Hawaii and the Grand Canyon. Data in our report show that accidents continue to occur in the other parts of the United States, reaffirming the need for FAA to continue and quickly complete its efforts to implement the rule for improved air tour safety. Further, the small air tour operators, which are not highly regulated by FAA, were identified by FAA in its draft rule as the air tour operators having the highest incidence of accidents.

We do not consider the three recommendations resolved. For recommendation one, we request that FAA provide us a target date for the publication of the air tour rule. We also request FAA reconsider its partial concurrence and direct district offices to determine whether there are any air tour operators in their area of responsibility that are not subjected to FAA oversight, and where air tour operators are identified, implement air tour procedures required by the handbook. Further, we request FAA to clarify whether development of the database will include all air tour operators and provide an action target date for completion of the database.

We request that OST provide us with a target time frame for an expedited review of the proposed rule once it is received from FAA.

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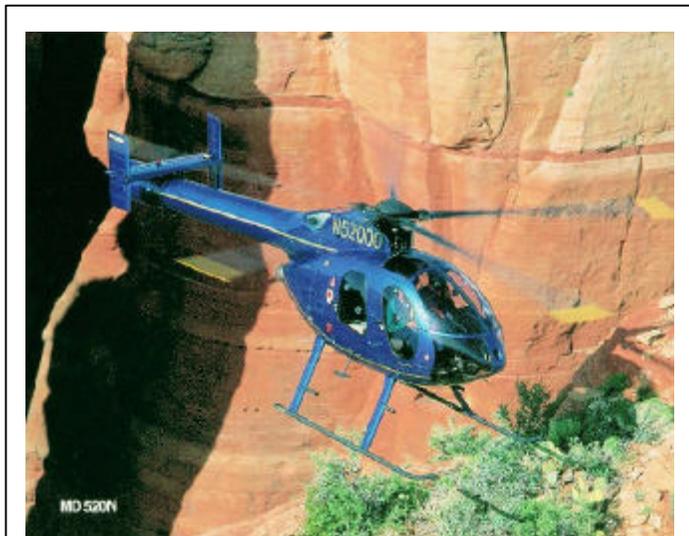
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I. Introduction

Background

Air tour operators provide commercial sightseeing flights to an estimated 2,000,000 passengers annually. Although about 2,100 air tour operators are dispersed throughout the country, the Grand Canyon National Park and Hawaii have a high volume of air tour traffic because of their extraordinary scenic beauty. The air tour operating environment is very different from other small commercial air operations. Among the unique conditions often found in the air tour industry are:

- lack of radar coverage or traffic advisories from an air traffic control facility;
- air traffic congestion near popular scenic areas, which are often limited in geographic size;
- a mix of helicopters and fixed wing aircraft, which have different flight characteristics such as speed and maneuverability; and
- flights at relatively low altitudes in close proximity to water, ground obstructions, and varied height terrain.



Air Tours May Operate Near Rugged Terrain

These conditions make air tour operations very different from on-demand air taxi and scheduled commuter operations, which fly along established air routes at higher altitudes, usually separated from other air traffic by FAA air traffic controllers. The operations of air taxi and scheduled commuter air carriers are governed by specific FAA requirements contained in Title 14 Code of Federal Regulations, Parts 121 and 135. These requirements impose standards for aircraft maintenance and crew training and experience. FAA also has a structured oversight program to ensure Part 121 and Part 135 operators' continued compliance with FAA requirements.

Regulation of Air Tour Operators

Part 91 provides basic safety rules for all aircraft. Commercial operators carrying passengers for hire, however, are subject to the more demanding requirements of Parts 121 or 135. An exception to Part 135, which governs the operations of most small commercial operators who carry paying passengers, allows air tours to operate under less demanding Part 91 requirements. For example, Part 135 pilots in command must have a minimum of 500 hours of flying experience versus a 250 hour minimum for a Part 91 pilot. Air tour companies operating under Part 91 are not certificated by FAA and do not have an FAA inspector assigned to monitor their operations. They are normally inspected by FAA only when a problem or an accident occurs. As a condition for operating under these less demanding regulations, Part 91 air tours must operate within a 25-mile radius of their take-off point and may not make any interim landings.

Conversely, Part 135 operators are subject to FAA oversight through an annual surveillance plan developed by FAA aviation safety inspectors assigned to their specific airline. In addition, Part 135 air crews are limited in the number of hours they can fly, and FAA reviews records to make sure the carrier is complying with the pilot time and duty limitations. Thus Part 135 air tour operators are subjected to at least a minimum level of required FAA oversight. (See Exhibit A for additional details on differences in Part 91 and Part 135 requirements.)

Since there is no database of air tour operators, we obtained estimates of air tour operations from FAA's draft rule. FAA estimates that 1,670 operators with 3,100 aircraft currently provide commercial air tour flights under the less rigorous Part 91, while about 450 operators with 1,300 aircraft provide commercial air tours under Part 135. For a number of Part 91 air tour operators, sightseeing flights are only a sideline to other commercial operations, such as providing flying lessons and renting airplanes. Although precise statistics are not kept, FAA estimates that approximately 40 percent of all Part 91 air tour operators fly air tours fewer than 10 hours per aircraft per year.

Air Tours Data Reporting

DOT requires extensive traffic information on a monthly basis from large air carriers and much less information on a quarterly basis from small scheduled carriers. However, there are **no** data reporting requirements for either Part 91 or Part 135 on-demand carriers such as air tour operators. Because data on the number of passengers, miles, or hours flown are necessary to calculate accident rates, FAA can only roughly estimate accident rates for air tour and other small commercial aviation operations.

Safety Board Reports on Air Tours

The Safety Board first recommended in 1987 that FAA regulate all air tour operators under Part 135, which has more stringent standards and involves a higher level of FAA surveillance than exists under Part 91. This recommendation was included in a Safety Board report related to a midair collision over the Grand Canyon, in which 25 people died. Fatal air tour accidents in 1989 (Hawaii, 11 deaths), 1992 (Niagara Falls, 4 deaths and Hawaii, 9 deaths), and 1994 (Hawaii, 3 deaths) led to additional safety recommendations for air tour operators and a special investigation report by the Safety Board entitled "Safety of the Air Tour Industry in the United States," issued in June 1995.

In its 1995 report, the Safety Board recognized the safety improvements in the Grand Canyon and Hawaii that resulted from FAA's special regulations issued in 1988 and 1994, respectively. The report noted, however, that these regulations followed fatal accidents and called for FAA action to improve air tour oversight nationwide before another accident occurred. The report stated "...the Safety Board must reiterate that a permanent nationwide policy for air tour operations is appropriate to define the industry, track its performance, and ensure equal treatment regardless of the points of tourist interest or the location of the operator." Therefore, the Safety Board again recommended FAA make improvements in the regulation and surveillance of the air tour industry nationwide.

Department Role in Air Tour Oversight

To provide FAA a mechanism for tracking air tour performance, the Safety Board recommended in 1993 that FAA devise a method of collecting data (such as flight hours and number of passengers carried) from air tour operators, which could be used to calculate air tour accident rates. The Safety Board believed that FAA needed to know who the air tour operators were, where they were flying, and how often they were flying. FAA responded to the Safety Board that FAA was not the appropriate agency for this recommendation. The responsibility for data collection, and thus the recommendation, was transferred to OST's Office of Policy Development. NTSB repeated this recommendation to the Department in its 1995 air tour special report. In a January 1999 memorandum, the Department has proposed that FAA develop an air tour database.

Objectives, Scope and Methodology

The objectives of our audit were to determine whether (1) FAA implemented permanent regulations and guidelines for air tour operators, (2) the Department established an accurate database of air tour operators nationwide, and (3) FAA implemented annual surveillance programs for air tour operators.

We performed work between June and February 1999 and assessed FAA's progress in improving the oversight of the air tour industry. We evaluated actions FAA took to respond to selected recommendations included in the Safety Board's Special Investigation Report, "Safety of the Air Tour Industry in the United States," NTSB/SIR-95/01, issued June 1, 1995. We interviewed appropriate management officials in FAA's Office of Associate Administrator for Regulation and Certification. We also interviewed FAA managers and inspectors at the Flight Standards District Office in Las Vegas, Nevada, responsible for implementing special regulations regarding air tours in the Grand Canyon.

To gain an understanding of accident and incident history and safety concerns related to the air tour industry, we interviewed Safety Board officials and reviewed and analyzed the Safety Board's:

- 1995 Special Investigation Report, "Safety of the Air Tour Industry in the United States";
- Aircraft Accident Report for the midair collision over Grand Canyon National Park that occurred June 18, 1986;
- Accident and Incident Database for the period January 1, 1988, through June 30, 1998; and
- Recommendations Database.

We reviewed Federal Aviation Regulations Part 91, General Operating and Flight Rules; Part 119, Certification: Air Carriers and Commercial Operators; and Part 135, Operating Requirements: Commuter and On-Demand Operations, to determine the applicability and differences in the requirements of Part 91 and Part 135. We also reviewed special air tour regulations covering the Grand Canyon and Hawaii. In December 1998 we obtained and reviewed a draft of the proposed rule for National Air Tour Safety Standards. We also held discussions with FAA officials responsible for development of the proposed rule and with managers and inspectors at nine FAA district offices to obtain information about their air tour oversight activities.

We interviewed officials in the Office of the Assistant Secretary for Transportation Policy; the Office of Policy Development; and the Association of Air Tour Operators. We performed the audit in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States and included such tests of procedures and records as we considered necessary.

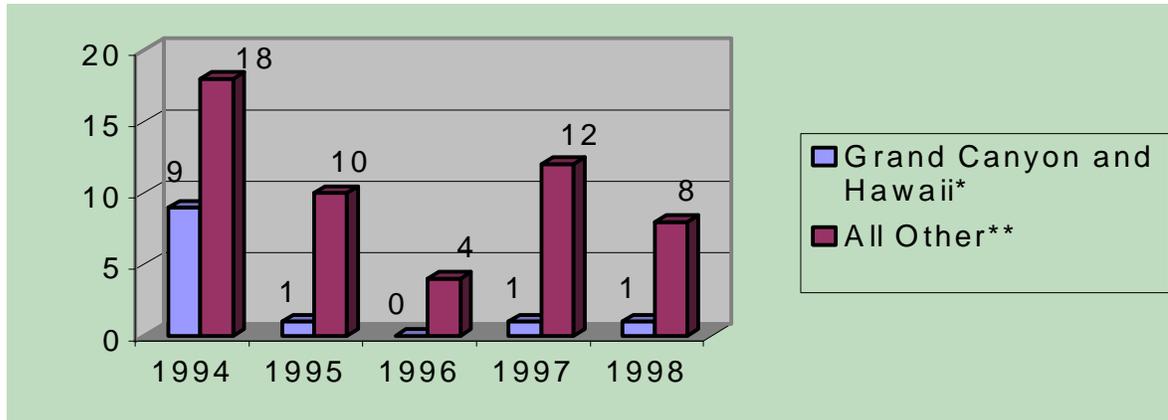
II. Results and Recommendations

FAA's regulatory and surveillance efforts in the Grand Canyon and Hawaii have shown that air tour accidents can be reduced through increased FAA oversight of the industry. Since special regulations went into effect for those two locations, the Grand Canyon has had no air tour accidents over the regulated area. Hawaii's air tour *accidents* dropped from 24 to 3, and *fatalities* dropped from 24 to 6 for comparable time periods before and after the special regulations. Although recommended by the Safety Board in 1995, FAA has not yet completed similar action to improve air tour safety nationwide. FAA's draft proposed rule, which is modeled after the special regulations in the Grand Canyon and Hawaii, should positively impact air tour safety in other scenic areas across the country, but it has not yet been published for comment. Between April 1995 and June 1998, 25 people died in 31 air tour accidents in areas not covered by special air tour regulations.

The Department is committed to achieving safer skies and reducing aviation fatalities in the future. In support of this commitment, FAA intends to focus its oversight by analyzing commercial air operations data, but sufficient data on nationwide air tour operations are not presently available. In response to a 1995 Safety Board recommendation, OST planned to propose an alternative solution that would allow FAA to collect the needed data. However, instead of initiating collection of the necessary information, OST waited for a definition of "air tour" in the proposed FAA rule. In January 1999, the details of an alternative approach to collecting operational data were completed and were described in a letter to the Safety Board from the Secretary. The letter also requested that the Safety Board transfer the recommendation back to FAA. Until there is a reliable database of air tour operators and operations, it will not be possible to accumulate operational data necessary to calculate reliable accident rates. This information is needed to assess the safety of the air tour industry, identify geographic areas that warrant additional surveillance oversight, and evaluate FAA efforts toward reduced air tour fatalities.

Although the proposed rule and the establishment of a database have both been delayed, FAA has had nationwide oversight requirements since 1992 that could improve oversight of air tours until the proposed rule is finalized and the database is created. The requirements provide a mechanism for increased attention to air tours, including identifying the universe of air tour operators. FAA could use this universe as a first step in developing a database to target air tour surveillance at those locations with the highest risk factors.

Figure 1. Air Tour Accidents Nationwide Compared to Grand Canyon and Hawaii (1994 through 1998)



* The 9 accidents in Hawaii in 1994 preceded the additional regulations and FAA oversight; there were no air tour accidents in the Grand Canyon from 1994 through 1998.

** Alaska, Arizona, and Florida have the most accidents outside of the Grand Canyon and Hawaii.

FAA's Involvement Improved Air Tour Safety

In response to specific fatal accidents, FAA increased its oversight of the air tour industry in the Grand Canyon and Hawaii, resulting in reduced accidents in those two locations. FAA's actions included issuance of special air tour regulations that targeted the causes of fatal accidents, and creation of specialized air tour surveillance units to ensure compliance with the new regulations. Since the additional oversight, there have been no accidents in the Grand Canyon area, and the accident rate in Hawaii has been reduced by 87 percent (see Figure 1). The Safety Board pointed to the successes of these changes in its 1995 report, which recommended that air tour safety regulations be expanded to the rest of the country.

Grand Canyon. Special Federal Aviation Regulation (SFAR) 50-2 was issued in 1988 as the result of a midair collision over the Grand Canyon that resulted in 25 deaths. SFAR 50-2 required air tours in the Grand Canyon area to operate under Part 135, developed a detailed route system, set minimum altitudes, and established no-fly zones in parts of the Canyon. The Las Vegas District Office also established a Grand Canyon Unit, which performs oversight of air tour



Fixed-wing Air Tours Are Separated From Helicopters in the Grand Canyon to Prevent Midair Collisions

operators in the Grand Canyon in addition to the oversight of the FAA safety inspectors assigned to the operators.

According to the unit manager, the two groups coordinate and the result is "two sets of eyes" for air tour operators. Grand Canyon Unit members have special knowledge of the air tour industry to address the unique needs of air tour operators. For example, they have established special routes to separate fixed-wing aircraft from slower helicopter traffic.

Although no accidents have occurred over the special flight rules area since 1988, our review of Safety Board accident records did identify eight air tour accidents from 1988 to the present in the jurisdiction of the Las Vegas District Office, but outside of the Grand Canyon. Most of these accidents were in the vicinity of the Grand Canyon Airport, which is outside of the special flight regulations area. These accidents resulted in 20 injuries and 22 fatalities. We found that six of the eight accidents in the district office's jurisdiction occurred between the implementation of SFAR 50-2 in 1988 and the establishment of the special air tour surveillance unit in June of 1992.

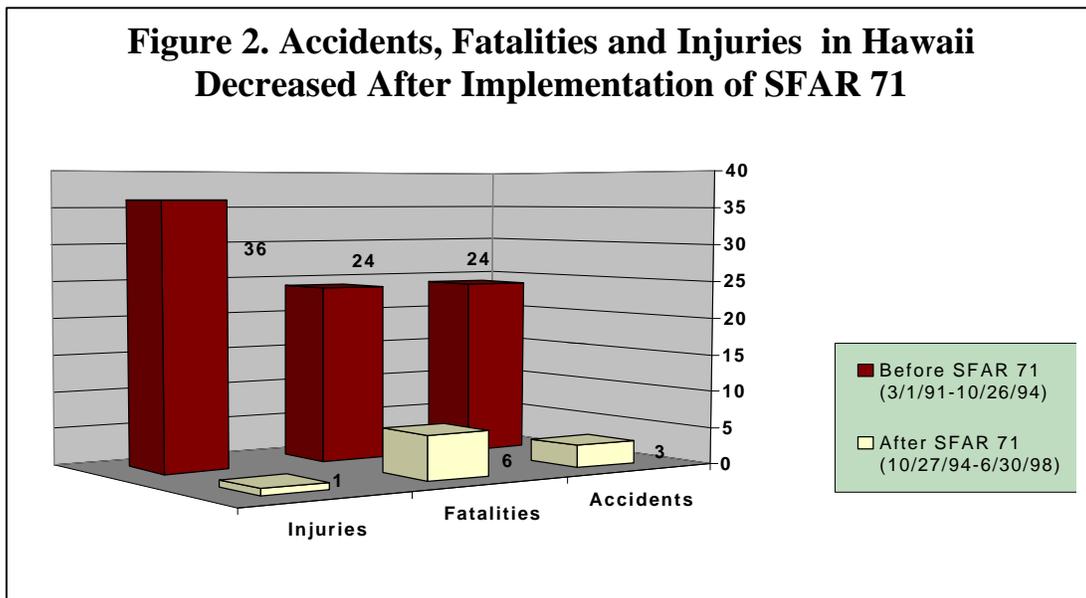
Hawaii. Special regulations (SFAR 71) and a dedicated air tour inspection unit to improve air tour safety were implemented in Hawaii in October 1994 as the result of an increase in the number of fatal accidents involving air tour aircraft. In the 9-year period between 1982 and 1991, there were 11 air tour accidents in Hawaii with 24 fatalities. Accidents escalated between 1991 and



Several Air Tour Deaths in Hawaii Occurred During Offshore Flights Near Rugged Cliffs

1994 with 24 air tour accidents and 24 fatalities, prompting Safety Board and FAA attention.

The special regulations were targeted to address the causes of these fatal accidents. Unlike the Grand Canyon, where congestion was a risk factor, FAA determined that a routing system for air tours was not necessary in Hawaii. In Hawaii, however, several fatalities resulted from crashes into water. For example, a helicopter accident in Hawaii in July of 1994 resulted in three deaths. The helicopter crashed in the water at the base of a cliff. While all seven aboard exited the helicopter uninjured, the pilot and two passengers drowned when they were unable to climb onto the rocks along the shoreline. The Safety Board reported that life preservers were found aboard the helicopter, still located in their containers beneath each seat. The special regulations addressed this type of accident by requiring either floats on single-engine helicopters or life jackets to be worn by each passenger, as well as a passenger safety briefing before air tours over water. The special regulations also require minimum flight altitudes, and helicopter performance plans and operating limitations.



The safety improvements resulting from the special regulations were especially significant in Hawaii, where air tour accidents, fatalities, and injuries have dropped dramatically, as shown in Figure 2.

Slow Progress on National Air Tour Safety Rules

Despite the successes in the Grand Canyon and Hawaii, and a decade of urging by the Safety Board, FAA has not implemented similar action for air tour operations nationwide. The Safety Board has been recommending that FAA improve its oversight of air tour operators since its 1987 accident report on a midair collision over the Grand Canyon in which 25 people died. In a 1995 report on air tours, the Safety Board recommended that FAA develop and implement national standards by December 31, 1995. Although FAA's July 1997 response to that report promised a rule on national air tour standards by December 1997, the rule was still in draft form in March 1999.

An FAA analysis determined the proposed rule was cost beneficial, but FAA managers were unsure in February 1999 if it would be held up by the Office of Management and Budget or the Small Business Administration due to the costs to small businesses to comply with the proposed rule. The proposed rule has not been published in the Federal Register. The draft rule was submitted to OST for review in December 1998. When OST has completed its review, the rule must be submitted to OMB for review, prior to publication in the Federal Register.

Once the rule is published, a comment period of 6 months will be followed by FAA analysis of any comments. The proposed rule may be changed in response to comments received and the process would then start over with publication in the Federal Register. As a result, the final rule is still months away, and air tour operators will have an *additional* year to begin complying with the new regulations. Although the draft rule was not yet published, FAA provided the Office of Inspector General with a copy.

The proposed rule would make permanent most of the special air tour regulations implemented in the Grand Canyon and Hawaii and apply them nationwide. Specifically, the proposed rule would:

- require all air tour operators to meet the requirements of Part 135 such as
 - annual FAA surveillance plan,
 - comprehensive aircraft maintenance program,
 - time and duty limitations on air crew,
 - higher standards for pilot qualification and training, and
 - reporting and recordkeeping requirements;

- establish minimum altitudes, standoff distances⁵, visibility requirements, and cloud clearance;
- require flotation devices and a passenger briefing before each commercial air tour over water;
- require a performance plan and operating limitations for helicopters; and
- allow deviations, approved by the administrator, provided an equivalent level of safety is maintained.

The proposed rule addresses several air tour safety recommendations made by the Safety Board in 1987 and 1995. However, the issue of FAA air tour surveillance, which was a factor in safety improvements in the Grand Canyon and Hawaii, is outside the scope of the proposed rule, which focuses on what FAA requires of the air tour operators.

Air Tour Database Not Developed

Although the Department's commitment to achieving safer skies and reducing aviation fatalities emphasizes data analysis in determining where to focus its scarce resources, FAA is still unable to accurately identify air tour operators in the United States. The Safety Board also addressed the need for data collection in 1993 and 1995, when it recommended that an air tour database be established. Without a reliable database, FAA's ability to target its oversight of air tour operations is limited.

In particular, identification of the universe of air tour operators is an essential first step in effectively identifying risks and targeting FAA surveillance. The Safety Board believed FAA should be able to accumulate operational data such as flight hours, departures, and passengers carried to calculate accident rates and thus better assess the safety of the air tour industry.

Action on the Safety Board's air tour database recommendation was initially assigned to FAA, but subsequently reassigned to OST's Office of Policy Development in the Office of the Assistant Secretary for Transportation Policy. OST managers concluded that FAA would have to issue clarifying regulations to define "air tour operator" before a reliable database could be established. We do not agree with these conclusions. The Hawaii special regulations of 1994 provided such a definition (i.e., "...'air tour' means any flight conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing"). Although this definition applied only to air tour operators in Hawaii in 1994, the definition in FAA's proposed rule is exactly the same.

⁵ Minimum distance from any person, structure, vehicle, vessel, or raw terrain.

In July 1998, OST and FAA agreed that modification of an existing FAA process, the annual General Aviation and Air Taxi Activity Survey, can accumulate the necessary data. The survey uses random sampling of aircraft to make projections regarding number of aircraft, primary use, and air hours flown, and includes sightseeing and air tour data. However, due to the small sample size of these operators included in the survey, the data are very unreliable. Further, expanding air tour coverage in this survey would first require identification of air tour operators. Even if FAA amends the survey to include a larger air tour sample, this would produce statistical projections rather than actual operator data. Therefore, FAA would still not have operator-specific safety information on which to base decisions on enhanced surveillance.

In a January 1999 letter to the Safety Board, the Secretary committed to gathering appropriate data from air tour operators that will enable the Department to determine accident rates and the scope of air tour operations. This work would be done by FAA in conjunction with the implementation of the final rule on air tour operators. The rule will allow air tour operators at least one year to comply with the rule requirements. In our opinion, an accurate air tour database is too important to delay until final implementation of the air tour rule. As FAA moves toward improved and targeted surveillance, accurate data on potentially high-risk industry segments, such as air tours, is essential.

FAA Already Has the Means to Begin Oversight and Data Collection

As a first step in decreasing air tour fatalities, FAA needs to begin collecting safety data to identify risks and target surveillance. FAA has had the means to begin data collection and implement enhanced air tour surveillance activities nationwide since 1992, when Handbook Bulletin 92-01 was issued. The Handbook Bulletin made principal operations inspectors responsible for:

- identifying scenic areas subject to air tour operations;
- identifying actual and potential air tour operators;
- coordinating with air traffic control, when appropriate, and airspace users to cooperatively establish recommended routes, entry/exit points, altitudes, direction of flight, and reporting points;
- encouraging participation of non-certificated sightseeing operators;
- identifying special regulations which may be developed in the future;
- listing special air tour authority in operating specifications;
- depicting routes and altitudes in operations specifications to enhance collision avoidance procedures and aircraft noise abatement; and

- recommending operators have a chapter in their operations manual outlining procedures for crewmembers conducting air tour operations.

In December 1994 these requirements on air tour and sightseeing operations were added to FAA Order 8400.10, the Air Transportation Operations Inspector's Handbook, and remain in effect today. FAA's 1998 and 1999 National Flight Standards Work Program Guidelines also designated air tour operations under Part 91 as a special emphasis area for FAA inspectors.

FAA has estimated that there are approximately 1,670 Part 91 air tour operators in the U.S. A search of FAA's 1998 inspection records for the Part 91 special emphasis air tour code, however, found only three inspections of this type of operators. It is probable that additional inspections were done but identified under different inspection codes.

To determine what air tour activities FAA district offices performed, either to comply with FAA Order 8400.10, or the Work Program Guidelines, we made telephone contact with nine offices located near scenic areas. We found that the nine district offices had identified the scenic areas in their jurisdictions. Although the district offices told us they had performed at least some inspections of air tour operators, most were unable to provide supporting documentation due to the difficulty in extracting air tour information from FAA's databases. We contacted two Alaskan district offices that told us they have implemented the air tour provisions of Order 8400.10. In these two district offices, 25 of 27 air tour operators are already under Part 135 and therefore have an FAA annual surveillance plan. Another district office, with 6 Part 135 operators, had identified their Part 135 and Part 91 air tour operators but had no specialized air tour surveillance.

For the remaining 6 district offices we contacted, two have identified and performed inspections of their Part 91 air tour operators recently, in response to either the National Work Program Guidelines or local concerns. The four remaining district offices have a small number of air tour operators, three of which do little oversight of air tours and the sole air tour operator in the fourth office is required to operate under Part 135 because of Canadian air tour regulations.

Implementation of FAA Order 8400.10 air tour requirements would provide at least a basic level of air tour oversight nationwide, particularly in areas where air tour operations are dispersed. The required identification of air tour operators would also permit FAA to begin to create a universe for improved data analysis. Also, action by FAA to ensure that district offices include inspections of Part 91 air tour operators, as suggested by the National Work Program emphasis, would ensure annual surveillance of these operators until the air tour rule that requires

them to operate under Part 135 and be subject to required annual inspections by FAA.

FAA and OST officials were concerned that we would suggest diversion of valuable inspector resources to an area where the risks are low compared to other areas where inspector oversight is needed. However, a Departmental memorandum stated actions to create the database would not begin until after the air tour rule is issued. We believe minimal effort would be necessary for inspectors to begin to develop universe information in areas where air tour activities exist. For example, inspectors could identify some air tour operations through a scan of the phone directories or visual observations at airports.

In drafting a proposed rule on air tour operations, FAA has taken an important first step. However, FAA now needs to move forward with the proposed rule to extend the safety improvements achieved in the Grand Canyon and Hawaii to air tours in the rest of the nation. In addition, data collection and analysis are also crucial in determining where enhanced surveillance can save lives. FAA needs to expedite actions on the proposed rule. However, in the interim, FAA needs to use the means already at its disposal to increase oversight of air tour operators and begin collecting data on air tour activities.

On April 30, 1999, subsequent to the issuance of our draft report, FAA recalled the proposed rule from OST to amend the rule to clarify an issue relating to small air tour operators. This amendment will further delay issuance of the air tour operator rulemaking.

Recommendations

We recommend the FAA:

1. complete publication of the proposed rule in the Federal Register by July 30, 1999.
2. direct district offices to implement the air tour procedures required by the FAA Order 8400.10; and
3. develop a universe of air tour operators using information obtained from FAA safety inspectors.

We recommend the Department of Transportation General Counsel:

4. promptly complete their review of the proposed rule.

Management Position

In a May 13, 1999 response to our April 12, 1999 draft report, FAA concurred with two of our three recommendations and concurred in part with the third recommendation. Although agreeing to complete publication of the proposed air tour rule, FAA did not commit to a publication target date. FAA concurred in part to our recommendation to direct district offices to implement air tour surveillance procedures, stating it would not be reasonable to apply this guidance to district offices that have no air tours. FAA concurred with development of an air tour database and noted that it had begun work on this effort through its operations specifications database.

In commenting on our draft report, FAA asserted that 80 percent of air tours are highly regulated. While agreeing that data are scarce and estimates on air tours are rough, FAA believes the majority of air tours conducted are done by Part 135 operators that are subject to FAA oversight. Further, FAA noted that the proposed rule was submitted to OST on December 15, 1998 but had been recently recalled for modification to address the needs of Part 91 operators.

In verbal comments provided on April 29, 1999, OST agreed with our recommendation to promptly complete its review of the FAA proposed rulemaking for the air tour industry. However, on April 30, 1999, FAA recalled the proposed rule to amend it. The recall of the rule by FAA will delay OST's review.

Office of Inspector General Comments

Development and publication of a rule to improve air tour safety has been delayed 4 years and postponed important safety improvements. We believe it is critical that FAA establish and commit to a target date for prompt publication of the rule. We recognize that the rule has been recalled from OST for changes. If the July 30, 1999 date we recommended for publication of the proposed rule cannot be met, we request that FAA expeditiously establish a target date that is realistic but does not slow down this important safety initiative. We request this information be provided to us.

On our recommendation that existing air tour surveillance guidance be implemented at all district offices, we agree that additional oversight is not needed in district offices where air tours do not operate. However, we believe implementation of the Handbook's provisions is necessary to establish which offices do not have air tour operations and heighten awareness of the issue

throughout the inspector workforce. As stated in our report, minimal inspector resources would be required to make such a determination.

FAA is beginning to develop an air tour database. However, we are concerned that this effort may not include all air tour operators. The effort is being done through the operations specifications database. Because only Part 135 air tour operators are required to have operating specifications, Part 91 operators would be excluded. We request that FAA clarify whether Part 91 operators will be included in this database.

Without a determination of the population of air tour **operators**, the assertion that the majority (80 percent) of air tours are regulated cannot be accurately supported. FAA's premise is based on the fact that a large percentage of the population of air tour **operations** occur in Hawaii and the Grand Canyon. Data in our report show that accidents continue to occur in the other parts of the United States, reaffirming the need for FAA to continue and quickly complete its efforts to implement recommendations for improved air tour safety. Further, Part 91 operators, which are not highly regulated by FAA, were identified by FAA in its draft rule as the air tour operators having the highest incidence of accidents.

We do not consider the three recommendations resolved. For recommendation one, we request that FAA provide us a target date for the publication of the air tour rule. We also request FAA reconsider its partial concurrence and direct district offices to determine whether there are any air tour operators in their area of responsibility that are not subjected to FAA oversight. Further, please clarify whether development of the database will include all air tour operators and provide an action target date for completion of the database.

We also request that OST provide us with a target time frame for completing its review of the proposed rule once it is received from FAA.

***Examples of More Stringent Safety Requirements
for Part 135 Operators***

<p>✓ The pilot in command must hold a commercial pilots license and have a minimum of 500 hours of flying experience.</p>
<p>✓ Every 12 months, the pilot must pass a <i>flight check</i> in one of the types of aircraft the pilot is to fly.</p>
<p>✓ Every 6 months, the pilot must pass an <i>instrument proficiency check</i>, given by FAA or an authorized check pilot.</p>
<p>✓ The pilot must ensure the aircraft has no inoperable instruments or equipment installed unless an <i>approved minimum equipment list</i> exists and its conditions are met.</p>
<p>✓ The certificate holder must have procedures to ensure that the pilot in command knows that required <i>airworthiness inspections</i> have been made and the aircraft has been returned to service in compliance with applicable maintenance requirements.</p>
<p>✓ The certificate holder must maintain copies of the <i>aircraft maintenance log</i> in the aircraft for access by appropriate personnel.</p>
<p>✓ Flight crew must not be scheduled for more than 8 hours <i>flight time</i> in any consecutive 24-hour period.</p>

List of Major Contributors to This Report

The following Office of Inspector General staff contributed to this report. The work was done under the direction of Alexis M. Stefani, Deputy Assistant Inspector General for Aviation.

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U.S. Department
of Transportation
**Federal Aviation
Administration**

Memorandum

Subject: **INFORMATION:** Draft Report on the Audit of
Oversight of the Air Tour Industry

Date: MAY 13 1999

From: Assistant Administrator for Financial
Services/CFO

Reply to
Attn. of:

To: Deputy Assistant Inspector General for
Aviation

As requested in your April 12 memorandum, we have reviewed the subject report and offer the attached comments.

Should you have any questions, please contact Mr. Anthony Williams, Management Programs Division, APF-200. Mr. Williams can be reached on 267-9000.

A handwritten signature in black ink, appearing to read 'C. Schellenberg', written over a horizontal line.

Carl B. Schellenberg

Attachment

**Federal Aviation Administration's (FAA) Response to the
Office of Inspector General's (OIG) Draft Report on
Oversight of the Air Tour Industry**

Comments:

We have reviewed the draft report and concur with the recommendations; however, the summary contains some misleading language. The report leaves the impression that 80 percent of air tours receive little regulatory attention. The limited data available shows that 80 percent of air tours are highly regulated.

FAA agrees with the OIG that data is scarce and estimates are rough pertaining to the air tours conducted by small operators that conduct occasional tours under the less rigorous requirements of Part 91. However, these small operators certainly represent substantially less than 80 percent of all air tours in the United States, perhaps as low as 10 percent. In other words, rough estimates may show that 80 percent of all operators who even once conduct something that can be called an air tour do not have a certificate under Part 135 or Part 121, but this "80 percent" conducts perhaps only 10 to 20 percent of all air tours. By focusing on the undefined term "air tour operators" rather than "air tours," the statement may unintentionally mislead a reader.

Approximately 80 percent of air tours are highly regulated by the FAA and provide the general public with the safest air tour experience found anywhere in the world. However, the remaining 20 percent of air tours are conducted by a large number of Part 91 operators that only occasionally conduct tours and that operate under less rigorous requirements.

The report references the National Transportation Safety Board's (NTSB) earliest recommendations to improve FAA's oversight of air tour operators and implies that FAA has been slow to respond to these recommendations. FAA issued temporary regulations immediately following each NTSB recommendation. These temporary regulations resulted in significant improvements in safety.

FAA's draft proposed rule was submitted to the Office of the Secretary of Transportation (OST) for review on December 15, 1998 and not January 1999. However, we must note that FAA has recently requested that OST return the Notice of Proposed Rulemaking (NPRM) because we identified an issue that needs to be clarified relating to Part 91 air tour operators.

The report incorrectly states that, "Until the rule is implemented, the majority of air tours will be operated under less demanding safety regulations." As discussed above, perhaps 80 percent of all air tours are already conducted under Part 135 or Part 121.

The OIG's draft report does not explain the differences in implementing Handbook guidance and the Guidelines on air tours. The guidelines are not mandatory because of differences in issues and priorities in different district offices. For example, the Honolulu Flight Standards District Office and the Las Vegas Flight Standards District Office are expected to experience higher than average numbers of operators that conduct air tours. Other offices may have no air tours and have thus appropriately allocated resources to other significant safety issues in their district.

The OIG notes they contacted offices located near scenic areas. These offices are not identified for the reader. The report indicates that in the two Alaskan district offices contacted, 25 of 27 air tour operators are already under Part 135 and, therefore, have an FAA annual surveillance plan. This supports the assertion that most air tour operators are certificated and subject to an annual surveillance plan.

OIG Recommendation 1: Complete publication of the proposed rule in the Federal Register by July 30, 1999.

FAA Response: Concur with publication of the proposed rule. FAA completed its work on the proposed rule and submitted it to OST for concurrence in December 1998. Recently FAA requested that the NPRM be returned to resolve an issue related to Part 91 air tours. When the proposed rule is resubmitted to OST and is cleared, it will then be reviewed by OMB and published in the Federal Register with an open comment period of approximately 3 months. FAA will perform an analysis of the comments and make an appropriate decision based on the comments received. Based on past experience and the controversial nature of the proposal, it is difficult to commit to a publication date.

OIG Recommendation 2: Direct district offices to implement the air tour procedures required by the FAA Order 8400.10.

FAA Response: Concur in part. FAA's Flight Standards Service (AFS) has provided guidance to district offices in the Air Transportation Operations Inspector's Handbook, Order 8400.10, for Part 135 and Part 121 operators, and known Part 91 operators. It would not be reasonable to apply this guidance to district offices that have no air tours. In addition, FAA has no information that indicates that offices and regions do not use existing guidance when dealing with air tour safety issues. There is currently no requirement for Part 91 air tour operators to communicate with the district office, and they are not mandated to have manuals. It would be imprudent to take resources from high priority safety issues and allocate them to implement air tour procedures in district offices where there are no air tours. FAA expects that Flight Standards district office managers will schedule Part 91 visits as resources permit and as safety dictates.

OIG Recommendation 3: Begin to develop a universe of air-tour operators using information obtained from FAA safety inspectors.

FAA Response: Concur. AFS has started developing this universe in its operations specifications database. This would also assist in determining which district offices should implement air tour procedures recommended by the Handbook. Priorities and allocation of resources should remain within the FAA and, when appropriate, and in line with the overall mission and focus of the FAA, be determined at the level with the greatest knowledge of local circumstances.