

GAO

Report to the Ranking Democratic
Member, Subcommittee on Aviation,
Committee on Transportation and
Infrastructure, House of Representatives

July 2004

AVIATION SAFETY

Better Management Controls are Needed to Improve FAA's Safety Enforcement and Compliance Efforts



G A O

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AVIATION SAFETY

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Highlights of [GAO-04-646](#), a report to the Ranking Democratic Member, Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The safety of the nation's flying public depends, in large part, on the aviation industry's compliance with safety regulations and the Federal Aviation Administration's (FAA) enforcement of those regulations when violations occur. FAA attempts to gain the industry's compliance through enforcement tools, including levying fines and suspending or revoking operating certificates, and partnership programs that allow participating companies or individuals to self-report violations of safety regulations and mitigate or avoid fines or other legal actions.

GAO was asked to assess how FAA uses its enforcement options to address noncompliance and what management controls are in place to ensure that enforcement efforts and partnership programs result in compliance with aviation safety regulations.

What GAO Recommends

GAO recommends that FAA develop evaluative processes for its enforcement efforts and partnership programs and use them to create performance goals, track performance towards those goals, and determine appropriate program changes. GAO also recommends that FAA improve the completeness of information in the nationwide enforcement database. FAA agreed with these recommendations and provided comments on general areas covered in the report.

www.gao.gov/cgi-bin/getrpt?GAO-04-646.

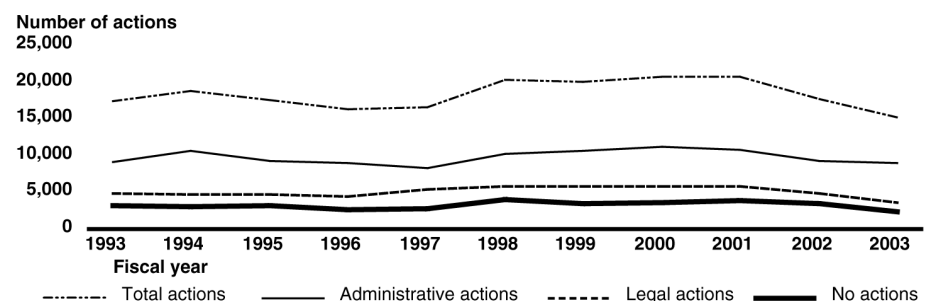
To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud at (202) 512-2834 or siggerudk@gao.gov.

What GAO Found

FAA relied on administrative actions such as warning notices to close most of its enforcement cases—53 percent of the nearly 200,000 enforcement actions taken during fiscal years 1993 through 2003—and closed about 28 percent with legal sanctions, such as fines. The administrative actions include those taken in response to violations that were self-reported under FAA's industry partnership programs, some of which allow airlines and pilots to self-report violations that, in many cases, FAA then closes administratively. In addition, when FAA managers recommend legal sanctions, they are often reduced by FAA legal counsel staff. For example, FAA managers recommended fines totaling about \$334 million for fiscal years 1993-2003; that amount was subsequently reduced to about \$162 million. According to FAA, it reduces or eliminates the sanctions when it has proof that the violator is attempting to correct the violation or new evidence arises that may exonerate the alleged violator. Annually, FAA closed about 3,200 cases (about 18 percent of the total cases) without taking action. Cases were often closed in this manner because the investigative reports prepared by inspectors who initially identified the possible violations lacked sufficient evidence, according to FAA.

FAA has established some management controls over its enforcement efforts and partnership programs, such as guidance on detecting violations, but lacks management controls in other areas. Specifically, FAA lacks explicit, measurable performance goals for its enforcement actions and partnership programs. In addition, FAA does not evaluate its enforcement efforts and partnership programs. Because FAA has not evaluated the effect of its enforcement actions, it is not possible to tell whether those actions have had a deterrent effect on future violations. FAA is limited in its ability to evaluate enforcement efforts because the agency lacks comprehensive nationwide data. For example, FAA field offices maintain independent, site-specific databases on enforcement cases because of missing or incomplete information in the nationwide Enforcement Information System database, but these databases are not linked. Thus, data maintained in one office are not readily available to other offices.

Number of Closed Enforcement Cases



Source: GAO analysis of FAA's EIS data.

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Abbreviations

ASAP	Aviation Safety Action Program
ASRP	Aviation Safety Reporting Program
DOT	Department of Transportation
EIS	Enforcement Information System
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FOQA	Flight Operational Quality Assurance
GAO	General Accounting Office
NASA	National Aeronautics and Space Administration
VDRP	Voluntary Disclosure Reporting Program

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

July 6, 2004

The Honorable Peter A. DeFazio
Ranking Democratic Member
Subcommittee on Aviation
Committee on Transportation and Infrastructure
House of Representatives

Dear Mr. DeFazio:

The safety of the nation's flying public depends, in large part, on the aviation industry's compliance with safety regulations and the Federal Aviation Administration's (FAA) enforcement of those regulations when violations occur. FAA has a variety of enforcement tools that it may use to respond to violations including administrative actions (such as issuing a warning notice or a letter of correction that includes the corrective actions the violator will take) and legal sanctions (such as levying a fine or suspending or revoking a pilot or other FAA-issued certificate). FAA plans to revise how it uses these enforcement tools over the next several years to target the type of enforcement actions so that they will be based on an assessment of the intent of the violator and the risks to safety.

Since 1990, FAA has emphasized gaining compliance from the aviation industry through cooperative means. One way that FAA focuses on industry cooperation is through partnership programs with the aviation community that allow participants, such as airlines and pilots, to self-report violations of safety regulations and help identify safety deficiencies, and potentially mitigate or avoid fines or other legal action.

This report responds to your request for information on FAA's enforcement actions and partnership programs. Specifically, we are reporting on: (1) How has FAA used its various enforcement options over the last decade to address noncompliance? and (2) To what extent has FAA established management controls, including measuring and monitoring performance, for its enforcement activities and partnership programs?

To address these questions, we obtained and analyzed data from FAA's computerized enforcement database—the Enforcement Information System (EIS)—for enforcement cases closed during fiscal years 1993 through 2003. We conducted a reliability assessment of the EIS data and determined that the data were sufficiently reliable for the types of analyses that we performed for this report—analyses of nationwide trends on the

amounts and types of recommended actions and final sanctions, the types of violations, and the time required for resolution. Using the federal government's guides for management controls at federal agencies¹ and guidance from specialists in GAO who assess those controls, we selected control standards that are relevant to the types of enforcement activities and partnership programs that FAA administers and assessed whether FAA had these controls in place. These controls include standards such as having measurable performance goals and indicators for programs, monitoring programs, and having adequate controls over information processing and systems. We obtained information on FAA's enforcement process, partnership programs, and management controls through interviews with program offices that conduct enforcement and compliance activities, FAA's Office of Chief Counsel, aviation industry organizations, and union officials who represent FAA inspectors and by reviewing agency guidance and orders on enforcement efforts and partnership programs. (See app. I for additional information on our methodology.) We conducted our review from April 2003 through July 2004 in accordance with generally accepted government auditing standards.

Results in Brief

FAA's enforcement efforts and partnership programs are designed to promote compliance with statutory and regulatory requirements for aviation safety. During fiscal years 1993 through 2003, FAA closed nearly 200,000 enforcement cases—using administrative actions (such as warning notices) about 53 percent of the time, assessing legal sanctions (such as fines) about 28 percent of the time, and closing 18 percent with no enforcement action. The initial decisions to use either administrative actions or legal sanctions are based, in large part, on the judgment of FAA inspectors. Inspector recommendations for enforcement actions are reviewed by management in the appropriate regional or program office; administrative actions receive no further review, but recommendations for legal sanctions are also reviewed by FAA's legal counsel. The type and amount of sanction or administrative action can be changed anywhere within the review process. FAA's use of administrative actions reflects, in part, the agency's emphasis on using alternatives to legal enforcement in certain circumstances. The administrative actions include those taken in

¹U.S. General Accounting Office, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: Nov. 1999) and U.S. General Accounting Office, *Internal Control Management and Evaluation Tool*, [GAO-01-1008G](#) (Washington, D.C.: Aug. 2001).

response to violations that were self-reported under two of FAA's industry partnership programs—the Voluntary Disclosure Program and the Aviation Safety Action Program. To encourage the aviation community's participation in these two programs, FAA allows participants to self-report violations, which, in certain cases, FAA then closes with administrative actions. In addition, when FAA resolved cases with legal sanctions, FAA's legal staff generally reduced the penalties—fines or duration of operating certificate suspension—recommended by program management. For example, during fiscal years 1993 through 2003, program management recommended fining entities and individuals a total of about \$334 million, but legal counsel staff subsequently reduced that amount to a total of about \$162 million. FAA cited several reasons for reducing or eliminating sanctions, including proof that the violator was making a good faith attempt to correct the violation or indicate mitigating circumstances, new evidence that might exonerate the alleged violator, and to resolve cases without litigation. Finally, from fiscal years 1993 through 2003, FAA closed about 3,200 cases annually (about 18 percent of all cases) without taking action. In about two-thirds of those cases management recommended no action after reviewing the inspector's initial report. The reasons most often cited by FAA for closing the cases in such a manner was that investigative reports submitted by inspectors did not contain sufficient evidence to support the allegation of noncompliance of safety regulations or that no violation occurred.

FAA has established some management controls over its enforcement efforts and partnership programs, but it lacks controls to measure and evaluate performance. For instance, FAA has controls in the form of guidance for inspectors and managers on detecting violations of safety regulations and procedures to track actions to correct violations and to track actions taken to correct safety incidents reported under the partnership programs. However, FAA lacks performance goals and measures for its enforcement efforts and partnership programs. In addition, FAA does not evaluate its enforcement activities and partnership programs to determine if stated program goals, such as deterrence of future violations, are being achieved. For example, little is known about nationwide trends in the types of violations reported under the partnership programs or whether systemic, nationwide causes of those violations are identified and addressed. Furthermore, FAA's enforcement policy calls for inspectors and regional counsels to recommend or assess enforcement sanctions that would potentially deter future violations. However, the agency's practice of generally closing cases with administrative actions rather than legal sanctions and often reducing the amount of the fines is at

odds with that policy and may reduce any deterrent effect that would be expected from sanctions. Moreover, FAA enforcement guidance indicates that increases in noncompliance with particular regulations may require an evaluation of the sufficiency of sanctions in order to determine if FAA's sanction policy is providing an effective deterrent and if changes to that policy are warranted. Because FAA has not evaluated the impact of its enforcement efforts, it is not possible to tell whether past enforcement sanctions have had a deterrent effect. In addition, FAA lacks a useful nationwide database to measure and evaluate enforcement activities. FAA inspection offices maintain independent, site-specific databases because they do not find the nationwide enforcement database—the EIS—user friendly or useful because of missing or incomplete historical information about enforcement cases. As a result of incomplete data on individual cases, FAA inspectors lack the complete compliance history of violators when assessing sanctions. For example, FAA regularly expunges the identity of individuals who committed violations from the national database. Later in fiscal year 2004, FAA plans to examine problems with the database and identify possible solutions.

Because FAA is responsible for ensuring that management controls are an integral part of its operations and that risks to aviation safety are identified and dealt with, we recommend that the agency develop evaluative processes for its enforcement activities and partnership programs and use them to create performance goals, track performance towards those goals, and determine appropriate program changes. We also recommend that FAA take steps to improve the usefulness of the EIS database by enhancing the completeness of enforcement information, such as including information on why sanctions are reduced, as part of the agency's planned efforts to enhance the database. FAA agreed with these recommendations and provided some additional comments on general areas covered in this report.

Background

FAA's enforcement efforts are designed to promote compliance with statutory and regulatory requirements for aviation safety. The agency's partnership programs are designed to promote increased safety by providing a means for the identification and correction of safety-related issues, including, but not limited to, possible violations of federal regulations. FAA Order 2150.3A, the agencywide compliance and enforcement program handbook, sets forth the responsibilities of FAA personnel and provides them with guidance on carrying out enforcement

activities. When violations are identified, the order calls for inspectors² to take the action most appropriate to achieve future compliance. The order identifies common violations, assigns responsibility to the inspection staff for initially recommending appropriate corrective actions, and contains recommended sanctions to promote national consistency. These actions range from education and remedial efforts, to administrative actions (such as warning notices), to punitive legal enforcement.

The enforcement process begins when an FAA inspector has evidence that a violation has occurred. An inspector can learn about possible violations from a variety of sources, including (1) inspection of certificate holders, such as airports, air carriers, aviation mechanics, and manufacturers of aircraft and their parts; (2) air traffic controllers; and (3) others, such as state and local government officials. Nearly 4,200 inspectors in six program offices inspect thousands of FAA certificate holders, such as airlines and aircraft repair stations and others, such as shippers of hazardous materials. Table 1 describes these program offices and the inspectors' responsibilities. The purpose of the inspections is to ensure that these entities and individuals adhere to FAA safety regulations, to detect violations of those regulations so that threats to aviation safety can be corrected, and to deter violations by making the entities and individuals aware of the possibility that they will be discovered and prosecuted.

²Some FAA offices use inspectors to identify and investigate violations. Other offices use personnel such as engineers and flight test pilots. For purposes of this report, we refer to all FAA staff who identify and investigate violations as inspectors.

Table 1: FAA Program Offices and Inspection Responsibilities and Resources

Program office	Responsibilities of inspection staff	Number of inspection staff	Number of entities inspected
Aircraft Certification Service	Inspect all manufacturers (aircraft, engines, propellers, parts) and monitor the activities of designees who act on FAA's behalf. ^a	666	7,388 (includes 5,615 designees ^a)
Flight Standards Service	Monitor the compliance of air carriers, repair stations, aircrews, mechanics, and the activities of designees who act on FAA's behalf. ^a	3,236	14,210 (includes 1,632 designees)
Commercial Space Transportation Division	Monitor compliance with licenses issued to launch satellites.	30	14 launch licensees and 4 launch site operators
Aerospace Medicine	Oversee the development and implementation of employee drug and alcohol testing programs for aviation industry employers and monitor the activities of designees who act on FAA's behalf. ^a	40	7,200
Airport Safety and Standards	Ensure that airports certificated under 14 CFR part 139 comply with the requirements of this regulation.	35	Approximately 575 airports
Security and Hazardous Materials	Monitor the transportation of hazardous materials. Prior to 2003, when this function was transferred to the Department of Homeland Security, inspectors also oversaw the security at airports and by U.S. and foreign air carriers.	156	1,235
Total		4,163	30,626 (includes 7,247 designees)

Source: FAA.

^aDesignees are authorized by FAA to act as its representatives in examining, inspecting, and testing persons and aircraft for the purpose of issuing airman and aircraft certificates. Designated pilot examiners, for example, can accept applications for flight tests, conduct those tests, and issue temporary operating certificates to pilots. FAA inspectors are required to review and/or inspect the work of designees.

When an inspector learns about a possible violation, he or she creates a report that describes the violation and recommends an enforcement action.

Information that identifies the potential violator, the nature of the violation, and the recommended enforcement action is entered in the EIS database. The initial recommendation to use administrative actions (such as warning notices and letters of correction) or legal sanctions (such as fines, suspension of operating certificates, and revocation of operating certificates) is based on the judgment of the inspectors. Administrative actions can be used for any violation if several criteria are met—examples of activities that would not qualify for administrative actions include flying while intoxicated, intentional falsification of information, and reckless or grossly careless operation of an aircraft. If the inspector recommends a legal sanction, he or she must consult FAA's sanction guidance policy in determining the amount of the proposed penalty. The guidance provides ranges of civil penalties for a single violation, which vary by entity. For example, the civil penalty against an air carrier can range from \$1,100 to \$11,000 for a single violation. The guidance also lists violations with a corresponding range of civil penalties for each violation. For example, for failure to comply with inspection and maintenance overhaul time limitations, FAA guidance calls for a maximum penalty of a 7 day suspension of the entity's operating certificate. In addition, the guidance lists factors that should be taken into consideration in setting sanctions, including the risk to safety, the past violation history, the attitude of the alleged violator, and the ability of the alleged violator to absorb the sanction.

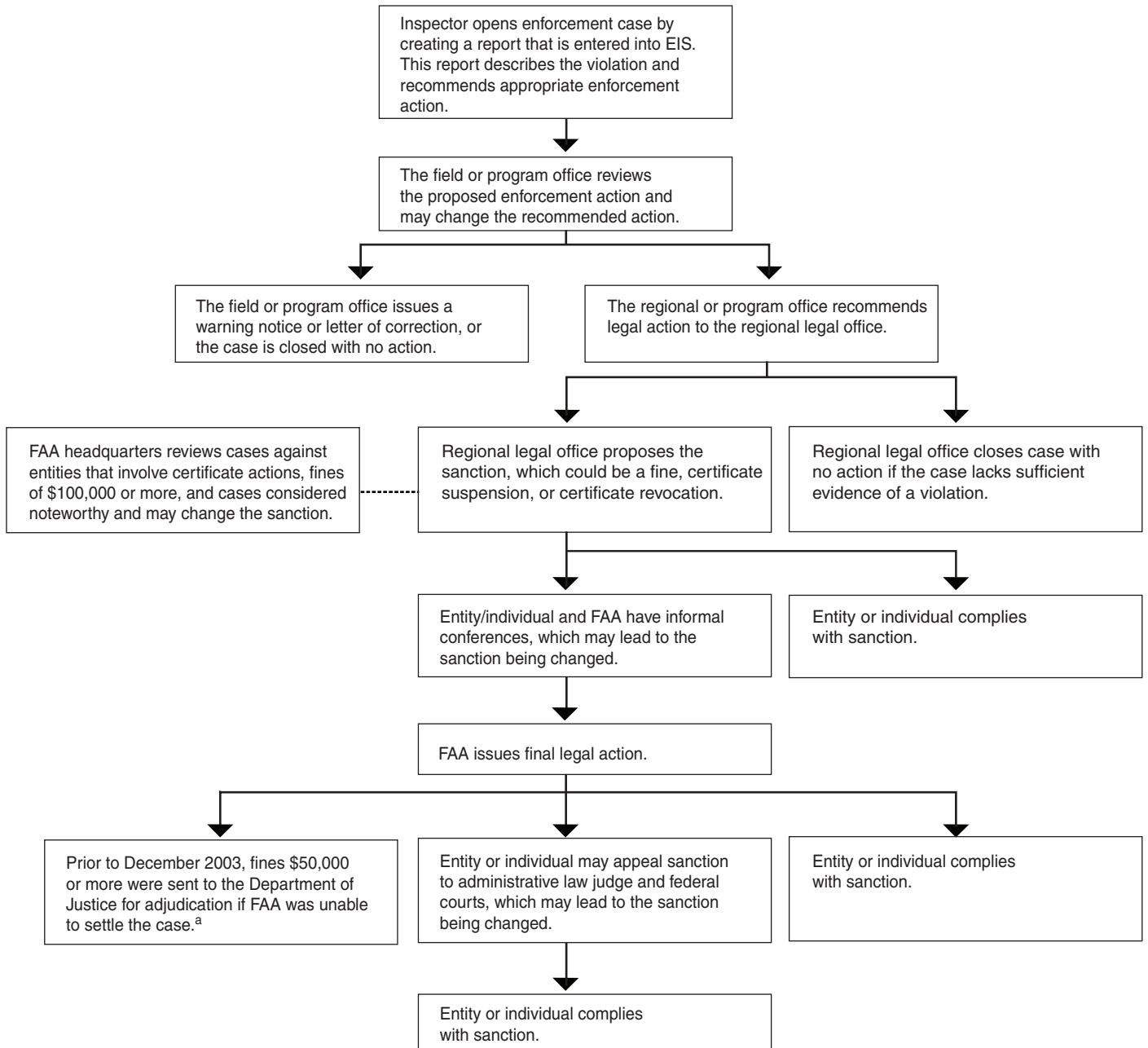
The inspector's report and proposed enforcement action are reviewed by management in the appropriate program office, which may issue an administrative action; recommend a legal sanction, which is then referred to FAA's legal counsel; or determine that no violation took place and close the case with no action.³ In situations where proposed penalties are \$100,000 or more or involve suspending or revoking an entity's certificate, legal counsel in FAA headquarters review the penalty. Legal counsel staff are responsible for the agency's assessment of any legal sanction. During the period of our review—fiscal years 1993 through 2003—cases with fines of \$50,000 or more were generally referred to the Department of Justice for resolution if they could not be settled.⁴ At any point during the review by

³Legal counsel are located in FAA regional offices as well as headquarters.

⁴The threshold penalty amount that triggers referral to the Department of Justice was generally increased to \$400,000 in December 2003 under Vision 100—Century of Aviation Reauthorization Act, P.L. 108-176, Sec. 503. The threshold for individuals and small business remained at \$50,000.

management and/or legal counsel, the amount and/or type of sanction may change or a decision can be made that no action is warranted. Once a penalty has been proposed, the entity or individual may comply with the penalty (by paying the fine or surrendering its certificate) or engage in informal procedures (such as conferences) with FAA officials to discuss the case. As a result of information obtained during these informal procedures, FAA may decide to change the penalty. After these procedures, an entity or individual may comply with the penalty or appeal the penalty to an administrative law judge. Figure 1 depicts the enforcement process.

Figure 1: FAA's Enforcement Process



Source: GAO analysis of FAA information.

^aIn December 2003, Congress increased the threshold from \$50,000 to \$400,000. The threshold remained at \$50,000 for individuals and small businesses.

For fiscal years 1993 through 1996, the maximum fine per violation that FAA could impose ranged from \$1,000 to \$25,000 (see table 2). During fiscal year 1997, all fines were increased 10 percent to account for inflation. In addition, during fiscal year 2002, the maximum fine for transporting hazardous materials was increased to \$30,000. In December 2003, Congress increased the maximum fine for other violations to \$25,000 for certain entities. Because individual enforcement cases may include multiple violations, it is possible for violators to be assessed fines greater than these maximums.

Table 2: Maximum Fines for Violations, Fiscal Years 1993-2003

Violation	Maximum penalty	Time frame (in fiscal years)
General safety violations by companies operating aircraft for compensation	\$10,000	1993-1996 ^a
	\$11,000	1996-2003
General safety violations by individuals and small businesses	\$1,000	1993-1996 ^a
	\$1,100	1996-2003
Transportation of hazardous materials	\$25,000	1993-1996 ^a
	\$27,500	1996-2002 ^b
	\$30,000	2002-2003
Interfering with cabin or flight crew	\$25,000	2000-2003 ^c
Carrying a concealed dangerous weapon	\$10,000	1993-1996 ^a
	\$11,000	1996-2003
Providing false information to an investigation of aircraft piracy	\$10,000	1993-1996 ^a
	\$11,000	1996-2003
Tampering with a smoke alarm	\$2,000	1993-1996 ^a
	\$2,200	1996-2003

Source: GAO analysis of FAA information.

^aFine increased December 20, 1996.

^bFine increased February 11, 2002.

^cFine created in 2000.

FAA's Industry Partnership Programs

FAA's "partnership" programs with industry are designed to assist the agency in receiving safety information, which includes reports of safety violations. According to FAA officials, the Aviation Safety Action Program, Aviation Safety Reporting Program, and Voluntary Disclosure Program augment FAA's enforcement activities and allow FAA to be aware of many

more safety incidents than are discovered during inspections and surveillance. All violations that FAA learns about through the Voluntary Disclosure Program are intended to be processed as administrative actions. Violations that are self-reported by participants in the Aviation Safety Action Program and FAA was aware of through its normal inspection operations are processed as administrative actions. When safety violations that have been previously reported under the Aviation Safety Reporting Program come to the attention of FAA, the agency issues legal sanctions, which are then waived. To qualify for any of these three programs, a safety incident must not involve such actions as criminal activity, drugs, alcohol, or intentional falsification. In addition, the Flight Operational Quality Assurance Program, a fourth partnership program, is designed to enhance aviation safety through the analysis of digital flight data generated during routine flights. Information that FAA learns about through this program is generally not used for enforcement. Appendix II describes each partnership program.

Management Controls

Management controls are the continuous processes and sanctions that federal agencies are required by law to use to provide reasonable assurance that their goals, objectives, and missions are being met. Controls allow organizations to clarify their missions, set strategic and annual performance goals, and measure and report on progress toward those goals. Several federal laws address the need for agencies and programs to have management controls that are appropriate for their areas of responsibility.⁵ The Federal Managers' Financial Integrity Act of 1982 further required us to issue standards for management controls in government.⁶ In addition, the Office of Management and Budget⁷ requires federal agencies to establish controls for their programs and operations. The standards indicate that controls should be an integral part of an agency's operations and include a continuous commitment to identifying and analyzing relevant risks associated with achieving the agency's objectives, establishing a process for verifying and reconciling program sanctions, establishing program goals and evaluating outcomes, and

⁵The laws are the Federal Managers' Financial Integrity Act of 1982, the Government Performance and Results Act of 1993, the Chief Financial Officers Act of 1990, and the Federal Financial Management Improvement Act of 1996.

⁶[GAO/AIMD-00-21.3.1](#).

⁷*Office of Management and Budget Circular A-123*, revised June 21, 1995.

creating and maintaining related records that provide evidence of the execution of these sanctions as well as appropriate documentation.

In 1998, we reported on FAA's inspection and enforcement activities and deficiencies that we found in the agency's management controls in such areas as detecting and reporting violations and in the usefulness of FAA's databases for identifying and targeting enforcement resources.⁸ We made recommendations on how the deficiencies could be improved, including improving the databases to identify major violations and cases. In response to our recommendations, FAA revised its enforcement policy guidance to prioritize enforcement cases, but did not further revise the guidance to address how inspectors should document all violations. FAA made no revisions to the EIS database in response to our recommendations.

FAA Resolved Most Enforcement Cases Administratively and Often Reduced Penalties

During fiscal years 1993 through 2003, FAA closed about 196,000 enforcement cases that involved nearly 200,000 enforcement actions against entities and individuals.⁹ Overall, about 53 percent of the actions were administrative, such as a warning notice, and 28 percent were legal sanctions, such as fines or suspension or revocation of a certificate. The remaining 18 percent of cases were closed with no action being taken by the agency. Most of the violations were security-related (29 percent), followed by flight operations (21 percent) and maintenance (15 percent); the remainder (35 percent) consisted of other categories, such as hazardous materials violations; training violations, which can involve violations of safety-related instructions for pilots, flights attendants, mechanics, and others; and violations of airport safety standards. (See app. III for additional information on closed enforcement cases.)

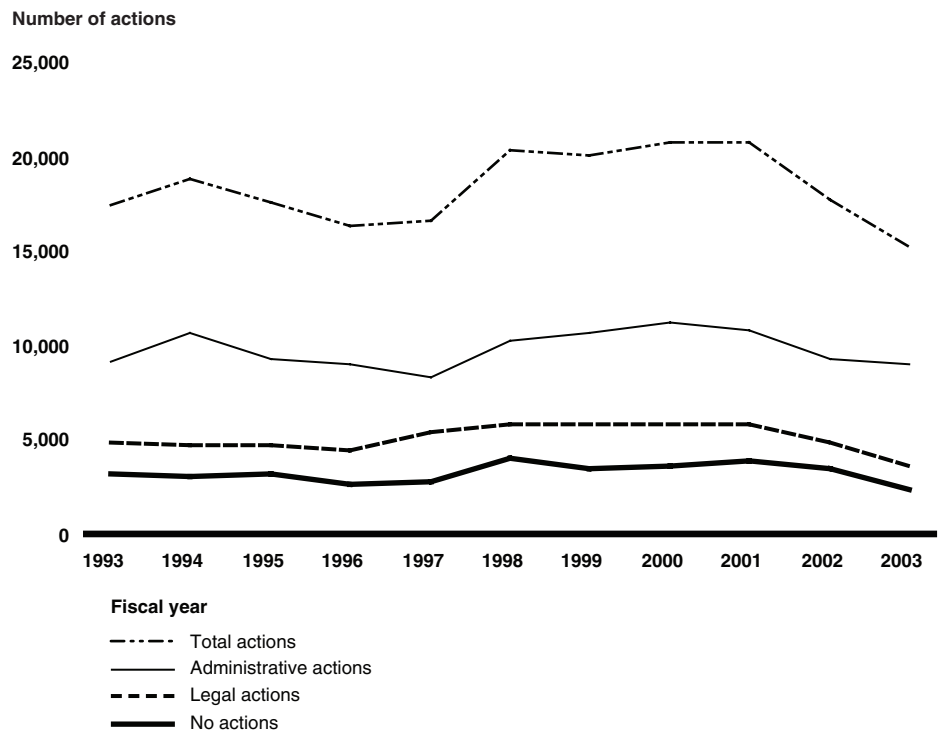
The number of closed enforcement actions reached a peak of about 20,500 actions in fiscal years 2000 and 2001 and has since declined. (See fig. 2.) In fiscal year 2003, FAA closed about 15,000 enforcement actions, a 27 percent decline from fiscal year 2000. The drop in actions is due, in large part, to the transfer of aviation security cases from FAA to the Department of

⁸U.S. General Accounting Office, *Aviation Safety: Weaknesses in Inspection and Enforcement Limit FAA in Identifying and Responding to Risks*, GAO/RCED-98-6 (Washington, D.C.: Feb. 27, 1998).

⁹Some cases were closed with more than one enforcement action. For example, a case may be closed with a fine and a certificate suspension.

Homeland Security during fiscal year 2002, when Homeland Security assumed responsibility for security inspections and enforcement. For example, in fiscal year 2001, 28 percent of the approximately 20,000 cases involved security violations, and in fiscal year 2002, about 23 percent of the enforcement cases involved security. By fiscal year 2003, the percentage of security cases had dropped to about 2 percent of the closed cases, reflecting the cases that had been on-going prior to the transfer of authority to Homeland Security.

Figure 2: Number of Closed Administrative Actions, Legal Actions, and No Actions, Fiscal Years 1993-2003



Source: GAO analysis of FAA's EIS data.

FAA Used Administrative Actions to Close More than Half of the Enforcement Cases

During fiscal years 1993 through 2003, FAA used administrative actions as its primary enforcement tool and provided inspection staff and agency reviewers with considerable flexibility as to whether cases are processed with administrative or legal actions. Such administrative actions can include warning notices to violators or letters of correction in which the agency and the violator agree to resolve a problem in a specific way. For example, in August 2002, a major airline reported that a flight attendant had been suspended by the airline for 14 days and was to be retrained for allowing a flight to depart with an extra passenger in the cabin. According to FAA information, the airline “has initiated a separate action to determine how and why 51 passengers were boarded on a 50-passenger plane.” The issue was resolved a month later with a letter of correction from FAA, according to information recorded in EIS.

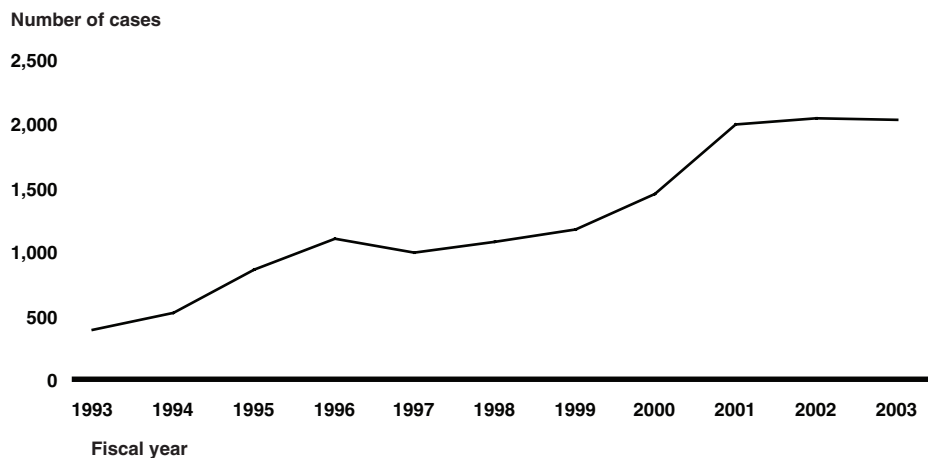
The administrative actions include those taken in response to violations that were self-reported under FAA’s Voluntary Disclosure Program and a small number of violations reported under the Aviation Safety Action Program.¹⁰ The self-reports include such information as a description of the violation, how long it lasted, and when it was discovered. To encourage participation in these programs, FAA allows some self-reported violations to be closed with administrative actions.¹¹ Our analysis of FAA’s EIS database indicated that individuals and companies in these two partnership programs filed 13,603 self-reports, which were processed with administrative actions, during fiscal years 1993 through 2003. (See fig. 3.) Increases in the number of self-reports after fiscal years 1994 and 2000 likely reflect the beginning of the Aviation Safety Action Program as a prototype program in 1994 with one major airline and the expansion of that program to the entire airline industry in 2000. According to an FAA official, not all self-reported cases that are filed with the agency are entered in the EIS database. For example, according to a 2003 internal agency report, only about 2 percent of the self-reported cases filed under the Aviation Safety

¹⁰FAA classifies self-reports received under the Aviation Safety Action Program as either “sole-source” or “not sole-source.” FAA considers a report sole-source if the self-report is the only way the agency would have learned about the incident. FAA considers a report not sole-source if the agency also receives information about the incident through other means, such as inspections. FAA takes no enforcement action for sole-source reports, and pursues administrative actions for self-reports that are not sole-source.

¹¹To qualify for any of these programs, the self-reports must not involve criminal activity, drugs, alcohol, or intentional falsification.

Action Program are entered into EIS.¹² An FAA official indicated that, overall, more than 500,000 reports have been made to FAA under the partnership programs since their inception.¹³ We could not confirm that number because FAA does not maintain comprehensive reports or data from them. According to FAA, that information is located with the program participants.

Figure 3: Number of Administrative Actions Recorded in EIS as Self-reported Cases, Fiscal Years 1993-2003



Source: GAO analysis of FAA's EIS data.

FAA's use of administrative actions also reflects the agency's emphasis on using alternatives to legal enforcement in certain circumstances. According to FAA officials, administrative actions are often used the first time an individual or entity commits a violation and the violation does not reflect a continuing safety issue. FAA's Chief Counsel expects the agency to revise its use of administrative actions and legal sanctions over the next several years as the office begins implementing a new targeted enforcement approach.

¹²Federal Aviation Administration, *Compliance and Enforcement Review* (July 2003). Only the self-reports that are not sole-source are included in EIS.

¹³The Aviation Safety Reporting Program was established in 1975, the Voluntary Disclosure Reporting Program in 1990, the Flight Operational Quality Assurance Program in 1995, and the Aviation Safety Action Program in 2000.

FAA Often Reduced Penalties for Assessed Fines

Overall, during the period that we reviewed, FAA's regional program management recommended fines totaling about \$334 million for a total of approximately 25,900 cases that had both a regionally recommended fine and final fine. In many cases, the recommended fines were subsequently reduced by legal counsel. For cases closed during fiscal years 1993 through 2003, FAA collected about 48 percent of the initially recommended fines (about \$162 million). (See table 3.)

Table 3: Total Amounts of Recommended Fines and Final Fines and Final Fine as a Percentage of Recommended Fine, Fiscal Years 1993-2003

Dollars in millions

Fiscal year ^a	Total amount of fines recommended by regional program management	Total amount of final fines	Final fine as a percentage of recommended fine
1993	\$9.1	\$5.6	62%
1994	14.7	6.4	44
1995	14.0	17.5	125
1996	13.0	10.5	81
1997	16.4	9.4	57
1998	45.0	14.7	33
1999	56.7	18.1	32
2000	55.1	19.1	35
2001	41.8	33.7	81
2002	42.2	17.0	40
2003	25.9	9.8	38
Total	\$333.9	\$161.8	48%

Source: GAO analysis of FAA's EIS data.

Note: This table includes only those cases that had both a recommended fine by the region and a final assessed fine.

^aFiscal year in which case closed.

During the period that we reviewed, for the approximately 25,900 cases that had both a regionally recommended fine and final fine assessed by legal counsel, 79 percent had a final fine that was less than the initial penalty. In about 5 percent of the cases, legal counsel increased the final fine from the region's recommendation; and in about 16 percent of the cases, legal counsel did not change the fine.

Our analysis showed that FAA was more likely to assess fines against commercial entities, such as air carriers and repair stations, and to take certificate sanctions against individuals, such as pilots and mechanics. For both types of legal sanctions, legal counsel often reduced the penalties from the regional program management’s recommendation. (See tables 4 and 5.) For example, fines against scheduled air carriers were reduced about 59 percent from an average recommended fine of about \$41,800 to an average final fine of about \$17,200. As another example, sanctions against mechanics were reduced from an average 87-day suspension of their mechanic’s certificate to an average final suspension of 63 days (a 28 percent reduction). While their certificates are suspended, mechanics are allowed to repair aircraft under the supervision of another certified mechanic, but they are not allowed to certify that the repaired aircraft are airworthy; such certification is required for aircraft to be returned to service. Other types of legal sanctions were also changed between the regional or program management’s recommendation and the final assessment. For example, of the approximately 8,800 cases that started out with a recommended certificate revocation, which would put an entity out of business or an airman out of work, about 1,308 (about 14 percent) of the cases were changed to a suspended certificate. Another 25 cases were changed to fines.

Table 4: Regions’ Recommended Fines and Final Fines for Selected Entities, Fiscal Years 1993-2003

Type of entity	Number of entities	Recommended fine			Final fine		
		Amount of total fine	Average fine per entity	Median fine per entity	Amount of total fine	Average fine per entity	Median fine per entity
Scheduled air carrier	1,767	\$73,772,685	\$41,750	\$11,000	\$30,463,300	\$17,240	\$7,000
Charter operator	789	\$12,088,068	\$15,321	\$8,000	\$3,612,047	\$4,578	\$2,000
Repair station ^a	742	\$5,606,049	\$7,555	\$2,000	\$2,508,250	\$3,380	\$1,225
Cargo air carrier	186	\$6,438,072	\$34,613	\$15,000	\$2,358,675	\$12,681	\$7,500
Foreign air carrier	128	\$9,489,649	\$74,138	\$20,000	\$2,207,975	\$17,250	\$7,750

Source: GAO analysis of FAA’s EIS data.

^aThis analysis excludes a case against one repair station in which FAA assessed a final fine of \$5 million in 1998.

Note: This table includes a total of about 3,600 cases out of the total 25,900 cases that had both an initially recommended and final fine. This table excludes over 21,000 cases for which information on the type of violator was missing or listed in EIS as “none.”

Table 5: Regions' Recommended Certificate Suspension and Final Certificate Suspension for Selected Types of Violators, Fiscal Years 1993-2003

Type of violator	Number of violators	Recommended assessment		Final assessment	
		Average days	Median days	Average days	Median days
Private pilots	4,544	81	60	68	60
Commercial pilots	1,262	75	60	48	30
Mechanics	989	87	60	63	45

Source: GAO analysis of FAA's EIS data.

According to an official in FAA's Office of Chief Counsel, legal sanctions are reduced for several reasons including proof that the violator is taking corrective action to prevent the recurrence of the violation (e.g., requiring training for staff in the affected area); the economic hardship that might accrue to the entity that caused the violation; and to speed up the processing of the case and resolve cases without litigation. In addition, according to officials in FAA's Office of Chief Counsel, the agency reduces or eliminates sanctions if it obtains new evidence to support a reduction. For example, an FAA official from the Chief Counsel's office said the agency will drop a case against a pilot and close it with no action if evidence shows a mechanical malfunction was the cause of the reported problem, not pilot error.

We could not verify the reasons for the reductions in sanctions because FAA's EIS database does not consistently provide that information. The database contains a series of comment fields, in which FAA legal counsel staff are encouraged to provide narrative to explain significant sanction changes, according to an official in the Office of Chief Counsel. However, officials in the Chief Counsel's office further explained that the comments field in EIS provided too little space to enter useful information on the reasons for reductions. In addition, the reasons for the reductions are expected to be documented in the paper file for the cases. Our review of a few case files found that such information was included in the paper file. Information on the reasons for reductions can be useful in subsequent enforcement cases, especially if the FAA attorney involved in the case is not available. (See table 6 for examples.)

Table 6: Examples of Fine Reductions that Lack Explanations in EIS

Entity	Amount of recommended fine	Amount of final fine	Comments in EIS
Private pilot	\$19,239	\$3,000	Electronic information says the fine was paid in 12 installments with 5 percent interest. There was no explanation of why the fine was reduced.
Mechanic	\$50,000	\$5,000	Electronic information says FAA terminated collection of the fine in January 1999 when a U.S. Attorney's Office took over collecting the penalty "due to criminal indictment." There was no explanation of why the fine was reduced.
Commercial pilot	\$2,996	\$500	There was no explanation of why the fine was reduced.
Repair station	\$420,000	\$18,000	There was no explanation of why the fine was reduced.
Foreign air carrier	\$46,000	\$25,000	There was no explanation of why the fine was reduced.
Cargo air carrier	\$125,000	\$32,500	There was no explanation of why the fine was reduced.

Source: GAO analysis of FAA's EIS database.

FAA Closed Nearly One-fifth of Its Cases with “No Action”

During fiscal years 1993 through 2003, FAA closed with no action (or dismissal) about 18 percent of its cases (more than 35,000 cases total), an average of about 3,200 cases each year. During that period, regional or program management recommended closing 24,599 of those cases with no action. The reasons cited for closing the cases in such a manner were that investigative reports submitted by inspectors did not contain sufficient evidence to support the allegation of noncompliance with safety regulations, or that no violation occurred. Some cases were closed with no action if the case was not acted on expeditiously and, according to FAA guidelines, became “stale.”¹⁴ As a result of closing the stale cases with no

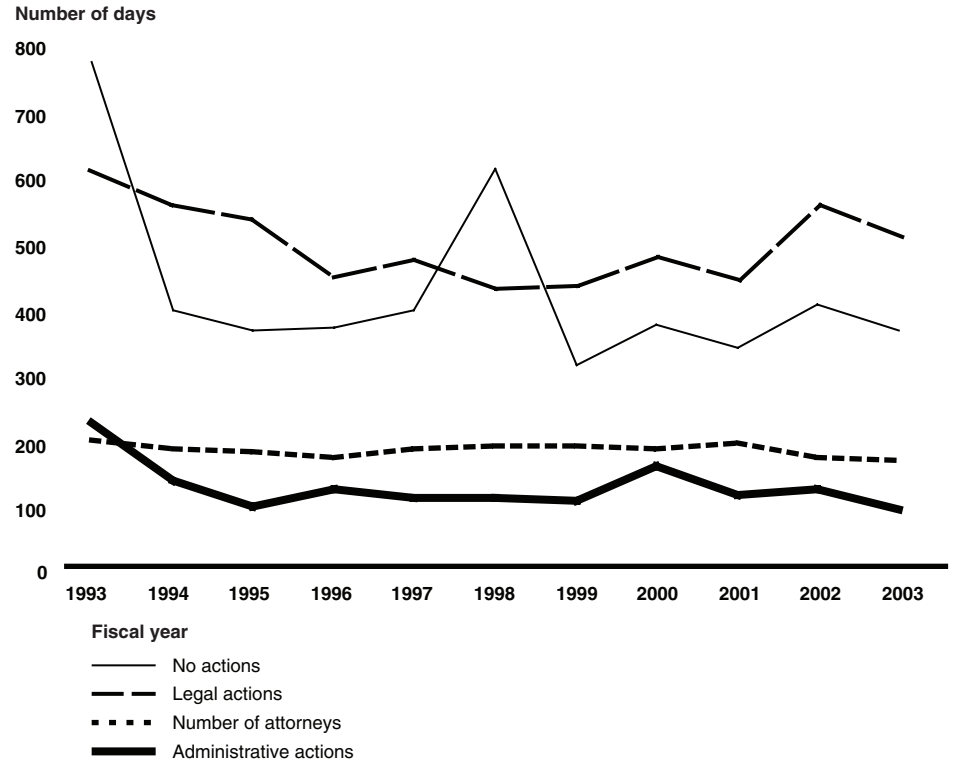
¹⁴A case is said to be stale if the alleged violator is not notified of the violation within the prescribed time, which is calculated from the date of the violation to the date that FAA sends the violator a notice of proposed action. The time depends on the type of violation, the identity of the violator, and the type and/or amount of proposed penalty. We were not able to determine how many cases were stale because such information is not consistently maintained in the EIS database.

action, enforcement decisions are not based on the merits of the cases and any potential deterrent effect on future violations is weakened.

Length of Time to Close Cases Has Varied Widely in Recent Years

In recent years, the length of time FAA has taken to process enforcement cases between when they were first known to FAA to eventual closure has varied widely from year to year. In fiscal year 1998, for example, FAA took an average of 316 days to process all types of cases, including administrative, legal, and those that were closed with no action. That average declined to 251 days in fiscal year 2003. Meanwhile, the average time to process legal enforcement sanctions increased from 438 days in fiscal year 1998 to 518 days in fiscal year 2003 (an 18 percent increase). During that same period, the time taken to process cases that resulted in no action declined from 625 days to 377 days (a 40 percent decline). According to FAA, the increase in time taken to close legal enforcement cases is due, in part, to a reduction in the number of attorneys and an increase in complexity of the cases they are processing. In fiscal year 2001, FAA's Office of the Chief Counsel had 205 attorneys in headquarters and regional offices; in fiscal year 2003, the number of attorneys declined to 175 due to attrition and transfers to the Transportation Security Administration. (See fig. 4.)

Figure 4: Average Number of Days to Process Enforcement Cases and Number of Attorneys, Fiscal Years 1993-2003



Source: GAO analysis of FAA data.

According to FAA, delays in investigating or processing enforcement cases can affect the effectiveness of the agency’s enforcement activities in several ways. Delays deemphasize the seriousness of a given violation and diminish the deterrent value of any enforcement action taken. By the same token, if the allegations of violation are not sustained, any unwarranted delay in processing a case may impose an unjustified hardship on the alleged violator if, for example, the alleged violator’s certificate is suspended.

FAA Has Established Some Management Controls Over Its Enforcement and Partnership Efforts but Lacks Processes to Measure Their Impact

Federal agencies are required to implement ongoing processes and actions, called management controls, that allow them to set performance goals and measure and report on progress towards those goals, among other things. FAA has established some management controls, such as guidance on detecting violations of safety regulations and procedures for tracking sanctions to correct the violations. However, FAA lacks (1) results-oriented goals and measures for enforcement efforts and its partnership programs and (2) useable data to measure and evaluate these efforts and programs. As a result, FAA does not know if its enforcement sanctions and partnership programs are deterring future violations.

FAA Has Established Procedures to Guide Enforcement Activities and to Enhance Participation in Partnership Programs

FAA has established management controls over its enforcement efforts with procedures that provide guidance on identifying regulated entities and individuals that are subject to inspections or surveillance actions, determining workload priorities on the basis of the timing and type of inspection to be performed, detecting violations of safety regulations, tracking the actions that are taken by the entities/individuals to correct the violations and achieve compliance with regulations, and imposing punitive sanctions or remedial conditions on the violators. These procedures provide FAA inspectors, managers, and attorneys with a process to handle violations of safety regulations that are found during routine inspections of those areas for which the agency is responsible.

The management controls that FAA uses for its industry-agency partnership programs are similar to the controls the agency uses for enforcement efforts. The controls over the partnership programs exist principally to increase the likelihood that the safety incidents identified through the program are, in fact, corrected. When FAA is made aware of a safety incident through reports by participants in the Voluntary Disclosure Program and Aviation Safety Action Program, the agency has procedures to track incidents and actions taken to correct the incidents. FAA has procedures to handle some reported incidents with administrative actions. In addition, FAA has procedures to handle violations reported under the Aviation Safety Reporting Program with legal sanctions, which may then be waived.

FAA Does Not Have Results-Oriented Goals and Measures for Enforcement Efforts and Partnership Programs

According to the government's management control standards and prior GAO reports on results-oriented management,¹⁵ federal agencies should establish measurable performance goals for their programs and operations. Moreover, those goals and measures should contribute to the agency's mission and strategic goals. FAA's strategic plan supports the Department of Transportation's goal to improve aviation safety. In addition, FAA guidance, in Order 2150.3A, provides a well-articulated enforcement strategy. However, the strategic plan and the enforcement strategy are not linked by measurable, results-oriented goals. For example, FAA's strategic plan has a goal to reduce fatal aviation accident rates and strategies for achieving that goal that mention the agency's enforcement activities and the safety information obtained from partnership programs. However, FAA does not have explicit, measurable performance goals that are related to the outcomes that its enforcement programs are expected to achieve, such as increased compliance or deterrence of future violations. Instead, FAA determines which companies should be inspected, when the inspection should occur, and the number of inspections that should be conducted in a fiscal year based on the inspection offices' assessment of risks. In 1998, we also reported that FAA lacked direct measures of the aviation industry's compliance with aviation safety regulations. Rather, the agency relied on the results of inspections as an indirect measure of the industry's compliance.¹⁶ In that report, we questioned whether this was a meaningful measure because inspectors did not report all violations, and we recommended that FAA's tracking systems be revised to distinguish major from minor violations. FAA declined to implement this recommendation. With regard to partnership programs, FAA has the explicit expectation that demonstrable safety enhancements will be achieved and tracked at the local level for each program, according to agency officials. These have included modifications to company operating procedures for take-off, approach and landing, coordination of changes to air traffic procedures at problem airports, improvements to company manuals and checklists, revised training curricula, and coordination of possible airworthiness issues with airframe manufacturers. The agency, however, does not have measurable performance goals that are related to the outcomes of the

¹⁵U.S. General Accounting Office, *Managing for Results: Strengthening Regulatory Agencies' Performance Management Practices*, [GAO/GGD-00-10](#) (Washington, D.C.: Oct. 28, 1999) and U.S. General Accounting Office, *Executive Guide: Effectively Implementing the Government Performance Results Act*, [GAO/GGD-96-118](#) (Washington, D.C.: June 1996).

¹⁶[GAO/RCED-98-6](#).

partnership programs. In contrast, other federal agencies, such as the Environmental Protection Agency (EPA), have measurable performance goals for their compliance and enforcement activities. For example, EPA's fiscal year 2003 performance plan includes goals to "increase opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis" and "direct enforcement actions to maximize compliance and address environmental and human health problems."

EIS could provide the agency with baseline data for performance measures for the enforcement efforts; however, problems with incomplete data, which we discuss later in this report, would have to be addressed. FAA lacks such data for its partnership programs. For example, although FAA believes that the number of self-reported violations in the partnership programs has increased, the agency lacks comprehensive, programwide information to show the types of problems being reported or agency responses to the self-reported violations. However, under the Aviation Safety Action Program, FAA has access to databases maintained by individual participating entities, which allows it to track corrective actions by individual participants. In addition, FAA maintains a database of quarterly reports that field offices submit on safety enhancements achieved through this program.¹⁷ Under the Aviation Safety Reporting System, FAA has access to incident reports, which are screened for urgent safety issues that are distributed to the aviation community. In addition, FAA has identified examples of safety enhancements that have been made as a result of some programs, as mentioned above in this report. However, FAA does not use this information to track nationwide performance in relation to specific program goals.

FAA Has Not Evaluated the Results of Enforcement Actions and Partnership Programs

One management control standard requires agencies to have an evaluation process so that agency officials, Members of Congress, and others will be able to determine if program goals are being achieved. Moreover, FAA enforcement guidance indicates that increases in noncompliance with particular regulations may require an evaluation of the sufficiency of sanctions in order to determine if FAA's sanction policy is providing an effective deterrent and if changes to that policy are warranted. However,

¹⁷Similar information will be required for the Flight Operational Quality Assurance program after program guidance is revised later in 2004, according to the manager of FAA's Voluntary Safety Programs Branch.

FAA does not have an evaluative process for its enforcement activities that would provide the information needed to determine whether these activities are having an impact on ensuring industry compliance with aviation safety regulations.

In internal reviews of its enforcement activities issued in 2001 and 2003,¹⁸ FAA reported descriptive, process-oriented information, such as the number of enforcement actions and length of time taken to process enforcement cases. These reviews did not evaluate the results or impact of these activities, although the 2003 review made a number of recommendations to improve the enforcement and partnership programs, including recommendations to evaluate the use and effectiveness of all types of administrative action for the partnership programs and modernize or replace the EIS database.

For its partnership programs, FAA relies on examples from individual programs to document results. For instance, the manager of FAA's Voluntary Safety Programs Branch told us that data collected under the Aviation Safety Reporting Program helped to identify operational safety issues, such as general aviation incidents, pilot and controller communications, and runway incursions. In addition, the agency has an ongoing periodic review process for the Aviation Safety Action Program that incorporates a detailed questionnaire on program results to date. According to FAA officials, agency inspectors are also required to review Aviation Safety Action Program annually. FAA also holds periodic meetings at the national level with operators participating in the Flight Operational Quality Assurance (FOQA) program to discuss safety issues identified through that program, and to formulate joint working groups to develop possible solutions. In addition, FAA requires operators with approved FOQA programs to brief their local FAA offices on adverse safety trends observed through their programs and on any corrective actions undertaken. Local FAA offices are responsible for tracking the effectiveness of such corrective actions. However, such examples do not provide an evaluation of the nationwide effectiveness of the programs or identify ways to enhance the programs' overall effectiveness.

FAA has increased its use of and promotion of partnership programs even in the absence of evaluative information on the effectiveness of these programs. The number of participants in partnership programs has

¹⁸Federal Aviation Administration, *Compliance and Enforcement Review* (July 2003).

increased in the last few years, and participation is expected to increase in the future. For example, as of June 2004, FAA had established 54 memoranda of understanding with airlines and repair stations to participate in the Aviation Safety Action Program, an increase from 51 participants in April 2004 and it had received over 80,000 self-reports. Because the agency is prohibited¹⁹ from disclosing information on those self-reports, little is known outside of FAA about the extent of the problems reported or whether the actions taken in response to them will correct problems across the industry. FAA officials indicated that they have not analyzed violation data from the partnership programs for nationwide trends, such as the frequency of the types of violations and, in some cases, the agency lacks data to conduct those types of studies. However, at the program participant level—such as an air carrier participating under the Aviation Safety Action Program—FAA does receive information about the types of violations and remedial actions, and FAA staff are expected to conduct periodic analyses of that information. Such information is not compiled by FAA for industry wide analyses, according to agency officials. FAA officials further noted that the agency does not analyze safety information obtained from the partnership programs for nationwide trends.

In 2003, an internal FAA report²⁰ acknowledged the need for evaluations to improve the effectiveness and efficiency of the agency's enforcement efforts and partnership programs. The report recommended that FAA evaluate the use and effectiveness of all types of administrative actions, including their use in the Voluntary Disclosure and Aviation Safety Action programs, conduct a review to determine the level of compliance with FAA enforcement policy and procedures by program offices within FAA, and evaluate the timeliness of processing legal enforcement actions in each program office. As of June 2004, the agency had not taken actions to implement those recommendations.

¹⁹Under 14 CFR 193 and FAA Order 800.82, the agency does not disclose information on those self-reports.

²⁰Federal Aviation Administration, *Compliance and Enforcement Review* (July 2003).

The Effect of FAA's Application of Enforcement Sanctions on Deterrence Is Unclear

FAA's policy for assessing enforcement sanctions against entities and/or individuals that do not comply with aviation safety regulations is intended to deter future violations. However, the agency's practice of reducing those sanctions and assessing more violations with administrative actions rather than legal sanctions could at times be at odds with the information on deterrence that is found in economic literature on that subject.²¹ Moreover, because FAA has not evaluated the impact of its enforcement efforts, it is impossible to tell whether past enforcement sanctions have had a deterrent effect.

As discussed previously in this report, from fiscal years 1993 through 2003, attorneys in FAA's Office of the Chief Counsel authorized a 52 percent reduction in the civil monetary penalties assessed from a total of \$334 million to \$162 million. Recommendations for sanctions are sometimes changed on the basis of factors that are not associated with the merits of the case. For example, FAA officials told us that the agency sometimes reduces sanctions in order to prioritize attorneys' caseloads by closing the cases more quickly through negotiating a lower fine. Economic literature on deterrence²² suggests that although negative sanctions (such as fines and certificate suspensions) can deter violations, if the violator expects sanctions to be reduced, he or she may have less incentive to comply with regulations. In effect, the goal of preventing future violations is weakened when the penalties for present violations are lowered for reasons not related to the merits of the case, or cases are closed with no action because they are "stale." In December 2003, Congress increased the maximum fines that FAA may impose. It is unknown what effect this increase will have on deterrence, because FAA frequently reduced fines in the past and thus did not always use the maximum available fine. We also found that FAA had closed the majority (about 53 percent) of enforcement cases with administrative rather than legal sanctions. It is unknown what impact FAA's frequent use of administrative actions has on the deterrent effect of the enforcement system.

²¹See app. I for a list of selected studies that we reviewed.

²²See, for example, A. Mitchell Polinsky and Steven Shavell, "The Economic Theory of Public Enforcement of Law," *Journal of Economic Literature*, Vol. XXXVIII (March 2000).

Incomplete Nationwide Data Hinder FAA's Ability to Analyze and Evaluate the Impact of Enforcement Efforts

Another management control for federal managers is to develop, manage, and revise information systems to improve the usefulness and reliability of data. In our 1998 report, we pointed out deficiencies in the EIS database. In our current review, we found that the usefulness of the EIS database to inspectors and program offices remains a problem. For instance, staff in several inspection offices that we contacted indicated that they found EIS difficult to use because of missing or incomplete historical information about enforcement cases. As a result of incomplete information, when assessing sanctions, FAA inspectors are not able to consider the entities' or individuals' full compliance history, as required by FAA's compliance and enforcement order. One reason for the lack of information about prior safety violations is FAA's policy to expunge data about the identities of individual violators. Prior to 1991, FAA indefinitely retained in its enforcement records the identity of individuals (such as pilots and mechanics) who committed violations. In 1991, FAA changed this policy after representatives of the general aviation community expressed concern about employment opportunities and insurance costs for certificate holders if their violation histories were made available. Consequently, FAA decided to routinely expunge the identity of individuals from the EIS database and case files using set criteria.²³ From fiscal years 1993 through 2003, FAA expunged the identities of individuals in about 54,000 cases—about 27 percent of the total number of closed cases. Most of the cases involved commercial pilots, private pilots, and mechanics. Others who also had their identities expunged included air traffic controllers, flight instructors, and student pilots. These cases involved administrative actions, fines, or suspensions.

In addition, FAA staff told us that about 55,000 closed security-related cases were purged from EIS in 2003 and transferred to the Transportation Security Administration, which has assumed responsibility for enforcing security regulations. By not maintaining a copy of the cases, FAA does not have complete data on the enforcement history of violators who have both security and safety violations to use in determining future sanctions. In addition, FAA lacks complete data on which to develop trend analyses and other historical information, such as analyses of attorney workload. According to FAA officials, safety inspectors never look at security

²³For example, for a closed case involving a civil penalty against an individual, the identity of the individual is to be destroyed 5 years after the date the civil penalty was paid, unless subsequent enforcement actions are open against the individual.

violations in determining sanctions, so FAA does not need the security information.

Officials from FAA offices that conduct inspections told us that they created additional databases in individual field offices to obtain historical information about the entities that they inspected because EIS was not user-friendly and case information was incomplete. However, the site-specific databases are not linked; therefore, enforcement and compliance information maintained in one inspection office is not readily available to other inspection offices. As a result, inspectors lack complete compliance history for certain regulated entities, which they are supposed to consider when assessing sanctions. FAA's enforcement policy calls for inspectors to consider, among other things, the past violation history of entities in determining whether to assess sanctions above the amount recommended in FAA penalty tables.

FAA has also reported on problems with the EIS database. For instance, the agency's July 2003 review of compliance and enforcement activities recommended that the agency "modernize or replace the system to provide the ability to enter and track data in a user-friendly manner and to capture sufficient data to enable the ongoing evaluation of the accuracy, consistency, timeliness, and effectiveness of the compliance and enforcement program." FAA indicated that an agency team met in May 2004 to examine problems with and possible solutions to the usability of EIS data. The team is expected to report to FAA's Deputy Administrator by the end of fiscal year 2004 with detailed solutions.

Conclusions

FAA has undertaken tens of thousands of enforcement actions intended to gain industry compliance with safety regulations. However, it has not developed the management controls, required of all federal agencies, that would allow Congress, agency officials, and others to evaluate program data to determine if program goals are being achieved and safety risks, such as repeat violations and offenders, are being addressed or whether the enforcement program should be changed as a result of changes in industry compliance. For example, FAA does not have explicit, measurable performance goals that are related to the outcomes that its enforcement and partnership programs are expected to achieve. Other agencies, such as EPA, have developed measurable performance goals for their enforcement programs, which might serve as a model for FAA. In addition, while FAA receives and tracks information on individual safety violations and from individual participants in its partnership programs, the agency does not

evaluate such information in the aggregate to identify trends in violations and their potential causes in order to reduce future violations. Furthermore, FAA has not evaluated the effectiveness of the use of administrative actions in achieving program goals or the consistency of the use of administrative actions and legal sanctions in the absence of specific criteria. Integral to the analyses and evaluation processes is the information system used to collect relevant program data. However, the EIS database fails to provide inspectors with useful, complete data. For example, in many cases, the EIS database lacks information on why sanctions were reduced. Because of the difficulty that FAA inspecting offices have in using the EIS database, they have developed localized databases that are not linked with other offices. Thus, enforcement and compliance information maintained in one inspection office about the violation history of a FAA certificate holder may not be available to other inspection offices. As a result, FAA inspectors lack complete compliance history when assessing sanctions. The lack of complete information on FAA's enforcement activities and partnership programs hinders FAA's ability to evaluate their impact or to know if future changes to these efforts are appropriate.

Recommendations for Executive Action

To determine the effectiveness of the agency's enforcement actions and partnership programs, we recommend that the Secretary of Transportation direct the FAA Administrator to implement the following three recommendations:

1. Develop a continuous evaluative process and use it to create measurable performance goals for enforcement actions, track performance towards those goals, and determine appropriate program changes. The evaluation should consider the agency's use of administrative actions and closure of cases with no action, and to identify repeat violators and repeat types of violations.
2. Work with industry partners to develop a continuous evaluative process and use it to create measurable performance goals for the partnership programs, track performance towards those goals, and determine appropriate program changes. The evaluation should consider the use and effectiveness of administrative actions in certain partnership programs.
3. Finally, to improve the usefulness of the EIS database to inspection offices and the Office of Chief Counsel, including providing them with

historical data on which to base their sanctions, we recommend that the Secretary direct the Administrator to make efforts to improve the completeness of enforcement information, such as consistently including information on why the sanctions are reduced, as part of the agency's planned efforts to enhance EIS.

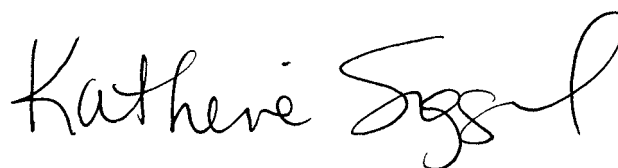
Agency Comments

We provided a draft of this report to the Department of Transportation for review and comment. FAA's Deputy Associate Administrator for Regulation and Certification and FAA's Assistant Chief Counsel for Enforcement provided comments. FAA agreed with our recommendations and provided technical corrections, which we incorporated as appropriate. In addition, FAA provided comments on two general areas covered in the report. First, FAA noted that the differences between the enforcement program and the partnership programs need to be clearly understood. FAA stated that the agency's enforcement program is intended to exact penalties for regulatory failures discovered through agency actions and that industry partnership programs are intended to promote the identification of potential safety lapses that can be fixed before safety is compromised. FAA stated that both efforts contribute to the agency's goal of reducing the rate of fatal accidents in commercial aviation and understanding the fundamental difference between the programs is important. Second, regarding our finding that FAA lacks a process to evaluate the nationwide effectiveness of actions implemented through the partnership programs, FAA noted that before measures can be established for such evaluations, it needs a process for collecting and evaluating nationwide data. The agency noted that this situation has posed both technical problems concerning the collection and analysis of data from various operators as well as valid concerns expressed by industry participants about how to protect data that are shared among operators. The agency indicated that, although it is not noted in our report, it is making progress in this area. According to FAA, it has established two aviation rulemaking committees that are developing a process to share data among all participants in the Aviation Safety Action Program and Flight Operational Quality Assurance program without revealing their identities.

As agreed with your office, unless you announce the contents of this report earlier, we plan no further distribution until 13 days from the report date. At that time, we will send copies of this report to other congressional committees, the Secretary of Transportation, and the Administrator of FAA. Copies will also be available to others upon request and at no cost on

GAO's Web site at www.gao.gov. If you or your staff have any questions about this report, please call me at (202) 512-2834. Major contributors to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in black ink that reads "Katherine Siggerud". The signature is written in a cursive style with a large, looping initial "K".

Katherine Siggerud
Director, Physical Infrastructure Issues

Objectives, Scope, and Methodology

This report focuses on the enforcement options and management controls used by the Federal Aviation Administration (FAA) to address noncompliance with aviation safety regulations. We answered the following questions: (1) How has FAA used its various enforcement options over the last decade to address noncompliance? and (2) To what extent has FAA established management controls, including measuring and monitoring performance, for its enforcement activities and partnership programs?

To better understand FAA's enforcement and compliance processes, we reviewed federal laws that authorize the agency to take enforcement actions against entities and individuals that do not comply with federal aviation regulations. We also examined the FAA orders used by aviation safety inspectors¹ to determine the steps they are required to take when a potential violation has been identified and the criteria they are expected to use to categorize violations and recommend sanctions.² In addition, to understand how each office implements the enforcement orders, we interviewed FAA officials in 11 offices (shown in table 7) that either conduct inspections and/or surveillances or, in the case of the Office of the Chief Counsel, are responsible for implementing legal action for violations of safety regulations.

¹In this report, we refer to FAA staff who perform safety audits, inspections, and surveillance as inspectors.

²FAA Order 2150.3A, *Compliance and Enforcement Program*, December 14, 1988, and changes incorporated and reprinted July 1999.

Table 7: FAA Offices Where We Conducted Interviews

FAA office	Location
Office of the Chief Counsel Enforcement Division	Washington, D.C.
Office of Aerospace Medicine • Drug Abatement Division	Washington, D.C.
• Aerospace Medical Certification Division	Oklahoma City, OK
Flight Standards Service	Dulles, VA Fort Worth, TX
Office of Airport Safety and Standards	Washington, D.C.
Commercial Space Transportation Division	Washington, D.C.
Office of Security and Hazardous Materials	Washington, D.C.
Aircraft Certification Service, Manufacturing Inspection Office • Small Airplane Directorate	Kansas City, MO
• Transport Airplane Directorate	Renton, WA
• Engine and Propeller Directorate	Burlington, MA
• Rotorcraft Directorate	Fort Worth, TX

Source: GAO.

Data Analyses

To obtain information on how FAA used its enforcement options to address noncompliance with aviation safety regulations in the past, we obtained and analyzed selected enforcement data for cases closed from fiscal years 1993 through 2003 from FAA’s Enforcement Information System (EIS) database, which is maintained by the Aviation Data Systems Branch in Oklahoma City. To assess the reliability of the EIS data, we (1) performed electronic testing for obvious errors in accuracy and completeness as well as inconsistencies; (2) reviewed existing information from internal FAA studies on EIS, as well as prior reports by us, about EIS and the data; and (3) interviewed officials in FAA’s Aviation Data Systems Branch and Office of the Chief Counsel (Enforcement Division), Washington, D.C., who are knowledgeable about the content of the data and how they were entered. We consulted regularly with these officials to resolve the handling of problematic data entries. We determined that the data were sufficiently reliable for the nationwide trend analyses that we used for this report.

Our analyses of the EIS data for fiscal years 1993 through 2003 formed the basis of the numerical information shown throughout this report on how FAA responded to prior enforcement and self-reported cases. Our analyses

included only closed cases, which we reported by the year closed. The information we developed from the data includes types of violators and enforcement actions associated with the cases closed; trends in the numbers of cases closed; and trends in the enforcement sanctions used to close them (administrative actions, no action, and various types of legal sanctions). We also conducted analyses to determine the extent to which FAA modified penalties and determined the average, median, range, and total monetary and nonmonetary penalties associated with various types of sanctions and violators.

We documented the procedures that we used to derive the EIS-based numerical information in our report and submitted them to officials in the Aviation Data Systems Branch and Office of the Chief Counsel (Enforcement Division), Washington, D.C., for their review. We consulted FAA officials and knowledgeable program staff regarding our approach and our analysis of the data.

Management Controls

We interviewed FAA managers in the Flight Standards Service, Aircraft Certification Service, Office of Aerospace Medicine, Office of Airport Safety and Standards, Commercial Space Transportation Division, and Office of Security and Hazardous Materials to determine what, if any, performance measures and goals have been established for their enforcement activities and partnership programs and the types of management controls they have incorporated in their areas. In addition, we reviewed the agency's internal management reports, including compliance and enforcement reviews for 1995 and 2003; the *Quarterly Management Report* for the Flight Standards Division's Southwest Region for the fourth quarter of fiscal year 2003; the Department of Transportation's Performance and Accountability report for fiscal year 2002; and FAA Order 2150.3A, *Compliance and Enforcement Program* (issued December 14, 1988, and changes incorporated and reprinted July 1999).

Using the federal government's guides for management controls at federal agencies,³ we selected control standards that are relevant to the types of enforcement activities and partnership programs that FAA administers.

³U.S. General Accounting Office, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1. (Washington, D.C.: Nov. 1999) and U.S. General Accounting Office, *Internal Control Management and Evaluation Tool*, GAO-01-1008G (Washington, D.C.: Aug. 2001).

(See tables 8 and 9.) We obtained information on FAA's risk assessment and program evaluation policies and administration of penalties and sanctions for violations. We analyzed the information provided by the managers on the agency's procedures and policies, and we compared it with control standards required of federal agencies in order to determine the presence and adequacy of management controls for FAA's enforcement activities and partnership programs.

Table 8: Selected Internal Control Standards Used to Assess Enforcement Activities

Performance measures

1. Have performance measures and indicators been established for the program?
2. Are the strategic goals communicated to staff?
3. Does management track program/unit's achievements and compare them to the plans, goals, and objectives established by the performance measures?

Risk assessment

4. Are enforcement violations analyzed and ranked by:
 - severity of infraction?
 - frequency of occurrence?
 - likelihood of recurrence?
5. Are the inspected entities ranked in any way?
6. Are analyses performed on inspection findings or other data?
7. Are the results of the analyses used to prepare a risk analyses plan?
8. Are findings from other audits and inspections considered before an inspection is conducted?
9. Are procedures or systems in place to deal with unexpected problems found during inspections?

Control activities

10. Have policies, procedures, techniques, or mechanisms for conducting an inspection and reporting findings been established?
11. Have policies, procedures, techniques, or mechanisms for recommending types of actions to correct violations been established?
12. Have policies, procedures, techniques, or mechanisms for verifying that action taken to correction violations been established?
13. Are records and appropriate documents that provide evidence of the findings and corrective actions created and maintained?
14. Does program management ensure that records and appropriate documents concerning enforcement activities are properly managed (i.e., information is timely recorded, complete, accurate, and readily available for examination by authorized persons)?
15. Are inspectors provided timely training aimed at developing and retaining skill levels regarding enforcement activities?

Controls over information processing and systems

16. Are databases other than the Enforcement Inspection System (EIS) used to record information about inspections?
 17. Are databases used in addition to EIS?
 18. Is the non-EIS database used throughout the field and program offices?
 19. Is either of these two databases the principal vehicle used to record information about inspections?
 20. Are data from EIS and/or the regional database used to obtain information before an inspection proceeds?
-

Appendix I
Objectives, Scope, and Methodology

(Continued From Previous Page)

21. Have inspectors been trained to use EIS and/or the regional database?
22. Do inspectors find using EIS and/or the regional database an easily attainable source of information on prior inspections?
23. Is information from EIS and/or the regional database used for reports to agency officials?
24. Is access to EIS and/or the regional database limited to inspectors?
25. Is access to the databases limited to specific staff?
26. Does the information from regional database differ from the information inputted into EIS database? If yes, how is the information in the two databases reconciled?

Monitoring

27. Have audits or reviews been performed on operations?
 28. Have the results of those audits/reviews been evaluated by management?
 29. Were actions taken to correct or resolve, within an established timeframe, matters brought to management's attention?
-

Source: GAO.

Table 9: Selected Internal Control Standards Used to Assess Partnership Programs

Risk assessment

1. Are incidents analyzed and ranked by severity of infraction, frequency of occurrence, and likelihood of recurrence?
2. Are the participating entities ranked in any way?
3. Are analyses performed on disclosed incidents or other data?
4. Are the results of the analyses used to prepare a risk analyses plan?
5. Are findings from other audits and assessments considered when an incident is disclosed?
6. Is there a procedure or system in place to deal with unexpected problems found as a result of a disclosure?

Control activities

7. Does the program have a policy, procedure, technique, or mechanism for receiving voluntarily disclosed information and reporting findings?
8. Does the program have a policy, procedure, technique, or mechanism for recommending types of actions to correct incidents?
9. Does the program have a policy, procedure, technique, or mechanism for verifying that action taken to correct incidents has occurred?
10. Does the agency staff create and maintain records and appropriate documents that provide evidence of the disclosed incidents and corrective actions?
11. Does the agency ensure that records and appropriate documents are recorded in a timely manner, complete, and accurate?
12. Are incident reviewers within the agency provided timely training aimed at developing and retaining skill levels?

Performance measures

13. Are there established performance measures and indicators for the program office? If so, how frequently are they reviewed and by whom?
14. Are the strategic goals communicated to staff?
15. Does management track unit's achievements and compare them to the plans, goals, and objectives established by the performance measures?

Controls over information processing and systems

16. Does the agency use a database to record information about disclosed incidents?
17. Is the database used throughout the field offices?
18. Is this database the principal vehicle used to record information about incidents?
19. Have staff been trained to use the database?
20. Do staff find using the database an easily attainable source of information on prior incidents?
21. Is information from the database used for reports to agency officials?
22. Is access to the database limited to specific staff?

Monitoring

23. Have audits or reviews been performed on the program's operation?
 24. Have the results of those audits/reviews been evaluated by management?
 25. Were actions taken to correct or resolve, within an established timeframe, matters brought to management's attention?
-

Source: GAO.

In order to understand the impact that FAA's enforcement activities and partnership programs have on enhancing compliance with safety regulations, we reviewed orders related to the partnership programs, interviewed the manager of the FAA's Voluntary Safety Programs Branch, and interviewed officials from the Airline Pilots Association, Air Transport Association, and Regional Airline Association because their members are subject to FAA enforcement and compliance efforts. We also interviewed representatives of FAA's largest inspector unions—the National Air Traffic Controllers Association and Professional Airways Systems Specialists—to obtain their views on FAA enforcement and compliance activities including the use of penalties and sanctions as a deterrence for future violations, inspector training, and the inspectors' role in FAA's enforcement process and partnership programs.

To obtain information about the significance of penalties and sanctions in deterring future violations in general, we reviewed literature and studies on the overall effect that those items have on ensuring compliance with rules and regulations. We assessed the relevancy of that information to the issues identified in this review. The literature on deterrence that we reviewed included:

- A. Mitchell Polinsky and Steven Shavell, "The Economic Theory of Public Enforcement of Law," *Journal of Economic Literature*, Vol. XXXVIII (March 2000);
- Oren Bar-Gill & Alon Harel, "Crime Rates and Expected Sanctions: The Economics of Deterrence Revisited," *Journal of Legal Studies*, Vol. XXX (June 2001), pp. 485-501;
- Isaac Ehrlich, "Crime, Punishment, and the Market for Offenses," *Journal of Economic Perspectives*, Vol. 10 (Winter 1996), pp. 43-67;
- Richard Posner, "Economic Analysis of Law," 3rd edition (1986); and
- Steven Levitt, "Why Do Increased Arrest Rates Appear to Reduce Crime: Deterrence, Incapacitation, or Measurement Error?" working paper #5268, National Bureau of Economic Research (September 1995).

We conducted our review from April 2003 through July 2004 in accordance with generally accepted government auditing standards.

Description of FAA's Partnership Programs

Aviation Safety Action Program (ASAP)

Year Established: 1997

Participation: Participants include employees of air carriers and repair stations that have entered into a memorandum of understanding with the Federal Aviation Administration (FAA). The memoranda can cover employee groups, such as pilots, maintenance employees, dispatchers, or flight attendants. Each employee group is covered by a separate memorandum of understanding. As of June 2004, FAA had accepted 54 memoranda of understanding and received over 80,000 ASAP reports, which may or may not include safety violations, according to FAA officials.

Purpose: ASAP seeks to improve aviation safety through the voluntary self-reporting of safety incidents under the procedures set forth in the memorandum of understanding. Under the program, FAA does not take enforcement action against employees who voluntarily reported safety violations for reports that are sole-source (the report is the only way FAA would have learned about the incident) and will pursue administrative action only for reports that are not sole-source. Incidents that involve alcohol, drugs, criminal activity, or an intentional disregard for safety are not eligible for self-reporting under ASAP.

Process: Each memorandum of understanding is a voluntary partnership between FAA, the airline, and an employee group. Although employee groups are not always included, FAA encourages their participation. The memorandum of understanding ensures that employees who voluntarily disclose FAA safety violations in accordance with the procedures and guidelines of ASAP will receive administrative action or no action in lieu of legal enforcement action.

Once a memorandum of understanding is approved, employees can begin reporting violations that fall under the agreement. When a violation occurs, an employee notifies the Event Review Committee, which includes representatives from FAA and the airline or the repair station and generally includes the appropriate employee association. The committee must be notified in writing within the time limit specified in the memorandum of understanding. The committee then determines whether to accept the report under the ASAP program. If the report is accepted (it meets the

acceptance criteria in the memorandum and does not involve criminal activity, substance abuse, controlled substances, or alcohol), then the committee determines the action to take. That action may include remedial training or administrative action, but it will not include a legal sanction.

Results: FAA does not have a national, systematic process in place to evaluate the overall success of ASAP. However, FAA cites examples that describes ASAP's contribution to enhanced aviation safety. These examples include identifying deficiencies in aircraft operations manuals, airport equipment, and runways. In July 2003, FAA's Compliance and Enforcement Review recommended that FAA evaluate the use and effectiveness of this program.

Aviation Safety Reporting Program (ASRP)

Year Established: 1975

Participation: Participants are all users of the national airspace system, including air traffic controllers and employees of air carriers and repair stations.

Purpose: The program is designed to improve aviation safety by offering limited immunity for individuals who voluntarily report safety incidents. ASRP was founded after TWA Flight 514 crashed on approach to landing in December 1974 after the crew misinterpreted information on the approach chart. This accident occurred only 6 weeks after another plane experienced the same error.

Process: The National Aeronautics and Space Administration (NASA) administers this program. When a safety incident occurs, a person may submit a form and incident report to NASA. There are four types of forms that can be submitted to NASA: (1) Air Traffic Control, (2) General Reports (includes Pilots), (3) Flight Attendants, and (4) Maintenance Personnel.

At least two aviation safety analysts read these forms and the incident reports that accompany them. The analysts at NASA screen the incident reports for urgent safety issues, which will be marked for immediate action to the appropriate FAA office or aviation authority. NASA analysts also edit the report's narrative to eliminate any identifying information. In addition,

each report has a tear-off portion, which is separated and returned to the individual who reported the incident as a receipt of the incident report's acceptance into the ASRP. When a safety violation that has been previously reported under ASRP comes to the attention of FAA, the agency issues a legal sanction, which is then waived. Reports that would not be eligible to have a legal sanction waived include deliberate violations, violations involving a criminal offense, or accident; reports filed by participants who have committed a violation of federal aviation regulations or law within the last 5 years and reports filed later than 10 days following an incident.

Results: FAA and NASA have no formal national evaluation program to measure the overall effectiveness of the program. ASRP reports are compiled into a database known as the Aviation Safety Reporting System. When a potentially hazardous condition is reported, such as a defect in a navigational aid or a confusing procedure, NASA will send a safety alert to aircraft manufacturers, the FAA, airport representatives, and other aviation groups. Individuals and organizations can request a search of the database for information on particular aircraft aviation safety subjects, including human performance errors and safety deficiencies. In addition, the database is used for a monthly safety bulletin that includes excerpts from incident reports with supporting commentary by FAA safety experts. NASA officials estimate that the bulletin is read by over 150,000 people.

NASA has been able to use the data collected in the database to analyze operational safety issues, such as general aviation incidents, pilot and controller communications, and runway incursions.

Flight Operational Quality Assurance (FOQA)

Year Established: 1995

Participation: Participants include air carriers that equip their airplanes to record flight data. As of March 2004, 13 airlines had FAA-approved FOQA programs, and approximately 1,400 airplanes were equipped for the program.

Purpose: FOQA is designed to enhance aviation safety through the analysis of digital flight data generated during routine flights.

Process: Air carriers that participate in the program equip their aircraft with special acquisition devices or use the airplanes' flight data recorders to collect data and determine if the aircraft are deviating from standard procedures. These data include engine temperatures, descent rate, and deviations from the flight path. When the aircraft lands, data are transmitted from the aircraft to the airline's FOQA station, where they are analyzed for flight trends and possible safety problems.

Once the data are transmitted to the FOQA ground station, the data are extracted and analyzed by software programs. The FOQA data are combined with data from maintenance databases, weather conditions, and other safety reporting systems, such as ASAP, in order to identify trends in flight operations. The analysis typically focuses on events that fall outside normal boundaries specified by the manufacturer's operational limitations and the air carrier's operational standards.

FAA does not receive FOQA data. Instead, the data are maintained by air carriers, who are responsible for the analysis of FOQA data and reporting to FAA information on safety trends. According to FAA officials, air carriers do not want to release these data to any outside party (including FAA) because of concerns that the data could then be publicly released. Air carriers pay for the special flight data recorders that can record FOQA data, which cost approximately \$20,000 each. Although this can be an expensive investment for some air carriers, most newer aircraft models come with the data recorder built into the airplane. The International Civil Aviation Organization (ICAO) has recommended that airlines from member countries implement a FOQA program. FAA has notified ICAO that the program will remain voluntary in the United States.

Results: FAA has no formal national evaluation program to measure the overall effectiveness of FOQA program. However, FAA cites examples that describes FOQA's contribution to enhanced aviation safety. For example, one FOQA program highlighted a high rate of descent when airplanes land at a particular airport. On the basis of the information provided from FOQA, air traffic controllers at the airport were able to develop alternative approach procedures to decrease the rate of descent.

Voluntary Disclosure Reporting Program (VDRP)

Year Established: 1990

Participation: Participants include air carriers, repair stations, and production approval holders.¹

Purpose: FAA initiated the program to promote aviation safety by encouraging the voluntary self-reporting of manufacturing, and quality control problems and safety incidents involving FAA requirements for maintenance, flight operations, drug and alcohol prevention programs, and security functions.

Process: Upon discovering a safety violation, participants can voluntarily disclose the violation to FAA within 24 hours. The initial notification should include a description of the violation, how and when the violation was discovered, and the corrective steps necessary to prevent repeat violations. Within 10 days of filing the initial notification to FAA, the entity is required to provide a written report that cites the regulations violated, describes how the violation was detected, provides an explanation of how the violation was inadvertent, and provides a description of the proposed comprehensive fix. The FAA may pursue legal action if the participant discloses violations during, or in anticipation of, a FAA inspection.

The violation must be reported immediately after being detected, must be inadvertent, must not indicate that a certificate holder is unqualified, and must include the immediate steps that were taken to terminate the apparent violation. If these conditions are met, and the FAA inspector has approved the comprehensive fix, then the FAA inspector will prepare a letter of correction and the case is considered closed with the possibility of being reopened if the comprehensive fix is not completed.

Results: FAA has no formal national evaluation program to measure the overall effectiveness of the program. A 2003 internal FAA report

¹A production approval holder is an entity that holds a certificate, approval, or authorization from FAA to manufacture aircraft, aircraft engines, propellers, and related parts and articles.

Appendix II
Description of FAA's Partnership Programs

recommended that the agency evaluate the use and effectiveness of this program.

Additional Data Analyses

Table 10: Number and Percentage of Enforcement Sanctions Resolved with Administrative Actions, Legal Sanctions, and No Action, for Cases Closed during Fiscal Years 1993-2003

Type of action	Fiscal year											Total
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Administrative	8,952 (52%)	10,516 (57%)	9,218 (53%)	8,934 (56%)	8,168 (50%)	10,141 (51%)	10,465 (53%)	11,046 (54%)	10,670 (52%)	9,128 (52%)	8,921 (59%)	106,159 (53%)
Legal	4,815 (28%)	4,668 (25%)	4,621 (27%)	4,315 (27%)	5,271 (32%)	5,731 (29%)	5,700 (29%)	5,784 (28%)	5,804 (28%)	4,830 (28%)	3,568 (24%)	55,107 (28%)
No action	3,109 (18%)	3,070 (17%)	3,198 (19%)	2,549 (16%)	2,725 (17%)	3,963 (20%)	3,411 (17%)	3,487 (17%)	3,800 (19%)	3,363 (19%)	2,390 (16%)	35,065 (18%)
Other ^a	405 (2%)	382 (2%)	262 (2%)	256 (2%)	224 (1%)	233 (1%)	201 (1%)	183 (1%)	179 (1%)	195 (1%)	188 (1%)	2,708 (1%)
Total	17,281 (100%)	18,636 (100%)	17,299 (100%)	16,054 (100%)	16,388 (100%)	20,068 (100%)	19,777 (100%)	20,500 (100%)	20,453 (100%)	17,516 (100%)	15,067 (100%)	199,039 (100%)

Source: GAO analysis of FAA's EIS data.

^aOther includes cases that the U.S. attorney declined to process, cases in which the certificates expired, and cases in which FAA was unable to locate the violators

Appendix III
Additional Data Analyses

Table 11: Types of Enforcement Cases against Violators, Fiscal Years 1993-2003

Type of case	Number of cases	Percentage of cases
Security	55,877	29%
Flight operations	41,530	21
Maintenance	28,679	15
Records and reports	18,222	9
Hazardous materials	17,808	9
Medical	15,539	8
Quality controls	4,768	2
Training	2,781	1
Interference with crew member	1,606	1
Airport	1,126	1
Hazards to persons/property on surface	1,029	1
Hazards to air navigation	230	0
Aircraft certification	180	0
Other ^a	6,247	3
Total	195,622	100%

Source: GAO analysis of FAA's EIS data.

^aOther includes noise violations, missing data, and violations that FAA categorized as "other."

Appendix III
Additional Data Analyses

Table 12: Number and Percentage of Enforcement Actions Resolved with Administrative Actions, Legal Sanctions, and No Actions by Region, for Cases Closed during Fiscal Years 1993-2003

Region	Type of action				Total
	Administrative	Legal	No action	Other	
Aero Center ^a	2,252 (18%)	8,592 (70%)	1,227 (10%)	133 (1%)	12,204 (100%)
Headquarters	1,724 (29%)	1,620 (27%)	2,603 (43%)	92 (2%)	6,039 (100%)
Alaska	3,937 (60%)	1,571 (24%)	943 (14%)	67 (1%)	6,518 (100%)
Central	4,781 (52%)	2,906 (32%)	1,358 (15%)	65 (1%)	9,110 (100%)
Eastern	12,487 (59%)	4,967 (23%)	3,631 (17%)	185 (1%)	21,270 (100%)
Europe	388 (73%)	78 (15%)	64 (12%)	0 (0%)	530 (100%)
Great Lakes	11,680 (54%)	5,457 (25%)	4,417 (20%)	260 (1%)	21,814 (100%)
New England	2,567 (53%)	1,325 (28%)	841 (17%)	80 (2%)	4,813 (100%)
Northwest Mountains	10,995 (58%)	5,427 (28%)	2,512 (13%)	186 (1%)	19,120 (100%)
Southern	16,674 (52%)	8,936 (28%)	6,187 (19%)	421 (1%)	32,218 (100%)
Southwest	17,170 (55%)	7,144 (23%)	6,026 (19%)	667 (2%)	31,007 (100%)
Western Pacific	17,905 (58%)	7,083 (23%)	5,256 (17%)	552 (2%)	30,796 (100%)
Total	106,159^b (53%)	55,107^c (28%)	35,065 (18%)	2,708 (1%)	199,039 (100%)

Source: GAO analysis of FAA's EIS data.

^aAero Center is the Mike Monroney Aeronautical Center in Oklahoma City.

^bTotal number of administrative actions includes 3,599 self-reported cases that FAA did not assign to any region.

^cTotal number of legal actions includes 1 self-reported case that FAA did not assign to any region.

Appendix III
Additional Data Analyses

Table 13: Total Number and Percentage of Closed Enforcement Cases for Which Regions Recommended Legal Sanctions, Fiscal Years 1993-2003

Type of legal sanctions	Number of cases	Percentage of cases
Certificate suspension	17,439	28%
Fine	36,320	58
Certificate revocation	8,844	14
Other legal sanction ^a	21	0
Total	62,624	100%

Source: GAO analysis of FAA's EIS data.

^aOther includes cases in which the sanction was deferred or waived.

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