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GAO

Report to the Chairman, Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

July 2001

AVIATION RULEMAKING

Further Reform Is Needed to Address Long-standing Problems

GAO

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Abbreviations

APHIS	Animal and Plant Health Inspection Service
APA	Administrative Procedure Act
DOT	Department of Transportation
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHA	Federal Highway Administration
FMCSA	Federal Motor Carriers Safety Adminstration
FDA	Food and Drug Administration
GAO	General Accounting Office
NHTSA	National Highway Transportation Safety Administration
NPRM	Notice of Proposed Rulemaking
NTSB	National Transportation Safety Board
NRC	Nuclear Regulatory Commission
OIG	Office of the Inspector General
OMB	Office of Management and Budget
OST	Office of the Secretary of Transportation

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

July 9, 2001

The Honorable John L. Mica
Chairman, Subcommittee on Aviation
Committee on Transportation and Infrastructure
House of Representatives

The Honorable John J. Duncan Jr.
House of Representatives

In response to your request to conduct a review of the Federal Aviation Administration's (FAA) rulemaking process in order to identify ways to improve its efficiency, we established three research questions:

- What are the time frames for FAA's rulemaking, including the time FAA took to initiate the rulemaking process in response to statutory requirements and safety recommendations and, once begun, to develop and publish significant rules?
- What were the effects of FAA's 1998 reforms on its process and on its time frames for completing rulemaking?
- How effective were FAA's reform efforts in addressing the factors that affect the pace of the rulemaking process?

This report contains recommendations to the Secretary of Transportation on steps that FAA can take to improve the timeliness of its rulemaking through better management of the process and its participants.

As we agreed with your offices, unless you publicy announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies to the Secretary of Transportation and the Administrator of FAA. We will also make copies available to others who request them.

If you or your staff have any questions about this report or would like to discuss it further, I can be reached at (202) 512-2834. Key contributors to this report are acknowledged in appendix VI.

Gerald L. Dillingham

Gerald L. Dillingham,
Director, Physical Infrastructure

Executive Summary

Purpose

The Federal Aviation Administration (FAA) develops regulations to enhance aviation safety and security and to promote the efficient use of airspace. In doing so, it must balance opposing pressures. On the one hand, the process of developing regulations, or rulemaking, is complex and time consuming. Because rules can have a significant impact on individuals, industries, the economy, and/or the environment, proposed rules must be carefully considered before being finalized. Often, difficult policy issues must be resolved. On the other hand, threats to public safety and the rapid pace of technological development in the aviation industry demand timely action. Over the past 40 years, numerous reports have documented problems in FAA's rulemaking efforts that have delayed the formulation and finalization of its rules.

In light of the critical role of regulations in aviation safety and the long-standing nature of problems associated with FAA's rulemaking process, the Chairman of the Subcommittee on Aviation, House Committee on Transportation and Infrastructure asked GAO to conduct a review of FAA's rulemaking process to identify ways to improve its efficiency. To meet this objective, GAO established three research questions in concert with the Chairman's office:

- What are the time frames for FAA's rulemaking, including the time FAA took to initiate the rulemaking process in response to statutory requirements and safety recommendations and, once begun, to develop and publish significant rules?
- What were the effects of FAA's 1998 reforms on its process and on its time frames for completing rulemaking?
- How effective were FAA's reform efforts in addressing the factors that affect the pace of the rulemaking process?

Background

FAA's rulemaking, like that of other federal agencies, is a complicated process intended to ensure that all aspects of any regulatory change are fully analyzed before the change goes into effect. A need for rulemaking can be identified internally, by one of FAA's offices, or externally, by an outside source such as the Congress or the National Transportation Safety Board (NTSB), which issues mandates or recommendations, respectively, calling for rulemaking. When the Congress mandates rulemaking, FAA is required to initiate the process. When NTSB issues a recommendation, FAA studies the situation and decides whether to initiate the rulemaking process. Once FAA formally initiates rulemaking, each rule must be

developed and published twice—first as a proposed rule and then as a final rule. In the proposed rule phase, the agency develops a proposed rule and publishes it in the *Federal Register* for public comment. During the comment period that follows, interested parties may submit written comments. When the comment period closes, FAA develops the final rule. Its procedures for finalizing the rule include examining the comments, making changes it deems appropriate, and publishing the final rule in the *Federal Register* for incorporation into the Code of Federal Regulations. Federal agencies' "notice and comment" process is governed primarily by the Administrative Procedure Act of 1946, but it must also follow additional statutory requirements as well as executive orders issued by the president.

FAA's responsibilities include developing rules that cover a wide range of aviation activities, including many aspects of commercial and general aviation. The critical nature of FAA's rules in setting standards for public safety has led the Congress to be particularly concerned with FAA's efficiency in developing rules. Most recently, in response to concerns about the pace of FAA's rulemaking, the Congress enacted legislation in 1996 that established, among other things, a 16-month time frame for the finalization of FAA's rules after the close of the public comment period.

Numerous studies of FAA's rulemaking procedures have identified common factors that delay the promulgation of rules. In this report, GAO groups these factors into three main areas of concern—management involvement, administration of the rulemaking process (process administration), and human capital. Earlier studies suggest that problems related to management involvement occurred because of changing priorities within and across departments, late or otherwise inappropriate timing of management decisionmaking, and an unwillingness to delegate authority. Difficulties in administrating the rulemaking process occurred because employees did not possess a clear understanding of their roles and responsibilities and because information management systems were not as useful as they could have been. Finally, human capital problems arose because FAA lacked a formal system for selecting and training its rulemaking staff and did not link incentives to performance. The agency undertook a major reform effort in 1998 to address these problems and respond to the time frames the Congress had established in 1996.

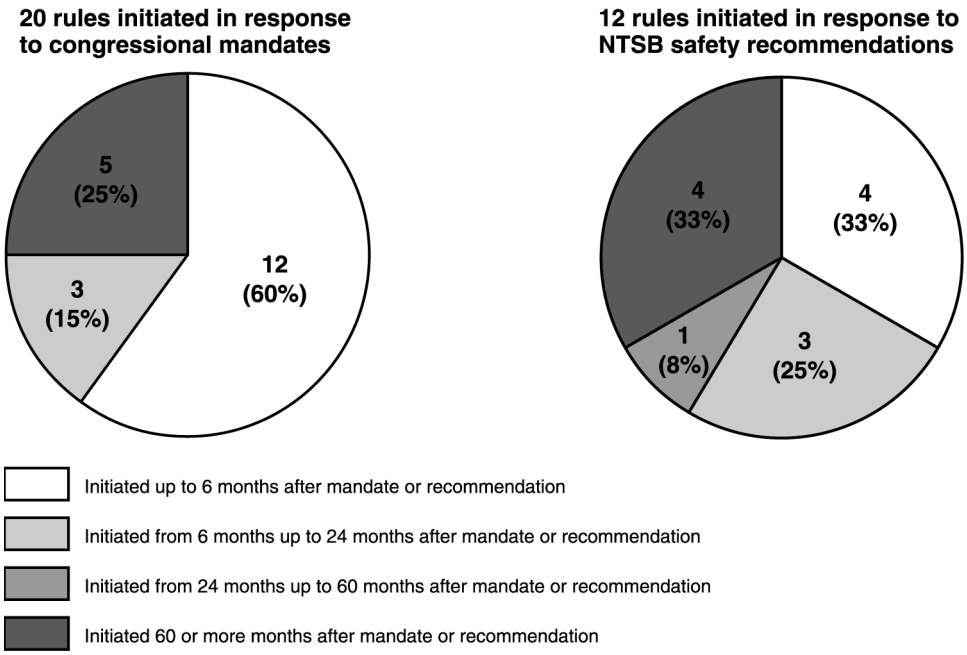
To measure the overall impact of the 1998 reforms, GAO discussed the reforms with FAA staff and management and created a database of 76 significant rules. These rules constituted the majority of FAA's workload of significant rules from fiscal year 1995 through fiscal year 2000. In

developing the database, to determine the dates that rulemaking projects were initiated, GAO used the dates recorded in FAA's information system. For the dates of publication of proposed and final rules, GAO used the dates of publication in the *Federal Register*. Using the database, GAO performed statistical analyses of the time frames for the rulemaking process in the 3 years before and after the reform was implemented in 1998. GAO discussed rulemaking reform with officials from other federal regulatory agencies, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and other operating administrations within the Department of Transportation (DOT), as well as with FAA rulemaking officials and other stakeholders in FAA's rulemaking process, including representatives of NTSB, the Office of the Secretary of Transportation (OST), and the Office of Management and Budget (OMB). To obtain more detailed information and employees' opinions on the effects of the reform on FAA's rulemaking process, GAO developed case studies on specific rules and surveyed 134 FAA employees who had served as rulemaking team members on significant rules. GAO supplemented its survey results with semistructured interviews of rulemaking team members involved in four rulemaking projects.

Results in Brief

The time frames for key steps in FAA's rulemaking process varied widely for the 76 significant rules we reviewed. These rules constituted the majority of FAA's workload of significant rules from fiscal year 1995 through fiscal year 2000. FAA initiated about 60 percent of rulemaking projects mandated by the Congress and about a third of rulemaking projects recommended by NTSB within 6 months of the mandate or recommendation. However, for one-fourth of the mandates and one-third of the recommendations, at least 5 years passed before FAA initiated the process, as shown in figure 1.

Figure 1: Time Elapsed Between 20 Congressional Mandates and 12 NTSB Safety Recommendations and FAA's Initiation of the Rulemaking Process



Note: The time until initiation was measured from the date the legislation containing a mandate was enacted or the date a safety recommendation was issued to the initiation date identified in FAA's rulemaking information system. No rules in response to congressional mandates were initiated from 24 months up to 60 months after the mandate.

Because of rounding, totals may not add up to 100 percent.

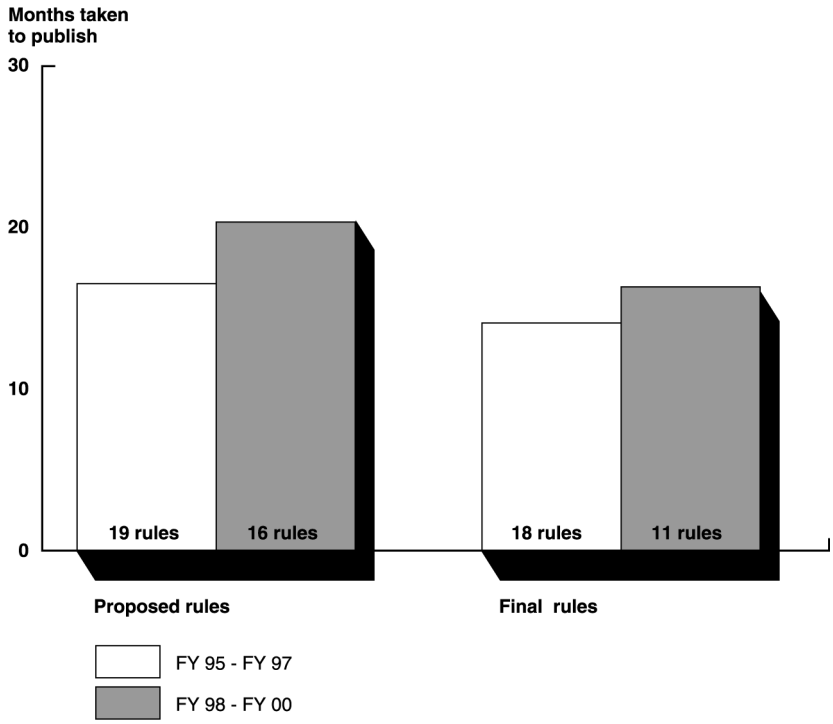
Source: GAO's analysis of FAA data.

Once the rule was formally initiated, FAA took a median time of about 2 ½ years to proceed from formal initiation of the rulemaking process through publication of the final rule, a process it completed for 29 significant rules from fiscal year 1995 through fiscal year 2000. While FAA completed this process within 2 ½ years for half of its significant rules, the agency took 10 years or more to move from formal initiation of the rulemaking process through publication of the final rule for 6 of the 29 rules. FAA's median pace for finalizing a rule after the close of the public comment period—about 15 months—was comparable to that of four other federal regulatory agencies we selected, ranging from about 1½ months to more than 6 years. Nonetheless, since the Congress enacted legislation in October 1996 that

established a 16-month time frame for the finalization of significant rules after the close of the public comment period, FAA had missed the deadline for more than half of its rulemaking projects.

The reforms FAA implemented in 1998 included establishing a rulemaking steering committee and a rulemaking management council to improve management involvement in setting priorities and resolving policy issues. FAA also created a rulemaking manual to provide consistent guidance for rulemaking staff and establish suggested time frames for steps in the process, implemented a new automated system to track and manage rulemaking documents, and established two new teams to monitor, evaluate, and improve the administration of the rulemaking process. Human capital management reforms—such as continuing training, skills assessment, performance measurement, and the development of a rewards system—were considered but not implemented. The median times FAA took to proceed from initiation of rulemaking through the release of the proposed rule for public comment (the proposed rule phase) and to finalize the rule after the close of the public comment period (the final rule phase), both increased in the 3-year period after FAA implemented its 1998 reforms, even though FAA published fewer rules during the latter period, as shown in figure 2. These comparisons suggest that the productivity of FAA's rulemaking process for significant rules decreased after FAA's reform.

Figure 2: Median Time FAA Took to Process Significant Proposed and Final Rules for Periods Before and Since FAA's Reforms



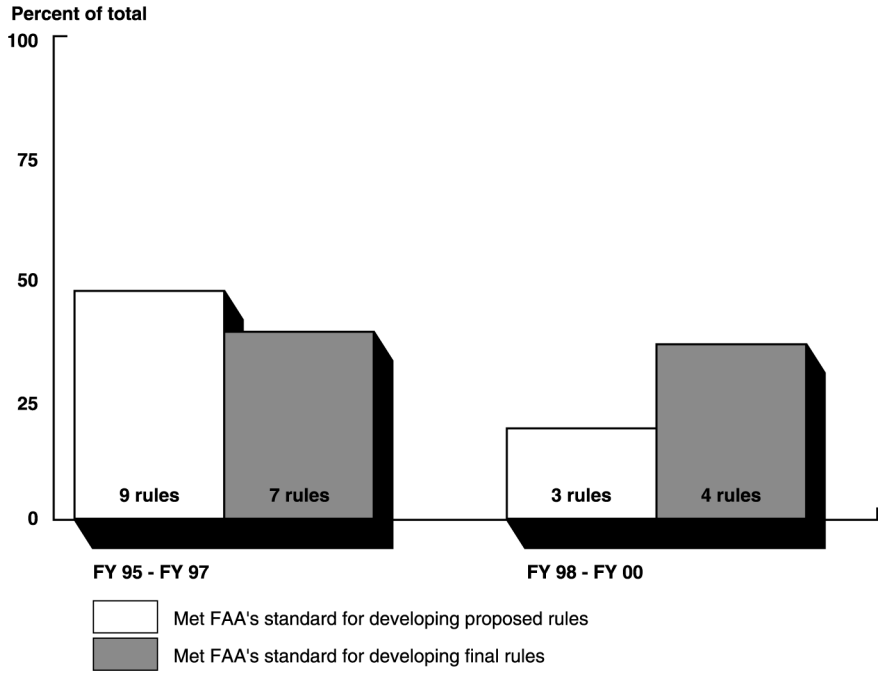
Note: These processing times do not include the public comment period. One final rule that was completed in fiscal year 1998 was included in fiscal 1997 in this chart because it was completed prior to FAA's reforms in January 1998. The median may not equal the arithmetic average (mean). Because the mean gives greater influence to extreme values in assessing processing time for rulemaking, we elected to present median values.

Source: GAO's analysis of FAA and *Federal Register* data.

As part of its rulemaking reforms, FAA established its own time frames for the process: 450 days to proceed from initiation of rulemaking through the release of the proposed rule for public comment (the proposed rule phase) and 310 days to finalize the rule after the close of the public comment period (the final rule phase). Although these time frames were established as part of FAA's reforms and were therefore not an applicable standard for rulemaking efforts prior to the reforms, nevertheless, we found that FAA met these time frames less often after the reforms than before them. For example, it met its time frame for proceeding from the initiation of the rulemaking process to the release of the proposed rule for public comment in 47 percent of projects in the 3-year period prior to the 1998 reforms but

in only 19 percent of projects in the 3-year period following the 1998 reforms, as shown in figure 3.

Figure 3: Percentage of FAA's Significant Proposed and Final Rules Published Before and Since FAA's Reforms That Met Time Frames Suggested in FAA's Reform Guidance



Note: The time frames suggested in FAA's guidance are 450 days (about 15 months) for developing proposed rules and 310 days (about 10 months and 10 days) for final rules.

Source: GAO's analysis of FAA data.

FAA's limited implementation of the reforms did not solve long-standing problems, as indicated both by the lack of improvement in the time required to complete the rulemaking process and by the agency's inability to consistently meet the time frames imposed by statute or its own guidance. Many of the problems that have slowed rulemaking at the agency remain. External pressures—such as highly-publicized accidents, recommendations by NTSB, and congressional mandates—as well as internal pressures, such as changes in management's emphasis continue to add to and shift the agency's priorities. For some rules, difficult policy issues have continued to remain unresolved late in the process.

Management has retained several layers of internal review. Process administration remains an area of concern. Rulemaking participants are not clear about job responsibilities, the updated information system contained consistent data on only the highest priority rules, and vital parts of the continuous improvement program have not yet materialized. Finally, FAA has not implemented recommended human capital management initiatives, rulemaking participants undergo limited training, and their performance is not tied to a consistent evaluation or rewards system.

This report contains recommendations designed to improve the efficiency of FAA's rulemaking through, among other things, more timely and effective participation of management in decisionmaking and prioritization; more effective use of information management systems to monitor and improve the process; and implementation of human capital strategies to measure, evaluate, and provide performance incentives for process participants. FAA and departmental officials concurred with a number of the recommendations. They said that a few of the report's recommendations will require further consideration and that a specific response to each of the report's recommendations will be provided in the Department's response to the final report.

Principal Findings

Steps of the Rulemaking Process Were Completed in Varying Times That Often Missed Legislative Requirements

Of the 76 significant rulemaking actions GAO reviewed, about 42 percent were initiated in response to a congressional mandate or recommendation by NTSB. While congressional mandates may require that FAA take rulemaking action, NTSB's recommendations do not. However, FAA is required to formally respond to the recommendation to specify what action is being taken and why. FAA initiated well over half of its rulemaking actions in response to mandates from the Congress and safety recommendations from NTSB within 2 years of the mandate or recommendation. However, FAA sometimes took many years to initiate the rulemaking process. In some cases, these delays may have occurred because FAA took additional time to study complex issues raised or because there were differences of opinion between FAA and NTSB. For example, because FAA did not agree with an NTSB recommendation to require the use of child safety seats aboard aircraft, 7 years passed between NTSB's recommendation and FAA's initiation of the rulemaking process. During that time, FAA studied the issue, concluded that if child restraints

were required on aircraft, passenger diversion to other transportation modes could cause a net increase in fatalities, and made a policy decision not to begin rulemaking to require child safety seats. Recommendations by the White House Commission on Aviation Safety eventually led FAA to revise its policy position and initiate rulemaking.

For significant rules published during the 6-year period from fiscal year 1995 through fiscal year 2000, FAA took a median time of about 2 ½ years[1] to proceed from formally initiating the rulemaking process to publishing the final rule in the *Federal Register*. This time period ranged from less than 1 year to almost 15 years. FAA took a median time of about 20 months to proceed from initiating the process to releasing the proposed rule for public comment. It took a median time of about 15 months to finalize the rule after the close of the public comment period, which was comparable to the time other federal agencies took to complete this final step.

The time taken for one step of the rulemaking process that occurs in FAA's development of both proposed and final rules—departmental review and approval—has been of particular concern to the Congress. In the Federal Aviation Reauthorization Act of 1996, the Congress addressed its concern by establishing a time frame for this step. The act requires the Secretary of the Department of Transportation to review proposed and final significant rules and either approve them or return them to FAA with comments within 45 days of receiving them. GAO was unable to measure the extent to which the Department met this 45-day requirement because, while FAA's information system tracked the date of the Office of the Secretary of Transportation's (OST) approval of some rules, it did not track the date of OST's response when the Department returned significant rules to FAA with comments. Using the dates that were tracked, GAO found that overall, for both proposed and final rules, the median time required for OST's approval since the 1996 act (including review, comment, and FAA's response, if any)—was 4.1 months (124 days). Measuring proposed and final rules separately, GAO found that the median time for OST's approval of proposed rules was 4.7 months (140 days), while the median time OST took to approve final rules was 2.3 months (69 days).

The time FAA took to finalize its rules after the close of the public comment period was similar to that of other federal agencies. GAO examined the

[1]The median processing time is the statistical point for which half of the processing times are greater and half of the processing times are lower.

time taken for this part of the rulemaking process for four regulatory agencies—Animal and Plant Health Inspection Services (APHIS), the Environmental Protection Agency (EPA), the Federal Drug Administration (FDA), and the National Highway Transportation Safety Administration (NHTSA)—in addition to FAA. Except for APHIS, which finalized all of its significant rules within 2 years of the close of the public comment period, agencies generally finalized between three-quarters and two-thirds of their significant rules within 24 months of the close of the public comment period.

FAA met the legislative requirement passed in 1996 to publish final rules within 16 months of the close of the public comment period for less than half of its significant rules. Specifically, FAA met the legislative time frame for 7 of the 18 significant rules subject to the requirement. FAA was even less successful in meeting legislative requirements to issue specific rules within specially mandated periods of time. Of the 76 rulemaking actions GAO reviewed, 7 were initiated in response to congressional mandates with specific time frames, and FAA met the required time frames for 2 of them.

FAA's Reforms Addressed Long-standing Rulemaking Problems but Did Not Reduce Rulemaking Times

The two new groups that FAA established to improve management involvement in the rulemaking process consisted of members from all FAA offices involved with current rulemaking efforts, as well as representatives from OST's General Counsel. The steering committee was established to provide a formal mechanism for senior-level managers at the associate-administrator level to meet periodically to determine the priority of rulemaking projects. The rulemaking management council was established to assemble director-level managers to manage the day-to-day process of developing rules. FAA's new rulemaking manual provides rulemaking policy guidance. It suggests milestones for completing steps in the rulemaking process and establishes guidelines for the steering committee to follow in setting priorities.

To better administer the rulemaking process, FAA documented in its manual the roles and responsibilities for each member of the rulemaking team. This included clarifying the scope of two reviews, legal and economic, that have historically caused delays. The new computerized system, the Integrated Rulemaking Management Information System, was designed to collect data on the time required to complete multiple internal processing steps and to track the status of rules. It was thought that this information would form a basis for measuring the process and the

performance of its participants. Furthermore, the two new teams FAA created, the continuous improvement team and the quality team, were to evaluate the process and make recommendations for improving it, providing essential feedback for rulemaking management.

These reforms were not matched by extensive changes in human capital management. According to the Director of FAA's Office of Rulemaking, the staff resources needed to develop and implement recommended human capital initiatives were not available because rulemaking staff and management were fully occupied with the day-to-day management of the rulemaking process. As a result, FAA relied on existing training and reward systems. Whereas FAA's reform plan envisioned orientation training in the new rulemaking process and ongoing training in other areas, rulemaking staff received only the orientation training along with an introduction to the new system software. Other instruction—on functional skill development, conflict resolution, and project management, among other things—was not offered. Furthermore, although FAA's reforms included recommendations to establish performance measures for carrying out rulemaking duties and to develop a rewards system for performance in rulemaking—key elements of human capital management—the agency has not implemented these recommendations.

FAA's reforms did not reduce the median time it took to complete the rulemaking process. For the 3-year period following the reforms (fiscal years 1998 to 2000), FAA's median time to proceed from initiating the rulemaking process to publishing the final rule increased by about 8 months compared to its median time to complete this step in the 3-year period prior to the reform (fiscal years 1995 to 1997). The median time FAA took to proceed from initiating the process to releasing the proposed rule for public comment increased by more than 3 months after the reforms, from 16.5 months in the 3-year period prior to reform (fiscal years 1995 to 1997) to 20.4 months in the 3-year period following the reforms (fiscal years 1998 to 2000). The median time FAA took to finalize the rule after the close of the public comment period increased from 14 months to 16.3 months during the same time period. FAA's reforms did not reduce the time needed for departmental review and approval of the agency's significant rules. Overall, for both proposed and final rules, the median time OST took to approve the rule (including review, comment, and FAA's response, if any) increased from about 125 days before FAA's reforms to about 130 days after the reforms. FAA officials said that the process might have taken longer without OST's review, noting, for example, that approval of FAA's

significant proposed and final rules by OMB might have required more time if OST had not identified issues that FAA might have missed.

The number of significant rules FAA published declined after the reforms took effect. FAA developed and published 18 significant final rules in the 3-year period prior to the reforms, and it published 11 in the 3-year period after the reforms. Although it published fewer rules in the 3-year period after the reforms than in the 3-year period before the reforms, more than half of the time, FAA did not meet the time frames for completing steps in the rulemaking process that it established in its 1998 reforms. For example, FAA's guidance suggests 450 days for the proposed rule phase of the process and 310 days for final rule phase. In the 3-year period following its reforms, FAA met its suggested time frame for proposed rules in about 19 percent of the cases and missed it in about 81 percent of the cases. FAA met its suggested time frame for final rules in about 36 percent of the cases and missed it in about 64 percent of the cases.

Limited Implementation of Reforms Has Not Solved Long-standing Problems

FAA's reforms have not successfully addressed many of the problems that have hindered the timeliness of rulemaking at the agency. Our survey of FAA's rulemaking staff showed that less than 20 percent agreed that FAA has made the changes necessary to improve the rulemaking process. As a result of external and internal pressures, there continued to be too many top priority rules (from 35 in February 1998 to 49 in March 2001). Shifts in management priorities, also driven by external and internal pressures, pulled staff from projects already under way. Furthermore, on some rules, management continued to have difficulty resolving complex policy issues early in the process, resulting in delays and additional work.

Process administration remained an area of concern because rulemaking team members' confusion over roles and responsibilities in the process continued to add to delays. In addition, the new automated information system was used to track only FAA's "A" list of priority projects, including 24 significant rules, and was therefore missing complete and accurate data for many of FAA's other significant rulemaking projects. The document management feature had not been fully implemented in all offices participating in the rulemaking process. Moreover, the continuous improvement team and the quality team had not documented any quality review tasks, such as completing project evaluations or making recommendations to improve the rulemaking process.

Finally, about half of the FAA employees who participated as members of the rulemaking teams and responded to GAO's survey indicated that they had not received enough training to do their jobs. Most participants, furthermore, said they are not evaluated or rewarded according to the quality and timeliness of the rules they produce.

Regarding the problems GAO identified, FAA rulemaking officials said they planned to upgrade their information system to (1) track the status of rules transmitted to OST to better measure the time taken to obtain OST approval and (2) incorporate the ability to document lessons learned to improve their continuous improvement efforts. They also said they were updating their rulemaking manual.

Recommendations for Executive Action

In order for FAA to improve the efficiency of its rulemaking process and reap the maximum benefits from its rulemaking reform efforts, GAO recommends that the Secretary of Transportation direct the FAA Administrator to expedite the rulemaking process by fully implementing the 1998 reforms to address long-standing problems in this process in the areas of management involvement, process administration, and management of human capital. These reforms include, among other things, instituting more timely and effective participation of management in decisionmaking and prioritization, making more effective use of information management to monitor and improve the process, and implementing human capital strategies to measure, evaluate, and provide performance incentives for process participants.

Agency Comments

GAO provided a draft of this report to the Office of the Secretary of the Department of Transportation and FAA for their review and comment. In discussions after their review of the draft, departmental and FAA officials stated that the report was a comprehensive treatment of the agency's rulemaking process. These officials indicated that they agreed with a number of the draft report's recommendations. They said that a few of the report's recommendations will require further consideration and that a specific response to each of the report's recommendations will be provided in the Department's response to the final report.

FAA provided GAO with technical clarifications, which GAO included in this report where appropriate. The Department also provided written comments on this report, which did not specifically address GAO's

recommendations or the overall conclusions of this report, but included four main points about the results of this review. (The full text of the Department's written comments and GAO's detailed response to those comments are provided in app. V.)

First, commenting officials said that the rulemaking process is necessarily complex and that straightforward arithmetical comparisons across projects cannot adequately disclose the nature and extent of challenges and timing behind each rulemaking effort. GAO agrees that rulemaking can be a complex and time-consuming process; this understanding is reflected throughout this report. GAO also agrees that quantitative measures cannot fully capture the qualitative nature of the challenges FAA may face in its rulemaking efforts. Yet, because such measures are necessary to evaluate the process and identify potential improvements, GAO continues to believe that the time FAA took to complete steps in the process is a valuable performance measure of FAA's reforms to the rulemaking process.

Second, commenting officials said they were gratified to see that FAA's rulemaking process is sound and getting better, citing GAO's findings that FAA's rulemaking process is comparable to other agencies in the federal government and that the median age of FAA's significant final rulemaking projects decreased between 1997 and 2000. In fact, the draft report provided to the Department for comment included a finding that the median time FAA's unpublished significant final rules had remained in the process (see fig. 16) had decreased by about 7 months, as the Department noted. However, in finalizing the calculations, GAO found that this measure showed an increase of approximately 5 months. Moreover, GAO believes it is important that this report's findings are kept in the appropriate context. For example, GAO's analysis found that for one step in the process, publishing final rules after considering public comments, FAA's timeliness was comparable to that of four other agencies examined. This report notes, however, that because agencies vary in how they initiate and document their rulemaking processes, it was not within the scope of this effort to attempt to collect and compare information on the time other agencies took to initiate the rulemaking process or to develop proposed rules up until their release for public comment. In addition, GAO's analysis of times to complete the entire process and steps within the process showed, at best, little or no improvement. Finally, the Department noted that GAO's analysis included rulemaking projects that predated FAA's reforms. As noted in this report, GAO used 3-year periods before and after FAA's reforms as a basis for its analysis of the impact of the reforms on processing times.

Third, commenting officials emphasized their need for flexibility in setting priorities, noting that the varied forces that affect FAA's rulemaking schedule necessitate periodic reevaluation and adjustment of rulemaking priorities. GAO agrees with the Department that rulemaking priorities must be flexible. However, real improvement in the rulemaking process can be achieved only through strategic management of the agency's resources within established priorities. To effectively accomplish FAA's mission as a regulatory agency, FAA rulemakers must make difficult decisions regarding how best to focus the agency's efforts and resources and resist pressures to expand its list of highest priority rules beyond the number it has the resources to aggressively pursue.

Finally, commenting officials said that the majority of FAA rules that have been reviewed by OST were completed timely and that the review added value to the process by ensuring the rulemaking package was complete. They said OMB officials have repeatedly emphasized the value of OST review in shortening its own reviews of FAA rulemakings. They also said that the report's analysis of the median time for OST review is skewed by a few rules that required extensive efforts to resolve satisfactorily. Regarding the value of departmental review, GAO was unable to compare process times for rules reviewed and approved by the Department to rules that were not because there were no significant rules that had not been reviewed by the Department. Similarly, OMB officials said they lacked a basis for evaluating the impact or value of OST's review in the absence of significant rules that had not gone through OST's review process. Regarding GAO's use of median times in the analysis, while the mean, or average, may give greater weight to extreme values, the median, or middle observation, identifies the statistical point for which half of the data points measured are greater and half are less. Thus, the median analysis is not skewed by the magnitude of individual observations.

Introduction

The Federal Aviation Administration (FAA) is responsible for developing, administering, enforcing, and revising an effective, enforceable set of aviation safety regulations that enhance aviation safety and security and promote the efficient use of airspace. Generally, a regulation is an agency statement that is designed to implement, interpret, or prescribe law or policy or to describe procedural requirements. The process by which FAA and other federal agencies develop regulations is called rulemaking.

FAA's rulemaking activities encompass all of the agency's areas of responsibility, including air traffic control, aviation security, and commercial space transportation. FAA must address both long-standing and emerging issues in its rulemaking efforts. For example, questions about the safety of aging aircraft and the adequacy of flight duty rest requirements for airline pilots have been debated for decades. In contrast, the issues of fire safety standards for cargo compartments and the transport of oxygen generators emerged after the Valujet crash outside of Miami in May 1996.

Rulemaking can be a complex and time-consuming process, and the Congress expressed its concerns about the speed of FAA's rulemaking in 1996, when it enacted legislation that established time frames for steps in the process. While some rules may need to be developed quickly to address safety issues or guide the use of new technologies, rules must be carefully considered before being finalized because they can have a significant impact on individuals, industries, the economy, and the environment. Figure 4 provides a case study of FAA's efforts to address a complex, long-standing aviation safety issue by creating a rule to regulate flight duty and rest requirements for flight crew members.

Figure 4: Case Study of FAA's Rulemaking to Establish Flight Duty and Rest Requirements for Flight Crew Members

A pilot fills out an electronic diary with sleep/wake information.

Airline pilots participate in an overnight study in the crew vehicle systems research facility's Boeing 747-400 simulator at the National Aeronautics & Space Administration's (NASA) Ames research facility.

Photos courtesy of Ames Research Center, NASA

Purpose of Proposed Rule

To amend rest requirements as well as duty and flight time period limitations for flight crew members engaged in aviation transportation

Key Events

1983:	FAA initiated a rulemaking effort to simplify and standardize flight duty and rest requirements.
Mar. 1984:	FAA published a proposed rule.
July 1985:	FAA published a final rule.
May 1989:	The National Transportation Safety Board (NTSB) issued a recommendation to DOT to review and revise regulations governing hours of service to ensure that they were consistent and incorporated the latest research on how fatigue can impact pilot performance.
June 1992:	FAA established a working group of its industry advisory committee, composed of pilots, air-carrier representatives, and other interested parties, to address concerns about the existing rule governing flight duty and rest requirements.
May 1994:	FAA initiated a second rulemaking effort to simplify and standardize flight duty and rest requirements.
June 1994:	FAA's advisory committee was unable to agree on the issues but identified areas that FAA should address in its rulemaking efforts.
Dec. 1995:	FAA published a proposed rule. It noted that the previously published rule was incomplete and difficult to understand and enforce.
Mar. 1996:	The original comment period was closed; FAA extended the comment period.
June 1996:	The extended comment period was closed; more than 2,000 comments were received.
Oct. 1996:	FAA decided to develop a supplemental proposed rule.
July 1998:	FAA established a second advisory committee to address one major issue identified in the comments received on the proposed rule.
Feb. 1999:	FAA's industry advisory committee completed its effort. It was unable to agree on how the rule should be written.
June 1999:	NTSB issued a recommendation to FAA to establish hours-of-service regulations that set limits, provide predictable work and rest schedules, and consider rest requirements (A-99-45).

Rulemaking Issues

FAA and its advisory committee worked throughout the 1990s to address NTSB's 1989 recommendation to the Department without coming to final agreement. Primary reasons included the complexity of establishing standardized flight-time rules for different types of air carriers and the competing interests of air carriers and pilots. For example, air carriers benefit from having pilots fly more hours, while pilots' unions favor increased rest requirements.

Status of Rulemaking Effort

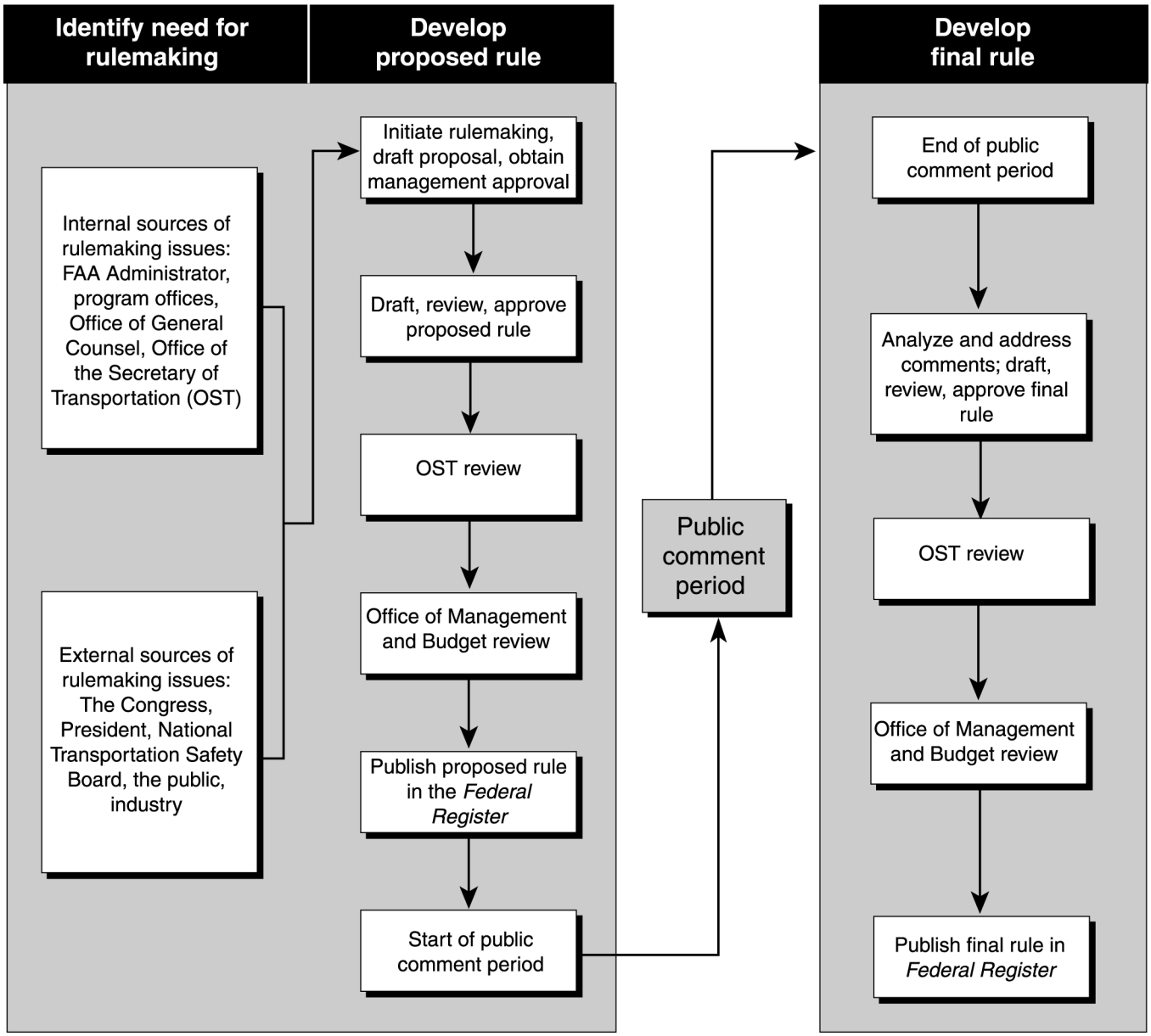
At the time of our review, 5 years had passed since FAA published its proposed rule. FAA planned to publish a supplemental proposed rule in 2001.

Source: GAO's analysis of FAA information.

Federal Rulemaking Process Involves Common Steps and Documents

Rulemaking involves three stages of agency activity. First, an agency identifies a need for rulemaking. Second, it initiates the rulemaking process, develops a proposed rule, and publishes it for public comment. After a public comment period, the agency finalizes the rule by considering the comments received and drafting and publishing the final rule. Figure 5 provides an overview of the process as it applies to FAA.

Figure 5: FAA's Rulemaking Process for Significant Rules



Source: Based on FAA's Rulemaking Manual, Dec. 1998.

A rulemaking issue may be identified internally or externally. For example, FAA staff may find that changes in aviation technology or operations or the emergence of a safety problem warrant rulemaking. Alternatively, the public or the aviation industry may petition the agency to develop a new rule or provide an exemption from existing rules. At the beginning of fiscal year 2001, FAA was responding to 57 petitions for rulemaking and 415 petitions for exemptions while reviewing 84 recommendations by its advisory committee—the Aviation Rulemaking Advisory Committee (ARAC). In addition, the Congress, the President, or the Secretary of the Department of Transportation (DOT) may direct FAA to develop a rule, or the National Transportation Safety Board (NTSB) may issue a safety recommendation. After a rulemaking issue is identified, an agency must consider the issue in light of its resources and other rulemaking issues that may be equally compelling. Some rulemaking issues may require study and analysis before an agency's management can decide whether to initiate the rulemaking process and devote resources to developing a proposed rule.

Once an agency has decided to initiate rulemaking, the basic process for developing and issuing regulations is spelled out in section 553 of the Administrative Procedure Act of 1946 (APA).[1] Most federal agencies, including FAA, use notice and comment rulemaking.[2] Once rulemaking is initiated, agencies generally must develop and publish a proposed rule or "notice of proposed rulemaking" in the *Federal Register*.[3] A public comment period follows, during which interested persons have the opportunity to provide "written data, views, or arguments." After the comment period ends, the agency finalizes the rule by reviewing the comments, revising the rule as necessary, and publishing the final rule in the *Federal Register* at least 30 days before it becomes effective.[4] Most rules are later incorporated into the Code of Federal Regulations (CFR).

[1]5 U.S.C. §553.

[2]In some cases, agencies use abbreviated procedures to expedite the rulemaking process by issuing the rules without first obtaining public comment. The APA allows agencies to issue final rules without issuing proposed rules for comment in certain cases, such as when the agency determines for "good cause" that notice and comment procedures are "impracticable, unnecessary, or contrary to the public interest." For example, agencies may bypass the comment process and issue a rule in the case of an emergency. We reported on agencies' use of the APA's "good cause" exception in our report *Federal Rulemaking: Agencies Often Published Final Actions Without Proposed Rules* (GAO/GGD-98-126, Aug. 31, 1998).

[3]The *Federal Register* is the official daily publication for federal agencies' notices, rules, and proposed rules, as well as presidential documents such as executive orders.

For the remainder of this report, we will use the term "rulemaking" to refer to the notice and comment process by which FAA's rules are developed and codified in the CFR.

Rules vary in importance, complexity, and impact. Under Executive Order 12866, federal agencies and the Office of Management and Budget (OMB) categorize proposed and final rules in terms of their potential impact on the economy and the industry affected. Executive Order 12866[5] defines a regulatory action as "significant" if it

- has an annual impact on the economy of $100 million or more;
- adversely affects the economy in a material way (in terms of productivity, competition, jobs, environment, public health or safety, or state, local, or tribal governments or communities);
- creates a serious inconsistency or interferes with another agency's action;
- materially changes the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the order.

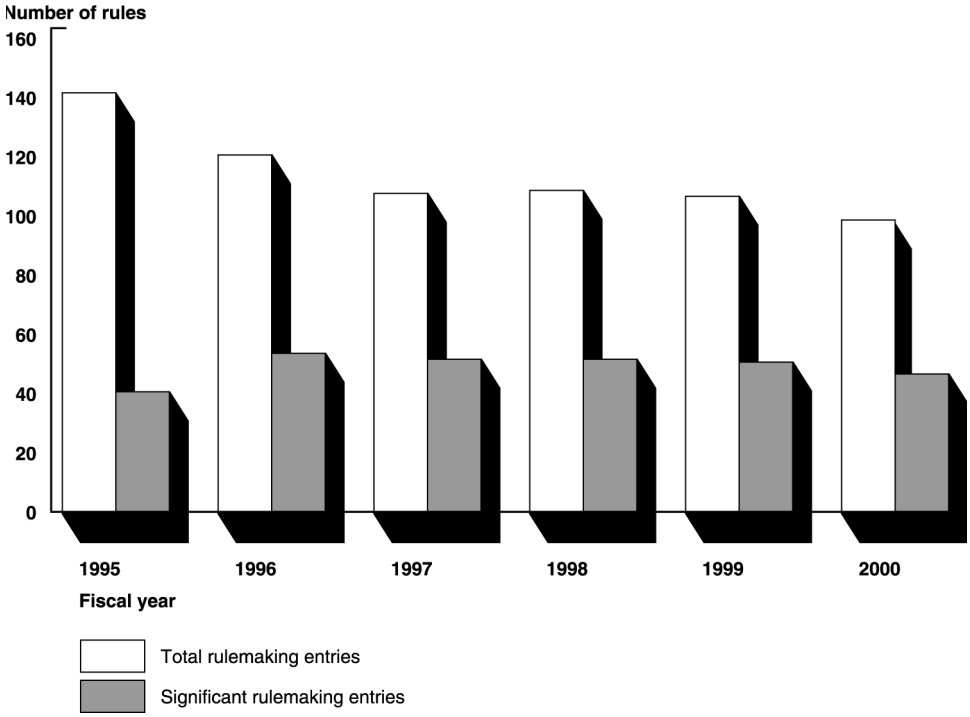
Since 1996, significant rulemaking entries have constituted about half of all of FAA's rulemaking entries in the Unified Agenda, a semiannual report of federal regulatory activities. [6] Figure 6 shows the total number of FAA's rulemaking entries and the number of significant rulemaking entries listed in the October Unified Agendas from 1995 through 2000.

[4]If the rule is considered "major" under the Small Business Regulatory Enforcement Fairness Act of 1996, then it cannot become effective until 60 days after a copy is received by the Congress or it is published in the *Federal Register*, whichever is later.

[5]Executive Order 12866, Regulatory Planning and Review (Sept. 30, 1993).

[6]Executive Order 12866 requires regulatory agencies to prepare an agenda of all regulatory actions under development or review. The Unified Agenda of Federal Regulatory and Deregulatory Actions is published in the *Federal Register* twice each year by the Regulatory Information Service Center and provides uniform reporting of data on regulatory activities under development throughout the federal government.

Figure 6: Number of FAA's Rulemaking Entries Listed in the Unified Agenda, Fiscal Year 1995 Through Fiscal Year 2000



Note: According to the Unified Agenda, the list includes rulemaking activities under development, under review, or recently completed. However, FAA rulemaking officials said that the number of entries in the agenda for FAA is not a precise measurement of the agency's rulemaking workload because FAA's submission includes rulemaking actions that are not actively being worked on. While FAA maintains statistics on the number of significant and nonsignificant rules published annually, it does not maintain historical records of the number of significant or nonsignificant rules under development for any particular year.

Source: GAO's analysis of data in the annual Unified Agenda.

Significant rules often take longer to issue than nonsignificant rules. They may require extensive regulatory analyses of the potential economic, social, and environmental impacts of one or more alternatives.[7] These analyses may take months to complete and are needed to ensure that the

[7]DOT requires that regulatory analyses include, among other things, a statement of the problem and issues that make the regulation significant, a description and analysis of the economic and other consequences of the alternatives, and an explanation of the reasons for choosing one alternative over the others.

projected economic impact has been correctly quantified and that the costs the rule will impose on the affected industry and individuals are justified.

Significant rules typically require more levels of review than nonsignificant rules. Executive Order 12866 requires that OMB review agencies' proposed and final significant rules before they are published in the *Federal Register*. Moreover, clearances for proposed and final rules may be required at the departmental level for those agencies that are part of a cabinet-level department.

To reduce this burden, the Federal Aviation Reauthorization Act of 1996 grants rulemaking authority directly to the Administrator, except that the Administrator may not issue a proposed or final rule without obtaining the Secretary's approval if that rule is significant as defined by statute. The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century narrowed the scope of rules that would be considered to be significant, setting the threshold for economic significance to $250,000,000 and eliminating inconsistency and interference with other agencies' actions and material changes to budgetary impact of entitlements, grants, user fees, or loan programs and recipients' rights and obligations as criteria.

Nevertheless, agencies that report to the Office of the Secretary of Transportation (OST), including FAA, have also been required by the Secretary to submit for review all rules deemed significant under the executive order as well as rules that OST has indicated are to be considered to be "significant" under supplemental guidelines.[8] These additional criteria increase the number of rules for which agencies within DOT are expected to complete regulatory analyses. For example, FAA published a significant rule in April 2000 that limited the number of commercial air tours permitted in the Grand Canyon.[9] While the rule was not considered a significant regulatory action under Executive Order 12866, and would not have been significant under the statute, it was considered significant under the Department's supplemental guidelines because the rulemaking had a

[8]Policies and Procedures for Simplification, Analysis, and Review of Regulations (DOT Order 2100.5, May 22, 1980). Under the Department's guidance, the Secretary, the Deputy Secretary, or the director of the program office involved may determine that a proposed or final rule is significant if it concerns a matter on which there is (1) substantial public interest or controversy; (2) has a major impact on other parts of the Department or another federal agency; (3) has a substantial effect on state and local governments; (4) has a substantial impact on a major transportation safety problem; (5) initiates a substantial regulatory program or change in policy; (6) is substantially different from international requirements or standards; or (7) otherwise involves important Department policy.

potentially substantial economic impact on Native American tribes. Specifically, the rule was expected to have a significantly adverse impact on the Hualapai Tribe's economic development and self-sufficiency, since the trive relied on income from air tour operations and tourist dollars brought to the reservation by the air tours.

The additional analyses and reviews required for significant rules are incorporated into the basic process that all federal agencies use for rulemaking: developing a proposed rule, releasing the proposed rule for public comment, and developing a final rule.

Various offices within FAA conduct the required analyses and reviews of rulemaking documents, as shown in table 1. In the early stages of rulemaking, each rule is the responsibility of a program office with technical expertise in a specific area. This office develops the initial rulemaking documents, as indicated in table 1. Depending on the content of the rule, the program office may be a staff office, like the Office of Chief Counsel, that also has the additional responsibility of reviewing all significant rules. Alternatively, it may be an office with responsibility for a technical area, such as the Office of Civil Aviation Security Policy and Planning. Each of these offices has managers who can become involved in the rulemaking process by reviewing the work of its representatives on a rulemaking team. Generally, FAA's rulemaking teams consist of representatives from the program office, the Office of Rulemaking, the Office of Aviation Policy and Plans, and the Office of the Chief Counsel. In addition to significant and nonsignificant rulemaking, the staff in these offices also work on other projects, including airworthiness directives, airspace actions, and responses to petitions and exemptions.

[9]Commercial Air Tour Limitation in the Grand Canyon National Park Special Flight Rules Area: Final Rule, April 4, 2000, *Federal Register*, Vol. 65 No. 65 p. 17708.

Table 1: Key Roles and Responsibilities of Participants in FAA's Rulemaking Process

FAA rulemaking participants	Responsibilities
Administrator	The Administrator sets FAA's overall policy and direction and resolves any rulemaking disputes. The Administrator's office reviews and approves all proposed and final rules.
Office of Rulemaking	The Office of Rulemaking is responsible for the administrative and nontechnical aspects of rulemaking project activities, including maintaining the agency's automated system for tracking rulemaking projects, drafting rulemaking documents, and tracking the priority of rulemaking activities.
Office of Chief Counsel	The Office of Chief Counsel provides legal support for all FAA activities. The Chief Counsel is responsible for determining the legal adequacy of FAA's actions related to rules and regulations and acting as a liaison between FAA and the General Counsel in the DOT.
Office of Aviation Policy and Plans	The Office of Aviation Policy and Plans provides detailed estimates of the economic consequences of existing and proposed regulations. This includes performing regulatory reviews of existing and proposed regulations to determine their impact on small businesses, and developing most of the critical values (e.g., injuries, property damage) to be used for economic analyses.
Program offices	A program office is the technical office that proposes a rulemaking. There are many offices at FAA that can become active in rulemaking when a rule within their area of technical expertise is considered. A program office evaluates the adequacy of existing regulations that fall within its jurisdiction and develops initial rulemaking documents. The director of a program office reviews and approves the initial proposal and submits it for approval by rulemaking management. A program office representative is the rulemaking team member who develops the technical content of rules within his or her office's jurisdiction. Examples of program offices at FAA whose technical expertise is frequently required to complete rulemaking include the Office of Flight Standards and the Office of Aircraft Certification.
Aviation Rulemaking Advisory Committee (ARAC)	ARAC is a formal advisory committee consisting of representatives from the aviation community. Established by the FAA Administrator in 1991, ARAC provides industry information, advice, and recommendations to be considered during FAA's rulemaking activities. ARAC affords FAA additional opportunities to obtain first-hand information and insight from those parties that are most affected by existing and proposed regulations.

Source: FAA's Rulemaking Manual, Dec. 30, 1998.

Prior Studies of Federal Rulemaking Have Found Similar and Persistent Problems

The ultimate goal of the federal rulemaking process is to develop and issue a quality rule in a timely and efficient manner. Time is of particular importance when safety is at stake or when the pace of technological development exceeds the pace of rulemaking. Many of the problems federal agencies face in developing and publishing rules are long-standing and similar across agencies, and they have been cited in studies and discussions of the process since at least the 1970s. For example, a Senate study in July 1977 cited deficiencies in decisionmaking, planning, and priority-setting by top management as causes of delay in federal rulemaking.[10] In July 2000, DOT's Office of the Inspector General (OIG) reviewed the Department's rulemaking process and found that the Department had taken as long as 12 years to issue significant rules.[11] The OIG attributed the lack of timeliness of the Department's rulemaking partly to a lack of timely decisionmaking and prioritization.

Studies specifically targeting the efficiency of FAA's rulemaking process over almost 40 years have also identified similar problems. Figure 7 provides a list of key studies on FAA's rulemaking process.

[10] *Delay in the Regulatory Process*, Committee on Governmental Affairs, United States Senate, July 1977.

[11] *The Department of Transportation's Rulemaking Process* (MH-2000-109 July 20, 2000).

Figure 7: Studies and Reports on FAA's Rulemaking That Identified Common Problems

1960s	-*Analysis of the Role of FAA Lawyers in Rulemaking*, FAA
1970s	-*Management Study of Flight Standards Service's Rulemaking Procedures*, FAA -*Management Study of Flight Standards Service's FY 78 and 79 Work Activities*, FAA
1980s	-*How to Improve the Federal Aviation Administration's Ability to Deal With Safety Hazards*, GAO/RCED-80-66 -*Rulemaking as an Organizational Process*, The Regulatory Group, Inc. -*Disposition of Recommendations from the Rulemaking Task Force on Improving the FAA Rulemaking Process*, FAA
1990s	-Evaluation Report: *Office of Rulemaking Service Effectiveness Evaluation, FAA* -*Meeting the Aviation Challenges of the 1990s*, GAO/RCED-91-152 -Office of the Inspector General: *Report on The Department of Transportation Rulemaking Process*, DOT -Challenge 2000 Reports: *Recommendations for Future Aviation Safety Regulation*, FAA -*Business Process Reengineering Technical Report*, FAA

Source: Generated by GAO.

The central findings of the most recent study of FAA's rulemaking process, published in 1997, echoed the findings of past studies.[12] For this report, we grouped the problems identified by the 1997 study into three areas: management involvement, administration of the rulemaking process, and human capital.

[12]*Federal Aviation Administration Business Process Reengineering Technical Report*, Electronic Data Systems (May 16, 1997).

Problems With Management Involvement, Process Administration, and Human Capital Impaired FAA's Rulemaking

In terms of management involvement, FAA's 1997 study of its rulemaking process found that problems related to shifting priorities, the timing of management involvement, and the willingness of management to delegate authority all caused delays. Inconsistent and changing priorities among FAA offices caused false starts, delays in the process, and wasted resources. Inadequate or ill-timed involvement by FAA's senior management hindered the agency's ability to make timely decisions. As a result, rule drafters frequently worked without adequate direction or buy-in from policymakers, causing extensive queuing, delays, and rework. The reluctance of FAA's rulemaking management to delegate authority caused problems in internal coordination and accountability and created extensive layers of review that delayed the rulemaking process. Rulemaking projects were also often delayed because no one was held accountable for keeping projects on schedule. The lack of coordination resulted in "finger-pointing" as to why problems remained unsolved. FAA's 1997 study identified similar concerns with the timeliness of rulemaking efforts by FAA's industry advisory committee. For example, the committee had too many projects, some of which were duplicative or overlapping. A lack of coordination and accountability between FAA and the committee also impaired the effectiveness of the advisory committee.

In terms of process administration, FAA's 1997 study found that confusion concerning the roles and responsibilities of rulemaking participants at FAA created difficulties in determining who had responsibility for what actions, led to breakdowns in coordination and communication, and resulted in inadequate supervision. Multiple information systems also hampered coordination and led to inaccurate tracking records and databases, as well as to information that was hard to access (e.g., archives of decisions made). Without reliable records, FAA often could not pinpoint where problems and backlogs occurred. Moreover, even when it did identify weaknesses, it lacked systems with which to evaluate and improve the process.

In terms of human capital management, the 1997 study found that FAA had not established systems for selecting and training personnel involved in rulemaking. Rulemaking teams at FAA typically did not observe project schedules, which they regarded as unrealistically optimistic. Measures of timeliness were not consistently used to measure and evaluate the performance of rulemaking participants. FAA's rulemaking process lacked a system for consistently tying incentives and rewards to specific measures of performance.

Concerns About the Efficiency of FAA's Rulemaking Prompted Congressional Action and the Latest FAA Review

Responding to concerns about the efficiency of FAA's rulemaking process and in particular the time required for departmental review by OST, the Congress enacted legislation in 1996 designed to speed FAA's efforts to develop and publish final rules. The Federal Aviation Reauthorization Act of 1996 amended section 106 of title 49 U.S.C. to establish a 16-month time limit for FAA's finalization of rules after the close of the public comment period and a 45-day requirement for OST's review of FAA's significant proposed and final rules (see ch. 2). (The act also established a 24-month time limit for finalization of rules after publication of an advanced notice of proposed rulemaking, a request for information that FAA may issue in developing a proposed rule. Because this notice is not always issued, we did not use it as a measure in our analysis.)

In response, FAA reviewed its rulemaking process, established its own suggested time frames for completing steps in the process (see ch. 3), and identified potential improvements to its process in the general areas of management involvement, process administration, and human capital management.[13] These improvements are discussed in chapter 3.

Objectives, Scope, and Methodology

The Chairman of the Subcommittee on Aviation, House Committee on Transportation and Infrastructure, asked us to review FAA's rulemaking process to determine whether FAA could improve the efficiency of its rulemaking process. Specifically, we addressed three main questions in our review:

- What are the time frames for FAA's rulemaking, including the time FAA took to initiate the rulemaking process in response to statutory requirements and safety recommendations and, once begun, to develop and publish significant rules?
- What were the effects of FAA's 1998 reforms on its process and on its time frames for completing rulemaking?
- How effective were FAA's reform efforts in addressing the factors that affect the pace of the rulemaking process?

To determine the time frames for FAA's rulemaking, we created a database of proposed and final rules that constituted the agency's significant

[13] *Federal Aviation Administration Business Process Reengineering Technical Report* (May 1997).

rulemaking workload from fiscal year 1995 through fiscal year 2000. We focused our analysis on 76 significant rulemaking actions identified by FAA in the semiannual editions of the Unified Agenda or identified in our search of the *Federal Register*. This consisted of rulemaking actions that had either been published for public comment or were initiated but had not yet been published for public comment.[14] The initiation dates and dates of published actions for the 76 rules are provided in appendix I. These rules constituted most (about 83 percent) of FAA's significant rule workload and were more likely to be complex and/or the subject of controversy and potential delay. Our database contained data obtained from FAA's Integrated Rulemaking Management Information System and from our review of proposed and final rules published in the *Federal Register*.[15] In creating our database, to determine the dates that rulemaking projects were initiated, we used the dates recorded in FAA's information system. For the dates of the publication of proposed and final rules, we used the dates of publication in the *Federal Register*. To determine the extent to which FAA's rulemaking met statutory time frames, we compiled information from our database of rulemaking actions and applied standards established by the Congress in 1996.

To determine the effects of FAA's 1998 reforms on the agency's rulemaking process, we reviewed the 1997 report on FAA's rulemaking process and discussed the 1998 reforms with FAA staff and management from the working team that participated in the study. We discussed rulemaking reforms with rulemaking officials from several other federal regulatory agencies—the Animal and Plant Health Inspection Service (APHIS), the

[14]The status of the 76 rules at the close of fiscal year 2000 was as follows: 29 had been published as final rules, 22 had been published as proposed rules and were still in the rulemaking process, 5 had been published as proposed rules but subsequently withdrawn and the rulemaking effort terminated, 9 had been terminated before being published as proposed rules, and 11 had been initiated but not yet published as proposed rules.

[15]Because we were unable to independently verify all data in FAA's information system related to FAA's internal processing steps, to the extent possible, we based our findings regarding the time required to complete the process on milestone data we were able to verify through rulemaking events published in the *Federal Register*. However, FAA's information system was the only source for data on the agency's internal milestones, such as the initiation date and the time required for OST approval. To reduce the potential of inaccuracies in the data impacting the results of our analysis, we used 3-year periods before and after FAA's reform as a basis for our analysis rather than an annual assessment, and we discussed our findings and conclusions with rulemaking officials who generally agreed that the time required to complete the process had not significantly changed as a result of the 1998 reforms.

Environmental Protection Agency (EPA), the Federal Highway Administration (FHWA), the Federal Motor Carrier Safety Administration (FMCSA), the Food and Drug Administration (FDA), the National Highway Transportation Safety Administration (NHTSA), and the Nuclear Regulatory Commission (NRC)—to identify what steps they had taken to improve their rulemaking processes and to discuss their efforts to improve rulemaking. We selected these agencies because they had developed significant rules that were potentially technically complex and have an impact on public safety (e.g., regulation of nuclear power, environmental concerns, and food safety). We also compared FAA's time frames for responding to public comment and finalizing significant rules with that of other federal regulatory agencies by collecting data from the *Federal Register* on the time spent processing significant rules by APHIS, EPA, FDA, and NHTSA.[16] To determine the extent to which FAA's rulemaking met FAA's suggested time frames for steps in the process before and after the reforms, we compiled information from our database of rulemaking actions and applied it to the time frames suggested in FAA's rulemaking guidance. We also reviewed the number of significant rules FAA published before and after implementing its reforms as a measure of improvement in the rulemaking process.

To determine the effectiveness of FAA's reform efforts in addressing the factors that affect the pace of the rulemaking process—management involvement, process administration, and human capital management—we considered case studies of specific rules, as well as the views of rulemaking officials and other stakeholders in the rulemaking process, including representatives of NTSB, OST, and OMB . We also surveyed 134 FAA employees who had served as rulemaking team members on significant rules listed in FAA's Unified Agendas since the beginning of fiscal year 1994. We chose these employees for our survey because these staff had recent experience and were likely to be familiar with changes in the reformed process. We mailed a survey to rulemaking staff to obtain their views on the status of the rulemaking process and the impact of rulemaking reforms. We received 109 responses (a response rate of about 81 percent). A copy of the survey instrument that summarizes the responses we received is provided in appendix II. We supplemented our survey results with semistructured

[16]We did not include FHWA, FMCSA in our analysis of time frames because FMCSA was created from a division within FHWA in 2000 and thus did not have a comparable data set for analysis. We did not include NRC because, unlike the other agencies, as an independent agency it was not subject to OMB review. As a result, its rulemaking time frames did not lend themselves to a direct comparison.

interviews of rulemaking team members involved in four rulemaking projects. For our semistructured interviews, we asked a series of questions designed to elicit staff members' views on the results of the reform efforts and suggestions for improving the process.

We conducted our work from April 2000 through March 2001 in accordance with generally accepted government auditing standards.

FAA Took Varying Times to Complete Steps of the Rulemaking Process, Meeting Legislative Requirements in One-Half or Less of Cases

The time FAA took to formally initiate rulemaking in response to a congressional mandate or a recommendation by the National Transportation Safety Board (NTSB) varied widely. Between fiscal year 1995 and fiscal year 2000, FAA initiated most rulemaking efforts in response to mandates and safety recommendations within 2 years, but some were initiated many years later. Once FAA formally initiates rulemaking, the time it takes to complete the process depends on many factors, including the complexity of the issue. FAA finalized and published in the *Federal Register* 29 significant rules over the 6-year period from fiscal year 1995 through fiscal year 2000. It took a median of about 2 ½ years[1] to proceed from formal initiation through publication of the final rule, ranging from less than 1 year to almost 15 years. Twenty percent of these final rules took 10 years or more to complete. During this same time period, departmental review, one step in the process for both proposed and final rules, took a median time of about 4 months. FAA's median pace for finalizing a rule after the close of the public comment period—about 15 months—was comparable to that of four other federal agencies. However, FAA met the 16-month statutory requirement for finalizing a rule after the close of the public comment period in less than half of the cases since the legislation was passed and other mandated time limits in only 2 of 7 cases.

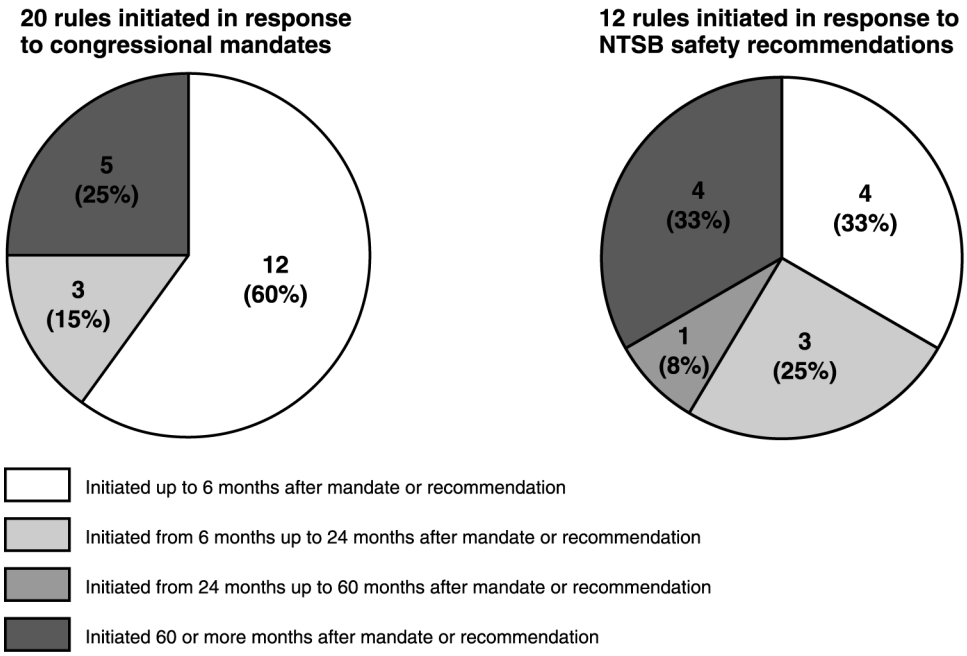
FAA Initiated Most Rulemaking in Response to Mandates and Safety Recommendations Within 2 Years

FAA initiated most rulemaking actions in response to safety recommendations from the NTSB and mandates from the Congress within 2 years.[2] Of the 76 significant rulemaking actions we reviewed, 32 rulemaking actions (or about 42 percent) were the subject of a congressional mandate or recommendation by the NTSB. While congressional mandates may require that FAA take rulemaking actions, NTSB's recommendations do not. However, FAA is required to respond formally to the recommendation and specify what action is or is not being taken and why. As shown in figure 8, FAA formally initiated about 60 percent of mandated rulemaking actions and about one-third of NTSB's recommendations within 6 months.

[1]The median processing time is the statistical point for which half of the processing times are greater and half of the processing times are lower.

[2]Our analysis included only those significant rulemaking actions that were part of the agency's rulemaking workload during the 6-year period from fiscal year 1995 through fiscal year 2000 and that FAA had initiated in response to recommendations or mandates; FAA did not identify any other recommendations or mandates for which they had not initiated rulemaking action.

Figure 8: Time Elapsed Between 20 Congressional Mandates and 12 NTSB Safety Recommendations and FAA's Initiation of the Rulemaking Process



Note: The time until initiation was measured from the date the legislation containing a mandate was enacted or a safety recommendation was issued to the initiation date identified by FAA.

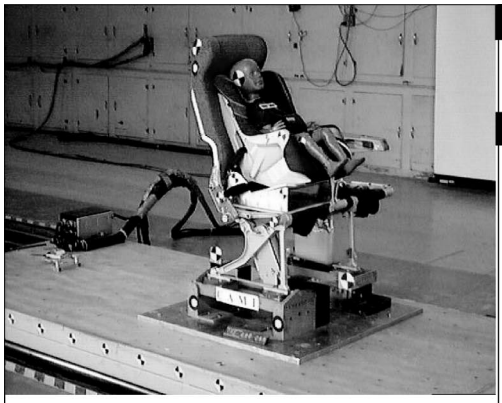
Because of rounding, totals may not add up to 100 percent.

Source: GAO's analysis of FAA data.

However, FAA sometimes took many years to respond to a mandate or recommendation. For example, figure 8 also shows that in one-fourth of the mandated cases and one-third of the recommendations we examined, FAA took more than 5 years to initiate rulemaking. Figure 9 provides a case study of a rulemaking issue with safety implications—aviation child safety seats—in which more than 7 years passed between NTSB's recommendation and FAA's initiation of the rulemaking process. In this case, the delay occurred because of policy-related disagreements between FAA and NTSB. After receiving NTSB's recommendation to require child safety seats on aircraft, FAA studied the issue. It issued a related technical order and rule but decided not to pursue rulemaking to require child safety seats on aircraft. In part, its decision was based on a study it presented to the Congress that concluded that if child safety seats were required on aircraft, passenger diversion to other transportation modes could cause a

net increase in fatalities. FAA eventually changed its policy position and initiated rulemaking after the White House Commission on Aviation Safety recommended that FAA make child-restraint systems mandatory on aircraft.

Figure 9: Case Study of FAA's Rulemaking to Require Child Restraints on Aircraft



FAA's testing of child safety seat for use in aircraft

Photo courtesy of FAA Office of Aviation Medicine

Purpose of Proposed Rule

To mandate child-restraint devices aboard transport aircraft

Key Events

Sept. 1972:	An FAA research report concluded that some auto seats would provide improved crash protection for children in aircraft.
1973-1978:	FAA started but then cancelled two studies on infant restraints.
Dec. 1978:	An aviation accident resulted in two infant mortalities. This accident led NTSB to recommend in 1979 that FAA hasten its research to support rulemaking to most effectively restrain infants in flight (A-79-63).
Jan. 1979:	FAA formed a task force on child restraints.
Feb. 1980:	GAO reported on the lack of timeliness in FAA's efforts to address child restraints. See *How to Improve the Federal Aviation Administration's Ability to Deal With Safety Hazards* (GAO/RCED/80-66, Feb. 29, 1980).
May 1982:	FAA issued a technical standard order prescribing a minimum performance standard for child restraints (TSO C-100).
Feb. 1983:	NTSB recommended that FAA amend its technical order to expand the standards for acceptable child restraints (A-83-1).
Feb. 1985:	FAA revised its technical standard order describing acceptable child seats (TSO C-100A).
1987-1990:	Two aviation accidents resulted in infant mortalities.
May 1990:	NTSB recommended that FAA require child restraints (A-90-78).
July 1990:	The Congress held a hearing on child safety seats.
Sept. 1992:	FAA issued a rule prohibiting air carriers from denying the use of child safety seats.
May 1995:	FAA issued a report to the Congress that concluded that if child restraint devices were required on transport aircraft, passenger diversion to other transportation modes could cause a net increase in fatalities. Based on these findings, the agency made a policy decision not to require child safety seats.
Feb. 1997:	The White House Commission on Aviation Safety recommended that FAA make child restraint systems mandatory.
Apr. 1997:	FAA initiated a rulemaking effort.
Feb. 1998:	FAA issued an advance notice of proposed rulemaking to obtain comments regarding the best way to protect children while onboard aircraft.
June 1998:	The comment period was closed.

Rulemaking Issues

NTSB recommended that FAA hasten its research on child restraints in 1979. NTSB issued a more specific recommendation to require child restraints in 1990. After studying the issue, FAA made a policy decision that child safety seats should not be required on aircraft. FAA initiated the rulemaking process in April 1997, in response to the White House Commission on Aviation Safety's recommendation.

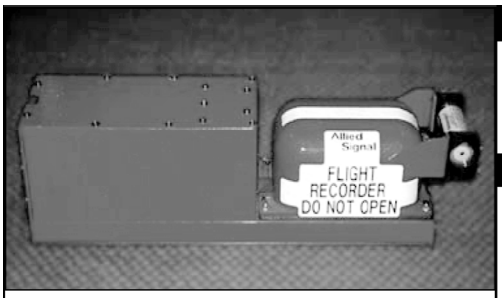
Status of Rulemaking Effort

FAA planned to issue a notice of proposed rulemaking in 2001.

Source: GAO's analysis of FAA information.

In contrast to the lengthy period of time that sometimes occurs between NTSB's recommendations and FAA's initiation of rulemaking, FAA responded within 1 month to an NTSB recommendation in 1999 to require flight data recorders on Boeing 737 aircraft. Figure 10 provides a case study of this rulemaking effort.

Figure 10: Case Study of FAA's Rulemaking to Revise Digital Flight Data Recorder Regulations for Boeing 737 Airplanes



Digital Flight Data Recorder
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Purpose of Proposed Rule

To amend the digital flight data recorder regulations for all Boeing 737 airplanes to require that the devices record additional flight data

Key Events

Apr. 1999: NTSB issued a safety recommendation.
May 1999: FAA initiated a rulemaking effort.
Nov. 1999: FAA published a proposed rule.
Dec. 1999: The comment period was closed.

Rulemaking Issues

FAA was able to initiate this project immediately after NTSB issued its recommendation partly because NTSB and FAA staff had already worked closely on a previous flight data recorder rule that was issued in July 1997. For this subsequent rule, two NTSB employees participated as members of FAA's rulemaking team.

Status of Rulemaking Effort

FAA sent the final rule to OMB for approval in December 2000. At the time of our review, the final rule had not yet been published, pending review by the new administration.

Source: GAO's analysis of FAA information.

Time FAA Took to Complete Steps in the Rulemaking Process Varied

For significant rules published during the 6-year period from fiscal year 1995 through fiscal year 2000, FAA took a median time of about 2 ½ years to proceed from the formal initiation of the rulemaking process to the publication of the final rule in the *Federal Register*. This time period ranged from less than 1 year to almost 15 years. Six of the 29 final rules (or 20 percent) took 10 years or more to complete. FAA took a median time of about 20 months to proceed from initiating the process to proposing the rule for public comment. It took a median time of about 15 months to finalize the rule after the close of the public comment period.

The time taken for one step of the rulemaking process that occurs in FAA's development of both proposed and final rules—departmental review and approval—has been of particular concern to the Congress. In the Federal Aviation Reauthorization Act of 1996, the Congress addressed its concern by establishing a time frame for this step. The act requires the Secretary of DOT to review proposed and final significant rules and respond to FAA, either by approving them or by returning them to FAA with comments, within 45 days after receiving them.

While FAA's information system tracked the date of OST's approval of some significant rules, it did not track the date of OST's response to FAA's transmittals of significant rules when it sent them back to FAA with comments rather than approving them. We were therefore unable to measure the extent to which the Department had met the 45-day requirement set forth in the 1996 act. FAA rulemaking officials said that they did manually track this information for individual rules and planned to incorporate this capability into the next upgrade of the information system. FAA's information system did contain the dates that some rules were submitted by FAA to OST and the dates of OST's final approval. We used these dates to measure the time it took for OST to approve FAA's significant proposed and final rules from fiscal year 1997, when the legislation went into effect, through fiscal year 2000. Overall, for both proposed and final rules, the median time OST took to approve the rules (including review, comment, and FAA's response, if any) was 4.1 months (124 days). Measuring proposed and final rules separately, we found that the median time OST took to approve proposed rules was 4.7 months (140 days), while the median time OST took to approve final rules was 2.3 months (69 days). In chapter 4, we discuss the views of departmental and FAA staff on issues that impact the time required for departmental approval.

In a more recent effort to reduce delays related to OST's review, on April 5, 2000, the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century amended title 106 of 49 U.S.C. by raising the dollar threshold required for secretarial approval and eliminating several criteria that triggered departmental review of significant rules.[3] The Congress included this language to, among other things, streamline FAA's rulemaking process

[3]The act raised the dollar threshold from $100 million to $250 million and eliminated consideration of the impact of a regulation on other agencies' actions, as well as consideration of the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients as considerations requiring secretarial review.

by reducing the number of significant rules that had to be submitted for departmental review and approval. Because the legislation preempts DOT's Order 2100.5 (which defines what rules FAA and other DOT modal administrations are to submit to OST for review, as discussed in ch. 1), FAA is required to submit to OST only those significant rules that meet the criteria defined in the act. At the time of our review, FAA and OST had not yet implemented the provisions of the act. As a result, the number of FAA's significant rules that met the criteria for OST review had not been reduced.

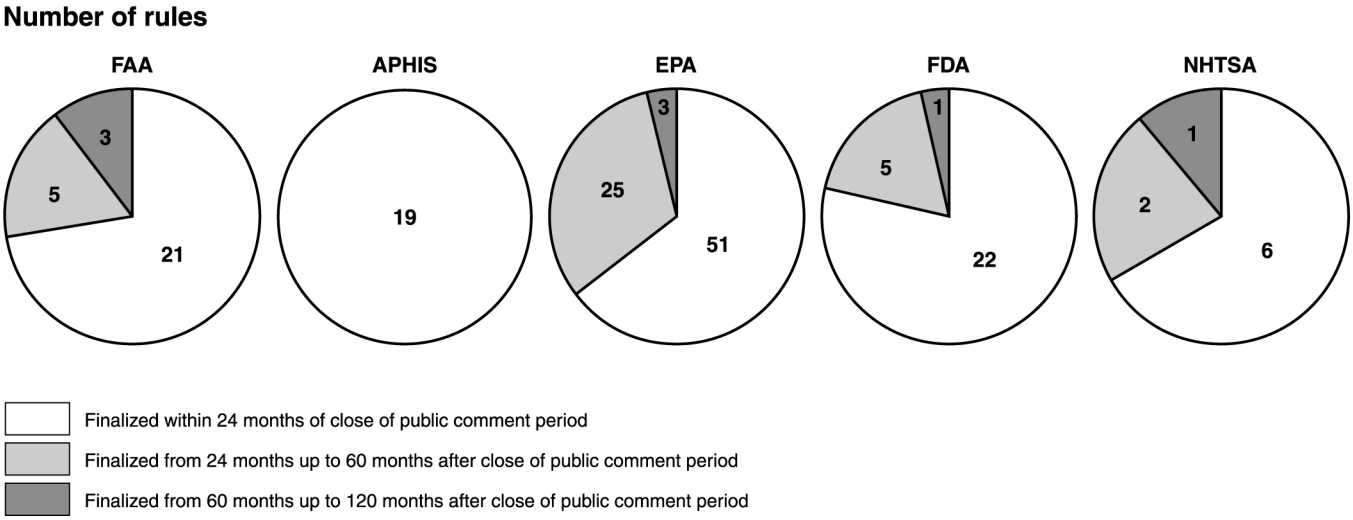
Time FAA Took to Finalize Rules After the Comment Period Was Comparable to That of Four Other Agencies

Although we did not compare the time frame of FAA's entire rulemaking process to that of other agencies, we did find that the time FAA took to finalize rules after the close of the public comment period was comparable to that of four other federal agencies.[4] We selected four regulatory agencies—APHIS, EPA, FDA, and NHTSA—and compared the time they took to finalize rules from fiscal year 1995 through fiscal year 2000.[5] The results are presented in figure 11. The figure shows that, except for APHIS, which finalized all of its significant rules within 2 years of the close of the public comment period, agencies generally finalized between two-thirds and three-fourths of their significant rules within 24 months of the close of the public comment period.

[4]Because agencies vary in how they initiate and document their rulemaking processes, it was not within the scope of this effort to attempt to collect and standardize information on the time elapsed at other agencies in initiating the rulemaking process and developing proposed rules up until their release for public comment.

[5]We selected these agencies because they had developed significant rules that were potentially technically complex and have an impact on public safety (e.g., regulation of nuclear power, environmental concerns, and food safety).

Figure 11: Percent of Significant Rules Finalized Within Certain Time Periods After the Close of the Public Comment Period by FAA and Other Selected Regulatory Agencies, Fiscal Years 1995-2000



Note: This analysis excludes interim final rules; rule count provided for each category/agency.

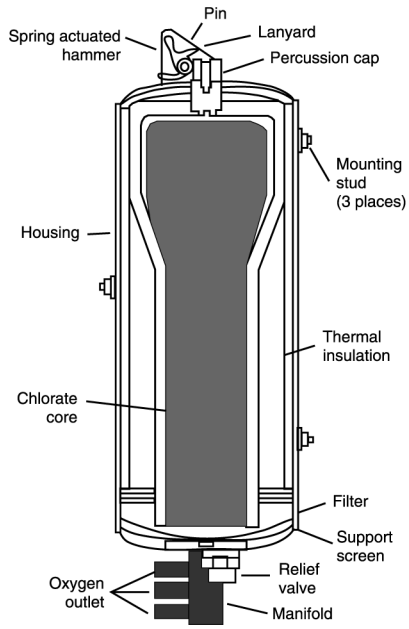
Source: GAO's analysis of data from the Regulatory Information Service Center and the *Federal Register.*

FAA Met Legislative Requirements in Half or Less of Its Rulemaking Efforts

The Federal Aviation Reauthorization Act of 1996 established a 16-month time frame for FAA's finalization of rules after the close of the public comment period. From October 1996 through March 2001, FAA met this deadline in 7 of 18 cases[6] by either publishing a final rule in the *Federal Register* or taking other final action within 16 months of the close of the public comment period. Figure 12 provides a case study of FAA's rulemaking to prohibit the transportation of discharged or unfilled oxygen generators in aircraft. This effort exceeded the congressional time frame by about 11 months. (See app. III for a complete list of rules subject to the act's time frames.)

[6]Since the passage of the act in October 1996, FAA published 25 proposed rules for comment. As of March 31, 2001, 10 of these proposed rules had been published as final rules. FAA met the 16-month legislative requirement for 7 of the 10 published rules but had missed the deadlines for the 8 other rules that had not yet been finalized. The comment period had closed for the remaining 7 rules, but 16 months had not yet elapsed as of March 31, 2001.

Figure 12: Case Study of FAA's Rulemaking to Prohibit Transportation of Oxygen Generators as Cargo in Aircraft



Schematic diagram of an oxygen generator

Transportation of hazardous materials label

Diagrams courtesy of FAA Office of Civil Aviation Security

Purpose of Proposed Rule

To supplement hazardous materials regulations on shipping oxygen generators by air

Key Events

May 1996: Valujet Flight 592 crashed after taking off from Miami, killing the flight crew and 105 passengers. The crash was the result of a fire in the airplane's cargo compartment caused by mislabled oxygen generators that were being improperly carried as cargo.

Dec. 1996: DOT's Research and Special Programs Administration published a final rule prohibiting the transportation of charged oxygen generators as cargo onboard passenger-carrying aircraft. FAA initiated a rulemaking effort to supplement this regulation by also banning oxygen generators that had not yet been charged or had already been discharged to reduce the likelihood of confusion in aviation handling of oxygen generators.

Aug. 1998: FAA published a proposed rule.

Oct. 1998: The comment period was closed. FAA suspended its efforts until DOT's Research and Special Programs Administration issued another related final rule on oxygen generators.

Aug. 1999: DOT's Research and Special Programs Administration issued a final rule on oxygen generators. According to FAA, comments on the final rule revealed that some requirements in FAA's rulemaking on oxygen generators were unnecessary.

Feb. 2000: The Congress's 16-month deadline for publishing the final rule passed.

Apr. 2000: FAA decided to issue a supplemental notice of proposed rulemaking.

Rulemaking Issues

FAA missed the legislative deadline to allow time to agree upon details of the final rule with the Research and Special Programs Administration and because rulemaking management required extra time to make decisions regarding the need to issue a final rule or supplemental notice of proposed rulemaking and direction of rule.

Status of Rulemaking Effort

FAA planned to issue a supplemental notice of proposed rulemaking in 2001 to partially withdraw its August 1998 proposed rule and seek further comments on handling empty oxygen generators in cargo operations.

Source: GAO's analysis of FAA information.

The Congress has also mandated time frames for steps in FAA's rulemaking on specific issues. The agency did not meet many of these legislated time frames. Specifically, of the 20 congressionally mandated rules that were part of FAA's workload between fiscal year 1995 and fiscal year 2000, 7 included a time frame for agency action. FAA met the time frame in only 2

cases, both of which called for initiating the rulemaking process by a certain date.[7] Appendix IV provides additional information regarding the current status of the seven rules with congressionally mandated time frames. Figure 13 provides a case study of FAA's proposed rule to revise procedures for aircraft registry to assist drug enforcement efforts that exceeded a specific legislative mandate by more than 10 years.

[7]FAA published a notice of proposed rulemaking within 1 month of one other mandated rulemaking project.

Figure 13: Case Study of FAA's Rulemaking to Revise Procedures for Aircraft Registry

Bundles of drugs hidden in floor of aircraft

One type of illegal fuel tank installation giving aircraft extended range

Agents in the field checking airmen/aircraft documents

Photos courtesy of FAA Office of Civil Aviation Security

Purpose of Proposed Rule

To revise the application procedure for aircraft registration to assist the Drug Enforcement Agency

Key Events

Nov. 1988: The Drug Enforcement Act of 1988 mandated FAA action to ensure accurate identification of aircraft registrants. FAA initiated a rulemaking effort.
Sept. 1989: The mandated deadline for issuance of a final rule passed.
Mar. 1990: FAA published a proposed rule.
May 1990: The comment period was closed.

Rulemaking Issues

According to FAA officials, the agency has implemented many of the requirements of the act without rulemaking, and many of the remaining items would place an undue burden on the aviation community as well as require additional staffing for implementation.

Status of Rulemaking Effort

At the time of our review, FAA had not determined a schedule for completing the rule. FAA considered the rule to be of lower priority and was not actively working on it. FAA planned to meet with Drug Enforcement Agency and Customs Service officials to solicit their support for a legislative change to the requirements of the act.

Source: GAO's analysis of FAA information.

FAA's Reforms Addressed Long-standing Rulemaking Problems but Did Not Reduce Rulemaking Times

To respond to congressional concerns about the timeliness of its rulemaking process and address long-standing problems (see ch. 1), FAA began implementing reform initiatives in January 1998 to improve the process in two of the three central areas we have identified: management involvement and process administration. FAA considered but did not implement most initiatives to improve human capital management. Other agencies have also implemented reforms to address similar types of problems. FAA's median times to proceed from initiation of rulemaking through the release of the proposed rule for public comment and to finalize the rule after the close of the public comment period did not improve after FAA implemented its 1998 reforms. Despite FAA's reforms, the time taken for departmental review and approval of FAA's significant rules was not reduced. In addition, fewer rules were published while proposed and final rules remained in the rulemaking process for longer periods of time.

FAA's 1998 Efforts to Improve Rulemaking Addressed Long-standing Problems

FAA began implementing reform initiatives in January 1998 to improve its rulemaking process in two of the three central areas we have identified: management involvement and process administration. FAA considered but did not implement most initiatives to improve human capital management.

FAA Took Steps to Improve Management Involvement in Process

FAA developed initiatives aimed at improving management's ability to coordinate and set priorities, resolve policy questions, and streamline the review process. To improve the coordination of leadership throughout the process, FAA established a rulemaking steering committee and a rulemaking management council. Rather than existing within any one FAA office, the committee and council are made up of members of all offices with current rulemaking responsibilities (see ch. 1, table 1). The steering committee is primarily responsible for determining FAA's rulemaking priorities; the rulemaking management council manages the rulemaking process. As the Administrator said in establishing the two groups in February 1998:

"With the direct involvement of senior-level management in the rulemaking process, I anticipate a dynamic rulemaking program that more directly meets the safety and technology challenges of a rapidly evolving aviation industry."[1]

In particular, to address long-standing concerns about delays that occurred during departmental review and approval of its significant rules (see ch. 2), FAA included a representative from OST on its rulemaking steering committee and management council, hoping that improved coordination would reduce the time taken for OST's review. Table 2 shows the members and duties of FAA's steering committee and management council.

Table 2: Membership and Duties of FAA's Rulemaking Management Groups

Title	Membership	Duties
Steering committee	FAA assistant and associate administrators with current rulemaking responsibilities Chief counsel A representative from OST	• Determine priorities • Resolve disputes that cannot be settled at the management council level
Management council	Director-level managers at FAA headquarters with current rulemaking responsibilities A representative from OST	• Ensure that rulemaking projects align with agency priorities • Allocate resources for projects • Monitor the quality of the process • Resolve policy issues and rulemaking process problems • Delegate appropriate level of authority to rulemaking teams

Source: FAA's Rulemaking Manual.

To formalize the new process and provide consistent and comprehensive guidance to rulemaking staff and management, FAA also developed a new rulemaking manual. Among other things, this manual suggested time frames for steps in the rulemaking process and established a system for the steering committee to follow in prioritizing rulemaking projects, as shown in table 3.

[1]Memo, Subject: Letter of Appointment, Direction, and Charter of Rulemaking Management Council, FAA Administrator (Feb. 17, 1998).

Table 3: FAA's System for Prioritizing Rulemaking Projects

Priority	Characteristics of projects
A	Have congressional, high-level, or departmental interest Support the strategic objectives of the agency Are scheduled for issuance within 6 months Have project schedules that the agency is committed to meeting
B	Have a moderate priority Are assigned as agency resources permit Are generally not actively worked on, according to rulemaking officials
U	Have the lowest priority Are not scheduled for completion Usually have little or no resources to develop them Can be considered inactive

Source: FAA's Rulemaking Manual and FAA's Office of Rulemaking.

Finally, to maximize the efficient use of employees' and management's time, FAA planned to limit reviews to those that added value and to delegate more responsibility for rulemaking decisions to rulemaking teams. Prior to the reforms, both nonsignificant and significant rules went through multiple layers of internal review. This practice stemmed more from agency protocol than from necessary oversight. For example, a team member's decision could pass through sequential reviews by his or her immediate managers, office directors, associate administrators, and the Office of the Administrator. FAA proposed eliminating intermediate manager and director-level review and approval for both nonsignificant and significant rules so that rules could pass directly from teams to associate administrators. In doing so, FAA hoped to use available resources more efficiently, improve team members' morale, and reduce delays. However, the agency stopped short of eliminating review and approval of significant rules by associate administrators, as was recommended in studies of FAA's rulemaking in 1988, 1996, and 1997. According to officials from the Office of Rulemaking, the revised process was designed to enable the management council to delegate coordination and approval of nonsignificant rules to managers below the associate administrator level and the reform was intended to allow teams to act with the full knowledge of their respective associate administrator's position on important issues.

FAA Took Steps to Administer the Process More Efficiently

To address problems in administering the rulemaking process, FAA implemented a series of reforms. These reforms were primarily designed to clarify the extent and limitations of each team member's roles and

responsibilities, to improve the monitoring of rules and the management of rulemaking documents throughout the process, and to ensure ongoing evaluation of the process. Given the potential complexity of rulemaking issues, inconsistent and unclear lines of responsibility between policy, technical, legal, and economic reviews have historically slowed the rulemaking process. In its reform, FAA documented in the rulemaking manual the roles and responsibilities for each member of the rulemaking team. Specific appendixes in this manual detail the purpose, intent, and limitations of legal and economic reviews.

FAA also created a new system for monitoring rule status and document management, the Integrated Rulemaking Management Information System, which was designed to increase the use of automation in the rulemaking process. According to FAA's Office of Rulemaking, its new system consolidated the functions of the existing rulemaking tracking and document management systems. The new system was designed to also provide access to a regulatory guidance library and the DOT's Docket Management System.

Finally, FAA developed rulemaking quality standards and established a continuous improvement team and a quality team to ensure ongoing evaluation of the rulemaking process, monitor the quality of rulemaking documents, and provide recommendations on potential improvements to the process. FAA's rulemaking quality standards are documented in an appendix to its rulemaking manual, *Rulemaking Quality Standard and Guide*. The guide offers practical tips, provides techniques, and suggests references and examples for rulemaking writers. FAA's continuous improvement team—envisioned as a staff-level team—was established to review the evaluations from rulemaking teams in order to provide recommendations to the rulemaking management council on improvements to the process to be incorporated into the rulemaking manual. Similarly, the role of the rulemaking quality team—envisioned as a management-level team— was to continually monitor and improve the quality of rulemaking documents and provide recommendations to the rulemaking management council on improvements to the process. These two teams were consolidated in 1999 because FAA management concluded that the two functions were difficult to separate and that both functions would benefit from both staff- and management-level participation.

FAA Considered but Did Not Fully Implement Recommendations to Improve Human Capital Management

To promote accountability in the rulemaking process, the working team for the 1997 study recommended a number of human capital management strategies to improve the training, evaluation, and rewarding of rulemaking staff. The team recommended that FAA provide orientation training on the new rulemaking process to all staff involved in rulemaking efforts. It also recommended skills assessment and additional ongoing training on functional skill development, conflict resolution, facilitation and consensus-based decisionmaking, project management, and team leader training. To measure efficiency and reward performance more consistently, the team recommended that FAA establish performance measures in the areas of rule-processing times, rule quality, and rulemaking productivity, as well as systems for performance evaluation. It also recommended that FAA develop a guide to clarify to supervisors the conditions to consider when granting rewards for good performance in rulemaking and to specify possible rewards. As discussed in chapter 4, FAA considered but did not take steps to formally implement these recommendations related to performance evaluation and rewards. According to the Office of Rulemaking, the staff resources needed to develop and implement these initiatives were not available because rulemaking staff and management were fully occupied with the day-to-day management of the rulemaking process. As a result, FAA relied on existing training and rewards systems.

Other Federal Agencies Have Undertaken Reforms to Address Similar Problems

During our investigation, we also discussed rulemaking reform with rulemaking officials from several other federal regulatory agencies whose rules involved public safety to identify what steps they had taken to improve their rulemaking processes. Although an evaluation of the effectiveness of the reforms undertaken by other regulatory agencies was beyond the scope of this review, the results of our discussions with the other rulemaking officials showed that the reforms other agencies have proposed or implemented are in some cases similar to those proposed by FAA, and they generally address the same types of problems faced by FAA.

For example, officials at several agencies we talked with considered management involvement a crucial element of an efficient rulemaking process. They used a variety of ways to improve management involvement, including the use of senior management councils and rulemaking coordinators. For example, EPA told us they established a regulatory policy council of senior management, as well as regulatory coordinators across EPA to manage priorities and resources. Other approaches cited by regulatory agencies we contacted included the use of agency ombudsmen

and "senior champions." Officials at the FMCSA said a regulatory ombudsman outside of agency program offices is responsible for moving rules through the process and tracking rules against established milestones. According to FMCSA officials, the ombudsman has the authority to resolve disagreements affecting timely processing; ensure sufficient staffing to meet statutory and internal deadlines; and represent FMCSA in discussions about individual rulemakings with other organizations, including OST, OMB, and other federal agencies. Rulemaking officials at FDA told us they assign a "senior champion" from the agency's program offices to be responsible for scheduling rulemaking actions and ensuring that timely actions are taken. FDA officials said that the senior champion concept improves accountability by establishing a single point of responsibility. To reduce layers of internal review, other federal agencies have taken steps to delegate authority by limiting the amount of sequential review that takes place. For example, FDA officials said they limit a program office's concurrence procedures and sign-off requirements to include only necessary staff. Rulemaking officials of the APHIS said that, in April 1999, they began limiting all staff organizations' reviews of regulatory packages to 2 weeks. Finally, senior managers at the EPA said they provide flexibility to associate and regional administrators to determine what procedures to follow on a rule-by-rule basis, allowing managers more autonomy to tailor procedures to fit different needs.

To better administer the rulemaking process, other federal agencies have developed automated tracking systems to monitor the progress of regulations under development, established evaluation systems for learning about delays in the process, and initiated appropriate actions to overcome internal delays. For example, FDA uses a tracking system to monitor the progress of all regulatory documents, which helps expedite the internal clearance process for regulations under development. FDA officials said that the tracking system has saved FDA time in processing regulations but had not estimated the amount of time saved.

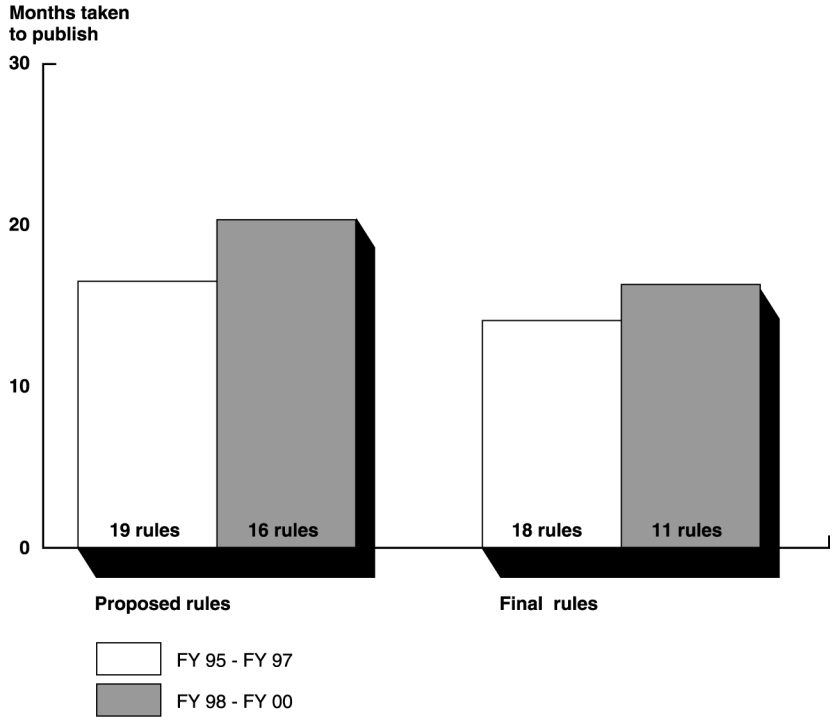
In the area of human capital management, other federal agencies cited a number of initiatives for training and performance measurement and evaluation. For example, to provide regulation writers with the training necessary to adequately prepare draft regulations, officials from APHIS encourage rulemaking staff to attend available courses and conferences or advisory committee meetings on the relevant subjects. The officials also encourage staff to seek technical support in drafting regulations and said that agencies could encourage, through incentives, technical staff to provide technical assistance to regulation writers. In addition, FDA

officials suggested using a mentor program for new staff or existing staff to encourage them to consult with experienced regulation writers. Other agencies have established quality standards for their rulemaking to measure the performance of their rulemaking processes. For example, EPA measures the quality of regulatory documents and holds senior managers accountable for ensuring that regulatory actions meet the definition of a quality action. When program offices at EPA are unable to demonstrate that they can develop quality actions, fewer rulemaking actions will be assigned to them. According to EPA regulatory officials, this is an incentive for senior managers to develop quality rules. At FMCSA, officials said they had a formal structure of accountability of rulemaking products and dates in performance agreements that involve the head of the agency down to division directors. These performance agreements have specific rulemakings that include dates for which the staff is held accountable. In addition, FMCSA has a supplemental statement to the performance agreement for every staff member for rulemaking work products and dates.

Despite Reforms, FAA's Rulemaking Times Did Not Improve

The median time FAA took to proceed from formal initiation of rulemaking through publication of the final rule increased from about 30 months in the 3-year period prior to the reform (fiscal years 1995 to 1997) to 38 months in the 3-year period following the reform (fiscal years 1998 to 2000). FAA's median times for proceeding from initiation through release of the proposed rule for public comment and for proceeding from the close of the public comment period through publication of the final rule both increased by more than 3 months after the reforms. Specifically, the median time FAA took to proceed from initiation through the release of the proposed rule for public comment increased from 16.5 months in the 3-year period prior to the reforms to 20.4 months in the 3-year period following the reforms. The median time FAA took to finalize the rule after the close of the public comment period increased from 14 months to 16.3 months during the same time periods, as shown in figure 14.

Figure 14: Median Time FAA Took to Process Significant Proposed and Final Rules for Periods Before and Since FAA's Reforms



Note: These processing times do not include the public comment period. One final rule that was completed in fiscal year 1998 was included in fiscal year 1997 in this chart because it was completed prior to FAA's reform in January 1998. The median may not equal the arithmetic average (mean). Because the mean gives greater influence to extreme values in assessing processing time for rulemaking, we elected to present median values. The change in the mean or average values for the 3-year periods before and after FAA's reform are as follows: the average time taken to process proposed rules decreased slightly, from 35.4 to 35.3 months, and the average time taken to process final rules increased from 19.3 to 29.8 months.

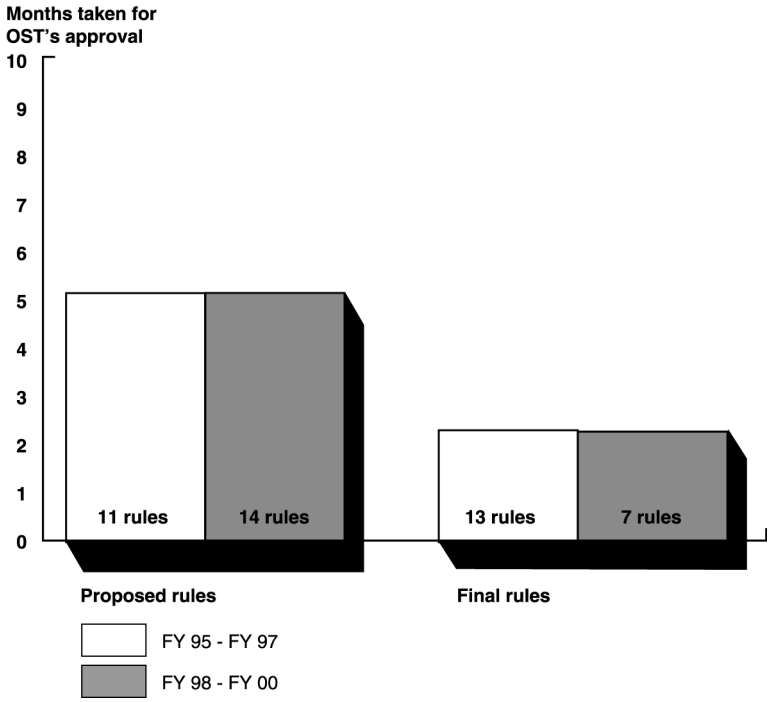
Source: GAO's analysis of FAA and *Federal Register* data.

Rulemaking Reforms Did Not Reduce the Time Taken for Departmental Review and Approval of FAA's Significant Rules

The time OST took to review and approve rules did not improve after FAA reformed its rulemaking process in 1998. Overall, for both proposed and final rules, the median time OST took to approve rules (including review, comment, and FAA's response, if any) increased from about 125 days before FAA's reforms to about 130 days after the reforms, an increase of about 5 days after the reforms. Measuring the proposed and final rules separately, we found that the median time taken for OST's approval of proposed rules

increased by 2 days, while the median time taken for OST's approval of final rules decreased by 1 day, as shown in figure 15.

Figure 15: Median Time OST Took to Approve FAA's Significant Proposed and Final Rules for Periods Before and Since FAA's Reforms



Note: Because FAA's system did not contain comparable data for all proposed and final rules, the number of proposed and final rules in figure 15 do not match those provided in figure 14. One final rule that was completed in fiscal year 1998 was included in fiscal year 1997 in this chart because it was completed prior to FAA's reform in January 1998. The median may not equal the arithmetic average (mean). Because the mean gives greater influence to extreme values in assessing processing time for rulemaking, we elected to present median values. The change in the mean or average values for the 3-year periods before and after FAA's reform are as follows: the average processing times for OST's review and approval of proposed rules increased from 6.1 to 9.2 months, and the average processing times for final rules decreased from 5.4 to 3.3 months.

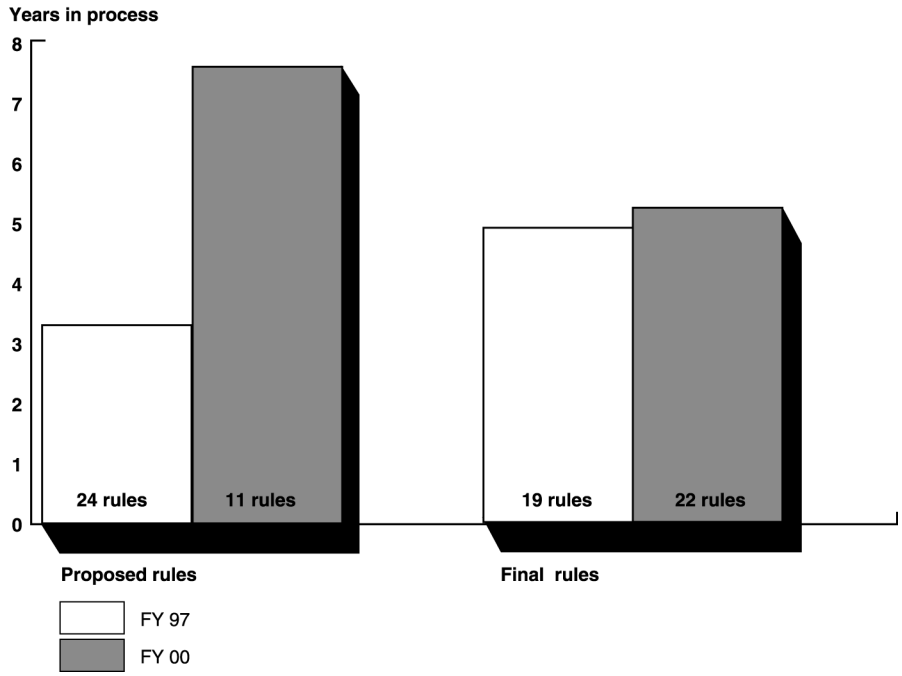
Source: GAO's analysis of FAA and Federal Register data.

The Number of Significant Rules Published Declined as Proposed and Final Rules Remained in the Process Longer

Since 1998, FAA has published fewer rules. As shown in figure 14, FAA finalized 18 significant final rules in the 3-year period prior to implementing its reform. In the 3-year period following the reform, FAA finalized only 11 significant final rules. FAA rulemaking officials attributed the change in productivity of significant rules to the agency's efforts to classify more rulemakings as nonsignificant and, thus, to decrease levels of evaluation and review within FAA, as well as to eliminate review by the Department and OMB. However, the number of nonsignificant rules the agency published from 1995 to 2000 do not reflect this. For example, FAA published almost 50 nonsignificant proposed and final rules each year in 1995 and 1996, as compared to less than 30 nonsignificant proposed and final rules each year in 1999 and 2000.

In the years since FAA's reforms, the median time that initiated significant rulemaking projects had remained in the process without being released for public comment (the proposed rule stage) increased —by more than 4 years from the end of fiscal year 1997 to the end of the fiscal year 2000. At the same time, the median time that FAA's unpublished significant final rulemaking projects remained in the process after going through the public comment period also increased, by about 5 months. This is shown in figure 16.

Figure 16: Median Time FAA's Unpublished Significant Proposed and Final Rules Had Been in Process as of September 30, 1997, and September 30, 2000



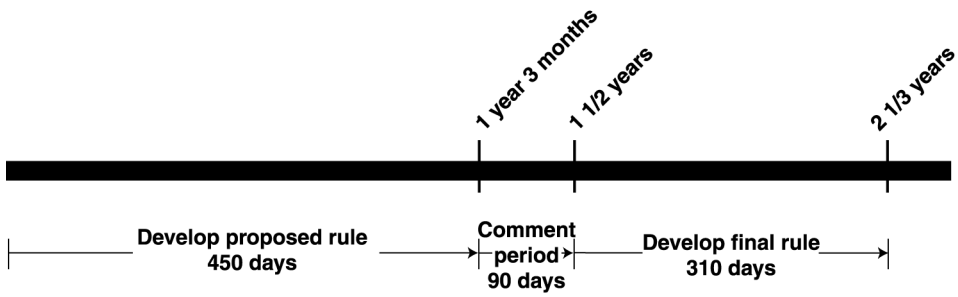
Note: Ten of the 24 unpublished proposed rules and 10 of the 19 unpublished final rules included in the 1997 medians remained unpublished at the end of fiscal year 2000 and thus were also included in the fiscal year 2000 medians. The median may not equal the arithmetic average (mean). Because the mean gives greater influence to extreme values in assessing processing time for rulemaking, we elected to present median values. The change in the mean or average values for the 3-year periods before and after FAA's reform are as follows: the average time proposed rules remained unpublished increased from 3.9 to 7.2 years, and the average time final rules remained unpublished increased from 6.0 to 6.9 years.

Source: GAO's analysis of FAA data.

FAA's Suggested Time Frames Often Not Met

As part of its rulemaking reform in January 1998, FAA established its own time frames for developing and publishing proposed and final rules, as shown in figure 17.

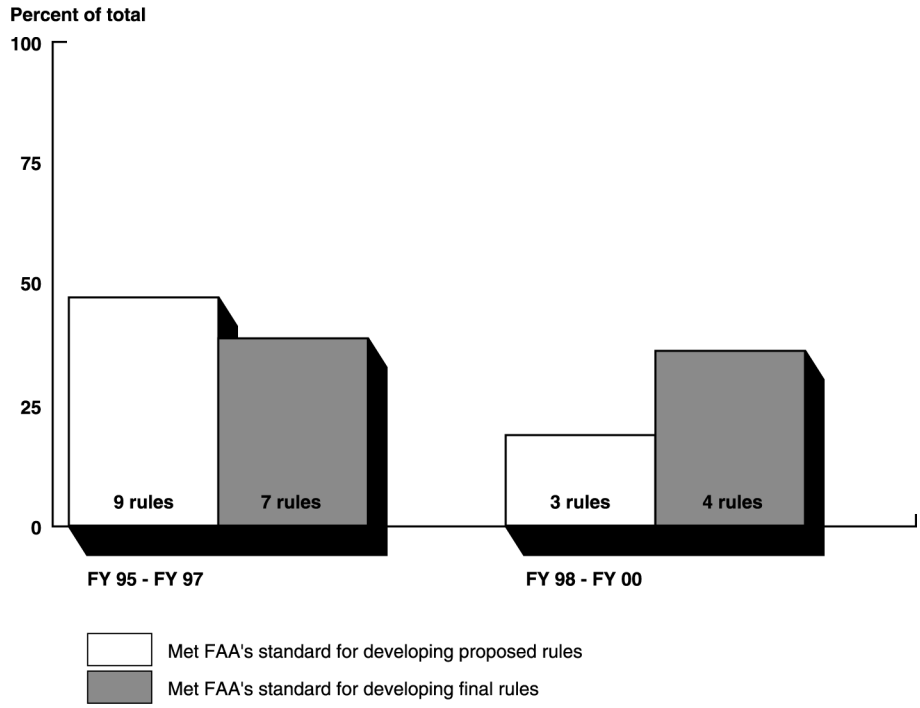
Figure 17: FAA's Time Frames for Steps After Initiation of the Rulemaking Process



Source: Based on FAA's Rulemaking Manual, December 1998.

Although these time frames were established as a part of FAA's reforms and were, thus, not an applicable standard for rulemaking efforts prior to the reforms, we compared processing times for the 3-year period preceding FAA's reforms to processing times for the 3-year period following FAA's reforms to measure the extent of the change. The percentage of FAA's proposed rules that proceeded from initiation through release for public comment within FAA's suggested time frames dropped from 47 percent prior to the reforms to 19 percent after the reforms. The percentage of rules that proceeded from the close of the public comment period to publication as a final rule within FAA's suggested time frames dropped from 39 percent to 36 percent in the same time periods. Overall, FAA did not meet time frames suggested in its rule making guidance for more than half of its proposed and final rules published, as shown in figure 18.

Figure 18: Percentage of FAA's Significant Proposed and Final Rules Published Before and Since FAA's Reforms That Met Time Frames Suggested in FAA's Reform Guidance



Note: The time frames suggested in FAA's guidance are 450 days (about 15 months) for developing proposed rules and 310 days (about 10 months and 10 days) for final rules.

Source: GAO's analysis of FAA data.

Incomplete Implementation of FAA's Reforms Impaired Efforts to Address Long-standing Rulemaking Problems

Despite the reforms FAA made to its rulemaking process, many of the problems that have historically impeded the efficiency of rulemaking at FAA continued. Our survey of FAA rulemaking staff showed that less than 20 percent agreed that FAA has made the changes necessary to improve the rulemaking process.[1] In addition, only about 20 percent of the staff surveyed agreed that the rulemaking process has become more efficient and effective in the last 2 years. (A copy of the survey is provided in app. II.) Our interviews with FAA rulemaking staff and management and our observations of specific rulemaking projects supported the staff's perception and confirmed that problems in the three central areas of management involvement, the administration of the rulemaking process (process administration), and human capital continued to slow the process.

Problems Related to Management Involvement Continued to Slow the Process

Problems related to three general areas of management involvement continued to slow the process. Multiple, shifting priorities made it difficult to allocate resources effectively and often disrupted the timing of the rulemaking process. Too often, policy issues were not resolved in a timely manner. Finally, multiple layers of review continued to contribute to delays.

Numerous and Shifting Priorities Created Staffing Resources Problems That Slowed the Rulemaking Process

An excessive number of rulemaking priorities continued to impair the efficiency of the process. The number of projects on FAA's top priority list grew from 35 in February 1998, when FAA established the priority list after implementing its reforms, to 46 in April 2000. At that time, the Associate Administrator for Regulation and Certification said it was critical to shorten that list to a more manageable number. However, the number of top rulemaking priorities continued to increase, to 49 rules by March 2001. According to the Director of the Office of Rulemaking, the maximum number of rulemaking projects that can be effectively managed is about 30 to 35 projects. Rulemaking officials cited external and internal pressures to add rules to its priority list, noting that the agency's priorities change due to external influences such as accidents, NTSB recommendations and congressional actions and mandates. Internally, they attributed the growth in the number of priority rulemaking projects in part to a lack of commitment to the reformed process of some participants and to what they

[1]We surveyed 134 FAA rulemaking staff members that worked on significant rules since fiscal year 1994 and received 109 responses, a response rate of about 81 percent. Additional details are provided in chapter 1 in the objectives, scope, and methodology section.

described as “parochial” views of priorities that resulted in efforts to circumvent the decisions of the rulemaking steering committee. For example, officials said that some program offices circumvented the approval process for adding rulemaking projects to the top priority list by adding projects to their own short-term incentive plans, creating pressure on the steering committee to add the rules to the top priority list. Our survey of rulemaking staff showed that less than one-third (29 percent) of the staff agreed that senior managers supported the steering committee's decisions regarding priorities.

Not only were too many rules given top priority, but changes in the relative ranking of “top” priorities created problems in managing staffing resources, thereby increasing the processing time for significant rules. Eighty-three percent of the survey respondents agreed that changing priorities in the rulemaking process caused delays in the process. Team members said they were frequently pulled off of top-priority rules to work on other projects that their management considered higher priority. They noted that these disruptions created delays.

It is important to note that, while some of the causes of shifting priorities stem from the current rulemaking process and can be changed, others relate to events that FAA cannot control. For example, new safety issues may emerge whenever there is an aviation accident. In addition, rulemaking efforts in progress that are related to issues such as safety threats can be overtaken by new events that then drive the agency's priorities. While the agency can monitor the effects of outside situations, there is little it can do to control them. Figure 19 provides an illustration of the impact of events on FAA's development of a proposed rule on aviation security.

Figure 19: Case Study of FAA's Rulemaking to Revise Airport Security Rules

Airport security checkpoint

Explosives detection systems

Canine teams

Photos courtesy of FAA Office of Public Affairs

Purpose of Proposed Rule

To revise aviation security regulations to incorporate new requirements in response to worldwide airport security issues

Key Events

June 1985: TWA Flight 847 was hijacked by terrorists in Greece.
Oct. 1986: The Secretary of Transportation issued a Safety Review Task Force Report.
Mar. 1987: FAA initiated a rulemaking effort.
Dec.1988: A terrorist bomb destroyed Pan Am Flight 103 over Lockerbie, Scotland.
May 1990: The President's Commission published its *Report on Aviation Security and Terrorism*.
Aug. 1991: The Gulf War presented additional security concerns.
Feb. 1993: Terrorists bombed the World Trade Center, renewing domestic terrorism concerns.
July 1996: TWA Flight 800 exploded in midair for then unknown reasons.
Feb.1997: A White House Commission reported aviation security recommendations.
Aug. 1997: FAA issued a proposed rule.
Dec. 1997: The comment period was closed.
Aug. 1999: FAA reopened the comment period for additional comments on compliance programs proposed in the rule.
Sept. 1999: The second comment period was closed.

Rulemaking Issues

FAA officials attributed the 10-year delay between initiating the process and issuing a proposed rule to the need to repeatedly reexamine the scope and contents of the proposal in the wake of security-related events. According to FAA, comments on the proposed rule also raised additional issues that required extensive analysis and led to the consideration of substantial changes to the rule. FAA officials said that they had completed a number of security-related rules since 1987. They cited recent examples of rules regarding unescorted access privileges in 1995, falsification of security records in 1996, sensitive security information in 1997, and employment history verification and criminal records checks in 1998.

Status of Rulemaking Effort

At the time of our review, FAA had not yet published a final rule. According to FAA rulemaking officials, the rule had cleared OMB for publication but was returned to the Department pending regulatory review by the new administration.

Source: GAO's analysis of FAA information.

Although FAA cannot prevent unexpected events from influencing its rulemaking priorities, FAA's system for prioritizing rules established as part of its 1998 reform lacks explicit criteria to guide rulemaking management in establishing and ranking the priority of projects and assigning available resources. While FAA's rulemaking manual describes factors that must be considered in prioritizing rulemaking projects—such as the legislative time frames established by the Congress and projects initiated in response to special commissions and the NTSB—the policy does not define how these criteria should be ranked in order of importance.

Identifying and ranking the agency's top rulemaking priorities is important because FAA's "A" list includes the Administrator's priorities as well as other top priority rules sponsored by different offices. The FAA Administrator's set of rulemaking priorities constitute about half of the "A" list of projects that are actively worked on. For example, in July 2000, 21 of the agency's 45 top priority rules were on the Administrator's list. Yet FAA's policy for determining rulemaking priorities does not establish the relative importance of the different factors that rulemaking managers must consider in determining the priority of rules within the "A" list of top priority projects. Without clear criteria for determining the rules' relative ranking and consensus among all offices involved in rulemaking, rulemaking managers may have difficulty in objectively determining, for example, whether legislated time frames take precedence over the Administrator's priorities or the safety recommendations of the NTSB. Thus, a final ranking is de facto left to the steering committee, which is made up of managers whose priorities are tied to the functions of their individual offices. One result is that managers from different offices may be more likely to allocate their staff resources on an ad-hoc, short-term basis, rather than in a strategic fashion to complete the agency's highest priority rules.

During our review, the Office of Rulemaking suggested that one way of allocating staff resources to ensure that top priority rules are completed is to "dedicate" team members to work on rules until they are completed. This approach was recommended in previous reviews of FAA's rulemaking process and is used in FAA's acquisitions of air traffic control equipment. According to the Office of Rulemaking, if this approach was put into place, managers of offices involved in rulemaking activities, including the offices involved in legal, technical, and economic analyses as well as the Office of Rulemaking, would ensure that rulemaking team members worked only on the highest priority rule by dedicating their staffs to that project. FAA

successfully used this approach to develop its "commuter rule" in 1995, as shown in figure 20.

Figure 20: Case Study of FAA's Rulemaking to Revise Commuter Operations and General Certification and Operations Requirements

Commuter aircraft at an FAA test center

Photo courtesy of FAA and the Department of Energy's Sandia National Laboratories

Purpose of Proposed Rule

To require commuter operators conducting scheduled passenger-carrying operations in airplanes with 10 or more seats to meet the same safety standards required for larger aircraft with 30 or more seats

Key Events

Dec. 1994: FAA initiated a rulemaking effort.
Mar. 1995: FAA published a proposed rule.
June 1995: The comment period was closed.
Dec. 1995: FAA published the final rule.

Rulemaking Issues

FAA officials offered this rulemaking as an example of how quickly rules can be developed and published if the agency dedicates its resources, particularly its rulemaking staff, to working exclusively on a single project. In this case, FAA said it developed a proposed rule within 100 days. The Office of Rulemaking noted, however, that other priority rulemaking projects were delayed as a result.

Status of Rulemaking Effort

Completed

Source: GAO's analysis of FAA information.

The Office of Rulemaking, which also cited changing priorities as an ongoing problem, noted that a continuing lack of realism in prioritizing fostered a sense of overload on the part of rulemaking staff. Our survey of rulemaking staff showed that only about 17 percent agreed that the amount of work was reasonable, allowing team members to produce high-quality products and services. Furthermore, less than one-third (about 30 percent) agreed that management from their office provided sufficient staff and resources to support and promote improvement in the rulemaking process.

Management Difficulties in Resolving Complex Policy Issues Continued to Slow the Rulemaking Process

On some rulemaking projects, the time FAA management took to resolve complex policy issues added years to the overall time taken to complete the rule. Based on findings that sequential review and decisionmaking by management late in the process had previously caused problems such as extensive backlogs, rework, and delays, FAA intended in its reform to promote a proactive management approach in which policy decisions would be made early in the process. However, only about 28 percent of the rulemaking staff we surveyed agreed that senior management focused on the prevention of problems rather than on the correction of problems, and only 11 percent of the staff surveyed agreed that sequential processing does not impact the timeliness of the rulemaking process. Figure 21 provides a case study of a rulemaking effort related to Flight Operational Quality Assurance (FOQA) Programs in which management's inability to resolve difficult policy issues early in the process contributed significantly to the overall time the rule has been in the process. This rule has taken years to develop because of complex policy issues that at the time of our review still had not been resolved. The policy issues concern the waiving of enforcement actions for violations discovered through FOQA data voluntarily provided by airlines. Agency officials said that the reason this issue has been so difficult to resolve is that the rule could set a precedent that would affect other regulatory agencies' enforcement efforts, and it therefore has ramifications beyond the Department's efforts to improve aviation safety. As a result, they considered their rulemaking efforts to be a management success.

Figure 21: Case Study of FAA's Rulemaking to Govern Air Carriers' Flight Operational Quality Assurance (FOQA) Programs

Purpose of Proposed Rule

To implement a nonenforcement policy for use of information collected from air carriers' FOQA programs

Key Events

Jan. 1993: FAA initiated a rulemaking effort.

Feb. 1995: The Administrator announced that air carriers' FOQA data would not be used for enforcement purposes if the carrier had a program in place to collect and analyze digital flight data and take corrective action.

Dec. 1997: GAO reported on the safety and cost benefits of FOQA along with factors impeding full implementation of the program, noting that many airlines and pilots appeared frustrated with FAA's delay in issuing the regulation implementing the policy of using the data strictly for nonenforcement purposes.

Dec. 1998: In response to continued industry concerns about the use of FOQA data for enforcement purposes, the Administrator published a statement of policy in the *Federal Register* that reiterated the agency's commitment to not using information for enforcement purposes. However, in the statement, FAA retained the authority to take action in egregious cases (i.e., if the violation was deliberate, involved a criminal offense, or the violator had committed a similar violation within the previous 5 years).

July 2000: FAA published a proposed rule that permitted the use of FOQA data for enforcement purposes under narrowly defined circumstances.

Rulemaking Issues

Between December 1997 and June 2000, rulemaking officials, in conjunction with the Department of Justice, worked to develop a rule that was acceptable to the industry and the Administrator. However, the Department of Justice took the position that federal agencies should not completely divest themselves of all enforcement discretion regardless of the circumstances of the violation and recommended that FAA retain enforcement discretion on a case-by-case basis. At that time, the Department of Justice expressed concern that the rule would be viewed as a precedent and could lead to other regulated industries receiving blanket immunity from enforcement for regulatory violations. In response to these concerns, FAA proposed to maintain the right to use an operator's FOQA data in cases where it was demonstrated that the certificate holder lacked qualifications. As a result, the agency received significant opposition from the aviation industry when it issued a notice of proposed rulemaking in June 2000. According to industry comments on the proposed rule, FAA's proposal "utterly destroys the spirit, intent and operational effectiveness of any FOQA program…"

Status of Rulemaking Effort

According to FAA, several airlines informed FAA that they were discontinuing their voluntary FOQA programs because they could no longer be sure that the data they provided would not be used to penalize them or their pilots. At the time of our review, FAA was still trying to address the policy issue of using FOQA data for enforcement purposes as it worked to draft a final rule.

Source: GAO's analysis of FAA information.

Multiple Levels of Management Review Continued to Slow the Process

Delays in the process caused by multiple layers of review within the agency continued despite FAA's reform efforts because the reduction in layers of review and the level of employee empowerment envisioned in FAA's reform did not materialize. In reviewing approved project records, we found that delegation of authority beyond the director's office had not been achieved in spite of FAA's plans to do so. (FAA's plans are detailed in ch. 3.) For example, in reviewing projects approved since the reform was implemented in January 1998, we found that in five of six projects not only did the directors of team members' offices review and approve team members' decisions, but so did their immediate managers and other managers. In 1997, FAA had concluded that multiple layers of review fostered a lack of accountability in the rulemaking process and that this, in turn, led to milestones that were unrealistic or not observed because final responsibility for the project was unclear.

Our survey of rulemaking team members showed that few (4 percent) agreed that layers of review did not interfere with the timely processing of rules. As noted above, only 11 percent agreed that sequential processing does not impact the time required to complete the rulemaking process. Finally, a minority of the respondents agreed they had the ability to establish realistic schedules; 36 percent of the survey respondents agreed that rulemaking teams set realistic schedules, and 19 percent of rulemaking staff agreed that rulemaking teams have sufficient control over the rulemaking process to set realistic milestones.

Senior rulemaking managers at FAA said that there was a fine line between employee empowerment and the need for adequate oversight, particularly for rules that were likely to have a significant economic or other impact on the aviation industry. They said that FAA's reform was not intended to eliminate managers from decisionmaking in the rulemaking process or give rulemaking teams total independence, noting that the primary focus of the rulemaking reform effort was to reduce the levels of review for nonsignificant rules. According to officials from the Office of Rulemaking, review and approval of certain nonsignificant rules that would harmonize certification requirements for passenger aircraft established by the Joint Aviation Authorities (FAA's European counterpart) have already been delegated below the level of associate administrators.

Our discussions with rulemaking staff revealed a variety of reasons why they strongly disagreed that rulemaking teams had enough control over the process to set realistic milestones. Staff noted that internal management decisions to change rulemaking priorities before a project was completed

and external reviews by OST caused process delays and were beyond their control. Less than 2 percent of the rulemaking team members agreed that departmental reviews improved the timeliness of the rulemaking process, and less than 15 percent agreed that departmental reviews improved the quality of rulemaking. Figure 22 shows the impact of coordination with OST on FAA's time frames in its rulemaking efforts to revise regulations governing the standards for aircraft repair stations.

Figure 22: Case Study of FAA's Rulemaking to Revise Aircraft Repair Station Regulations

FAA-certified aircraft repair station

Photo courtesy of Banyan Air Service

Purpose of Proposed Rule

To reorganize existing repair station rules to reduce duplication of regulatory language, eliminate obsolete information, and establish new requirements related to repair station ratings and classes, manuals, recordkeeping, and personnel

Key Events

Sept. 1986: FAA initiated a rulemaking effort.
Nov. 1994: FAA completed its initial draft of the proposed rule.
Feb. 1997: FAA provided the draft rule to OST for review and approval.
May 1999: OST approved the proposed rule.
June 1999: FAA published the proposed rule.
Oct. 1999: FAA scheduled the close of the comment period but decided to extend the comment period.
Dec. 1999: The extended comment period was closed.

Rulemaking Issues

According to FAA, developing the rule took almost 9 years because of the scope and complexity of labor, training, and safety issues. There were additional issues related to foreign repair stations, including FAA oversight and requirements for coordinating procedures with the national civil aviation authorities of different countries. According to FAA, OST's policy concerns and congressional interest in the proposed rule prolonged OST's review and approval, causing the approval process to take more than 2 years. In addition, the regulatory evaluation had to be updated during OST's review because it was more than 2 years old.

Status of Rulemaking Effort

FAA submitted the final rule to OMB for approval in January 2001. At the time of our review, the rule had not yet been published.

Source: GAO's analysis of FAA information.

FAA's internal review process reflects the lack of empowerment as well. Officials from OST and the Office of Rulemaking said that the requirement for numerous layers of review reflects FAA's hierarchical management

structure and that the lack of empowerment is embodied in FAA's "grid sheet" for signing off on a proposed rule. The grid sheet can involve 20 different signatures, each indicating a different layer of review. Moreover, they said that these extensive reviews can reduce accountability, noting that, because FAA requires a lot of signatures, rulemaking documents are sometimes passed through the process without FAA officials reading them. Figure 23 illustrates the multiple layers of review that occurred in reaching team concurrence for a proposed rule to require that emergency medical equipment be carried aboard certain passenger aircraft.

Figure 23: Case Study of FAA's Rulemaking to Require Emergency Medical Equipment on Aircraft

Automatic external defibrillator

Photo courtesy of MedAire, Inc.

Purpose of Proposed Rule

To require that certain air carrier operators carry automatic external defibrillators on aircraft and train flight crew members on the use of the devices

Key Events

Apr. 1998: The Congress enacted the Aviation Medical Assistance Act.
Oct. 1998: FAA initiated a rulemaking effort.
Sept. 1999: The rulemaking team circulated its draft proposed rule for approval within FAA.
Jan. 2000: FAA provided the draft rule to OST for review and approval.
Feb. 2000: OST approved the proposed rule.
Mar. 2000: OMB approved the proposed rule.
Apr. 2000: FAA held the rule, waiting for a White House announcement.
May 2000: FAA published the proposed rule.
Sept. 2000: The comment period was closed.
Apr. 2000: FAA published the final rule.

Rulemaking Issues

In response to legislation directing FAA to determine whether current requirements for air carrier crew members' medical emergency training and air carrier emergency medical equipment should be modified, rulemaking team members developed a proposed rule and circulated it for review and approval in September 1999. The package was circulated for 2 months and reviewed by a total of 13 different reviewers at various levels of FAA, including division managers and office directors. According to FAA's reform, only the Associate Administrator, the General Counsel, and the Administrator's office should have reviewed the proposed rule before transmitting it to OST.

Status of Rulemaking Effort

Completed

Source: GAO's analysis of FAA information.

DOT officials said that the time needed for their review and approval of FAA's significant rules can be lengthy if FAA's position is not thoroughly evaluated in terms of departmental policy early in the rulemaking process. DOT officials also cited lack of coordination among FAA's program offices and a lack of empowerment and accountability of rulemaking teams as problems that continued to contribute to delays in the process. They said that departmental review served a valuable role in ensuring that OMB's concerns were adequately addressed and noted, for example, that OST's efforts to coordinate proposed changes were hindered when FAA staff did not have the authority to make the suggested changes.

Problems in Process Administration Continued to Impair Rulemaking

Problems in three central areas related to the administration of the rulemaking process continued to contribute to delays. Significant confusion persisted regarding the roles and responsibilities of rulemaking team members. Information systems lacked complete, accurate, or current data and were inconsistently used. Finally, key elements of a continuous improvement program to identify and correct problems in the process were not in place.

Confusion Remained Regarding the Roles and Responsibilities of Participants

Although FAA attempted to address confusion over roles and responsibilities in its reforms, our survey indicated that only about 40 percent of the individuals we surveyed agreed that the “roles and responsibilities are clearly understood.” In addition, less than half (47 percent) of the survey respondents agreed that “roles and responsibilities are clearly established.”

The effort by the Office of Rulemaking to define roles and responsibilities for rulemaking participants in its rulemaking manual did not appear to have eliminated confusion. As we indicated in chapter 3, the manual describes the specific roles of legal and economic reviewers. According to FAA's guidance, legal reviews should focus on the legal authority for the action proposed, compliance of the proposal with applicable laws, and whether the requirements being imposed are stated with sufficient clarity and justification to be enforced and defended in court, if need be. Economic reviews should estimate the costs and benefits of a proposed or final rulemaking. However, rulemaking management said that legal reviews continued, in some cases, to focus on nonlegal issues and that the scope of economic reviews could potentially be reduced. Senior legal staff involved in the rulemaking process noted that FAA's Chief Counsel is a political appointee whose role as advisor to the Administrator can result in the

office's involvement in policy issues, as well as assessments of the quality of analyses conducted to support rules.

Information Systems Consistently Track Only "A" List Rules and Are Not Consistently Used

In September 2000, we reported on the importance of information technology resources for federal agencies to gather and share information,[2] and FAA officials cited the development of a rulemaking management information system as a major element of its rulemaking reforms. According to FAA's Office of Rulemaking, its new automated system consolidated the functions of the existing project-tracking and document-management systems. FAA's tracking of its 24 "A" list significant rules on this system has established data on rulemaking times for specific steps that should help it to monitor the rulemaking process. However, the small number of rules that it consistently tracks and a lack of agencywide implementation has made the system less useful than it could potentially be.

Because FAA used the project-tracking portion of the automated system only for its "A" list of priority projects, including 24 significant rules, the system was missing complete and accurate data for many of the remainder of FAA's significant rulemaking projects. FAA rulemaking officials said that they did not have the resources available to complete, correct, or update records of rules that were not being actively worked on from the agency's "A" list of rules, citing resource limitations. However, since previously initiated rulemaking projects may be shifted onto the "A" list, historical data could be useful for measuring the performance of the rulemaking process over time.

FAA rulemaking officials also noted that FAA's rulemaking policy allows teams to select milestones on a case-by-case basis. However, continuing to consider some milestones in the system voluntary may result in a lack of consistent and comparable information on rules. Without complete, accurate, and consistent data on all FAA's rulemaking projects, FAA managers will not be able to use the information system to its fullest capacity—to measure the time elapsed between specific steps in the process to identify where and to what extent delays occur over time. Since the rulemaking process can take years to complete, a longer-term management perspective on the performance of the process is essential.

[2] *Human Capital: A Self-Assessment Checklist for Agency Leaders*, (GAO/OCG-00-14G, Sept. 2000).

FAA agreed that additional performance and statistical measures should be incorporated into the reporting system to enhance its ability to manage the process and said it had begun making changes to the system.

The document management portion of the automated system was limited in its usefulness because it had not been fully implemented across all offices involved in rulemaking. FAA's technology plan called for an "automation champion" to lead the initiative across all of the affected offices. However, according to the Office of Rulemaking, FAA had not designated a champion or developed a plan or goals for an integrated system outside the Office of Rulemaking. As a result, offices outside of the Office of Rulemaking had not fully implemented the new system. Although all rulemaking team members received initial training on the new system, only 26 percent of the respondents to our survey agreed that rulemaking team members were provided with training when new technologies and tools were introduced. After the initial training, we found that the system was not effectively implemented outside of the Office of Rulemaking.

We reviewed the rulemaking documents in the system for four significant safety-related rules and found that since FAA's reforms in 1998, only 1 of 27 rulemaking staff outside of the Office of Rulemaking on the 4 rulemaking teams had used the automated system. This staff person used the system only twice, on the same day in February 1998. Although officials from the Office of Rulemaking said that the new system was available to all rulemaking staff, only about 23 percent of the survey respondents agreed that their coworkers used FAA's automated capabilities to record rulemaking actions. Individuals from the Office of the Chief Counsel said that they either did not have access to the automated system or that their computers were not capable of using the rulemaking software. While economists in the Office of Policy and Plans with whom we spoke had access to the system, they said that the software was too cumbersome. One economist said that he preferred to develop rulemaking documents that were inaccessible to change by other team members in order to maintain the integrity of his work product.

FAA's Implementation of Continuous Improvement Efforts Was Incomplete

Despite explicit efforts in the rulemaking reform to establish systems to evaluate the new process and establish quality standards and guidance, FAA had not fully implemented a continuous improvement or quality review program. The concept of continuous improvement is embodied in quality management principles as well as the Government Performance and Results Act.[3] Continuous improvement efforts are essential for identifying

problems in the rulemaking process. However, continuous improvement and quality management teams established in FAA's reforms reported problems in attempting to implement review systems.

In the fall of 1999, members of the continuous improvement team expressed concerns about the purpose and authority of the team related to management's participation in establishing and supporting the evaluation function. To improve the effectiveness of the system, FAA combined the teams to include both staff and management. Despite the reorganization, little substantive work had been done in the area of process improvement at the time of our review. For example, project teams are to complete a "lessons learned" evaluation after publication of a proposed rule to document practices and procedures that worked well, identify problem areas, and determine opportunities to improve the entire rulemaking process. However, since the process was reformed in January 1998 through fiscal year 1999, we found that FAA had not documented any evaluations.

The quality and continuous improvement teams were also expected to review sample rulemaking documents during the progress of a selected project, perform periodic quality assurance reviews with selected rulemaking teams, and make recommendations to the management council regarding their findings. However, none of these quality review functions had been accomplished. No evaluations or recommendations had been documented, and the rulemaking manual had not been updated since its publication in December 1998. In discussing the issue at a steering committee meeting, members of the management council attributed the lack of implementation of process improvement efforts to an inadequate level of organizational commitment to the reformed process. Rulemaking officials said that, although the continuous improvement team met on a regular basis to discuss lessons learned, the team had not documented the results of their discussions. They said they planned to incorporate the ability to document lessons learned in the next version of the management information system and that they were updating the rulemaking manual. They also said that another team, made up of managers from key offices, has met monthly and sometimes weekly to implement and improve the reformed process.

[3] *Executive Guide: Effectively Implementing the Government Performance and Results Act*, (GAO/GGD-96-118, June 1996).

Human Capital Management Initiatives for Rulemaking Activities Were Overlooked

Human capital management initiatives focusing on training, performance measurement and evaluation, and rewards for rulemaking efficiency and quality work were generally not implemented at the time of our review. According to the National Performance Review, which made recommendations regarding federal agencies' rulemaking processes in 1993, proper training, performance measurement, and performance incentives are needed to ensure that the agency officials involved in regulatory activities work as effectively as possible. We reported on the importance of training, performance measures, and performance incentives as key elements of an effective human capital strategy in September 2000.[4] In preparing its 1997 report, FAA's working team recommended a series of human capital management initiatives to help rulemaking participants adjust to the revised process and foster change throughout FAA. These areas included training and skills assessment as well as performance measurement, evaluation, and rewards for rulemaking participants.

Recurring Rulemaking Training Was Limited to the Office of Rulemaking Staff

Although FAA's reform plan called for orientation training on the new rulemaking process and ongoing training in a wide range of areas for all staff involved in rulemaking, rulemaking participants outside the Office of Rulemaking generally received training only on the information system software and an introduction to the new process. A formal program for continuing the training of all rulemaking team members in the areas of functional skill development, conflict resolution, facilitation of and consensus-based decisionmaking, project management, and team-leader training was not implemented. About 50 percent of the staff surveyed agreed that they received the training they needed to perform their jobs. Similarly, although FAA's reforms called for the analysis of the skills needed to function in the revised rulemaking process and to establish a mentoring program, the Office of Rulemaking had not conducted a formal analysis, and we found no evidence of such an analysis in the other offices involved in rulemaking. Only the Office of Rulemaking had established a mentoring program. Representatives from the Office of Policy and Plans and the Office of the Chief Counsel said that they had recurring training programs, but they agreed that these programs did not include a formal

[4] *Human Capital: A Self-Assessment Checklist for Agency Leaders*, (GAO/OCG-00-14G, Sept. 2000).

segment devoted to training to support the rulemaking process, as envisioned by the reform.

Lack of Rulemaking Performance Measurement, Evaluation, and Rewards Hinders Effectiveness of Reforms

As we reported in January 2000,[5] a key element of human capital management is the use of performance management systems, including pay and other incentives, to link performance to results. However, in the area of rulemaking, FAA has not consistently done so for rulemaking staff and management. Although FAA's reform effort included recommendations to measure and evaluate team and individual team member performance and to develop an associated rewards system, these human capital management efforts were not implemented on a consistent, agencywide basis. According to rulemaking officials, the staff resources needed to develop and implement these initiatives were not available because rulemaking staff and management were fully occupied with the day-to-day management of the rulemaking process. As noted above, we found evidence that some individual senior managers' performance evaluations included rulemaking projects specific to their program areas. The Government Performance and Results Act of 1993 requires agencies to pursue performance-based management including results-oriented goal setting and performance measurement. Although the act gives agencies the impetus for tailoring their human capital systems to their specific missions and objectives, it is up to agencies, like FAA, to follow through on the opportunity. FAA implemented an agencywide effort to link performance with rewards in April 2000. FAA's new core compensation plan provides for pay increases tied to performance and individual contributions. Despite the opportunities provided by the new compensation system, as well as personnel reforms enacted in 1996 to provide FAA with greater flexibility in human capital management, FAA management has not established systems to measure and reward performance in rulemaking based on the quality or timeliness of the process.

One measure of rulemaking performance is the time taken to complete steps in the process to develop and issue a rule. To implement rulemaking reforms, senior managers involved in FAA's rulemaking agreed that process milestones were appropriate measures of rulemaking performance. However, results from our survey of rulemaking staff indicate that, while slightly more than one-half (51 percent) agreed that milestones

[5] *Human Capital: Key Principles from Nine Private Sector Organizations* (GAO/GGD-00-28, Jan. 31, 2000).

are used to assess the overall performance of teams, team members did not believe that using milestones is an accepted or acceptable means of measuring performance. For example, less than one half of the respondents (about 48 percent) agreed that senior management holds team members accountable when teams do not meet milestones. Only 20 percent agreed that senior management is held accountable when teams do not meet milestones. Less than 20 percent agreed that rulemaking teams have sufficient control over the rulemaking process to set realistic milestones. Only 36 percent of the staff agreed that teams set realistic schedules. Only 8 percent agreed that their offices provide incentives based on the milestones of the rulemaking process. Officials in the Office of Rulemaking suggested that one method to provide agencywide incentives for timely rulemaking would be to include a goal for the agency's timely rulemaking in the short-term incentive plans for all senior managers involved in rulemaking.

The Office of Rulemaking did not develop a separate rulemaking award system as recommended by the working team. They said rulemaking awards were given based on the preexisting agency award system in which individuals and teams are recognized for outstanding performance on various projects. Although about 70 percent of the staff surveyed agreed that management from their offices provides an environment that "supports my involvement, contributions, and teamwork on the rulemaking team," few rulemaking staff that responded to our survey agreed that teamwork is rewarded. Specifically, only 28 percent of rulemaking staff agreed with the statement "I am appropriately rewarded for teamwork in the rulemaking process (e.g., performance ratings, cash awards, certificates, or public recognition)."

Conclusions

FAA's reforms of its rulemaking process have not fully addressed the long-standing problems that can lead to unnecessary delays because the initiatives have either not been fully implemented or their implementation has been impaired by a lack of management commitment and support. Management's attention to factors critical to achieving desired results—establishing baseline data, priorities, a plan for addressing root causes, and an evaluation system to measure the agency's progress—would facilitate effective implementation of the reform initiatives begun in 1998.

FAA's management committees that were established as a part of the reform are a step in the right direction in FAA's efforts to improve management involvement, encourage timely resolution of policy issues,

and reduce layers of review. Clarifying staff and management's roles in the process and including performance expectations, measures, evaluations, and rewards based on these roles is an essential step in establishing a performance system for rulemaking that emphasizes accountability and results. The system must hold staff and managers accountable for producing timely, quality rules that are needed to improve aviation safety and security. Equally essential are automated information systems to monitor the performance of the individuals and offices in the process and provide information to continually evaluate and improve rulemaking. A performance management system is a key element of an effective human capital strategy that is the best, and perhaps the only, means of obtaining the needed level of commitment and support from FAA management and staff. FAA's new Core Compensation Plan that provides for pay increases tied to performance and individual contributions offers the agency an opportunity to establish new systems for performance measurement, evaluation, and rewards based on timeliness and quality in rulemaking for all offices involved in the process. Finally, the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century provides an as yet unrealized opportunity for FAA to reduce the number of rules that must go through one of the levels of review—the review by the Office of the Secretary of Transportation. Adhering to the provisions of the act could reduce the processing time for selected significant rules that meet the criteria established in the act.

Recommendations

To improve the efficiency of its rulemaking process and reap the maximum benefits from its rulemaking reform efforts, we recommend that the Secretary of Transportation direct the FAA Administrator to take steps to improve management involvement in the rulemaking process by

- reducing the number of top-priority projects to a manageable number over time by limiting the number of projects added until existing projects are completed and establishing criteria for ranking the highest priority rules so that the lowest ranked of these priority rules may be tabled if necessary to allow sufficient resources to be applied to emerging, higher-priority projects;
- providing resources sufficient for rulemaking teams to meet the agency's suggested time frames. One approach, suggested by the Office of Rulemaking, is to prototype the use of dedicated rulemaking teams by assigning staff for the duration of rulemaking projects. This approach would give the teams the ability to focus their efforts and manage projects to completion;

- holding managers at the director and associate administrator level accountable for making and supporting policy decisions as early as possible in the rulemaking process; and
- empowering team members by giving them the authority to coordinate with their associate administrators so that they can represent the associate administrator's policies, thus eliminating the need for the separate step of associate administrator's review and approval; empowering team members by permitting them to set their own schedules and deadlines; and holding staff and management accountable for ensuring that schedules are realistic.

In addition, the Secretary of Transportation should direct the FAA Administrator to take steps to improve administration of the rulemaking process by

- clearly communicating the roles and responsibilities of program and support staff on rulemaking teams and holding team members and their managers accountable for limiting their reviews to established criteria;
- ensuring that information systems used for rulemaking tracking and coordination contain current, complete, and accurate data on the status of all significant rulemaking projects, including the time elapsed between FAA's transmission of rules to OST and the receipt of OST's comments or approval; and
- implementing elements of its proposed continuous improvement program and using the resulting information to identify problems in the process and potential solutions.

Finally, the Secretary of Transportation should direct the FAA Administrator to take steps to improve human capital management of the rulemaking process by establishing a human capital management strategy for offices involved in rulemaking that includes

- providing training and support to all participants that promotes use of the agency's automated information system and collaborative, team-based decisionmaking skills, and assessing the skills of rulemaking staff and developing targeted training to better enable them to fulfill their rulemaking roles; and
- establishing and implementing performance measures based on expectations, evaluations, and incentives that promote timely, quality rules. One approach suggested by the Office of Rulemaking would be to include a goal for the agency's timely rulemaking in the short-term incentive plans for all senior managers involved in rulemaking.

In addition, we recommend that the Secretary revise departmental policies to make them consistent with the provisions of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century and reduce the number of FAA's significant rules subject to its review.

Agency Comments

We provided a draft of this report to the Office of the Secretary of the Department of Transportation and FAA for their review and comment. In following discussions, departmental and FAA officials indicated that they agreed with a number of the draft report's recommendations.

For example, they said that FAA will take steps to ensure that the rulemaking tracking system is completely accurate and up-to-date, and includes all appropriate tracking milestones. Furthermore, they agreed that FAA will use its continuous improvement program to identify potential process improvements and will hold senior management accountable for providing policy input as early as possible in the rulemaking process. These officials also indicated that some of the draft report's recommendations will require further consideration, and that a specific response to each of the report's recommendations will be provided in the Department's response to the final report.

FAA officials provided technical comments, which we incorporated into the report. The Department also provided written comments on the report, which discussed four main points about the results of the review. The full text of FAA's written comments is provided in appendix V, along with our detailed response to these comments.

Status of 76 Significant Rules in FAA's Workload FY 1995 - FY 2000

	Rule title	Initiation date	Publication of a proposed rule in the *Federal Register*	Publication of the final rule in the *Federal Register*	Terminated or withdrawn
1	Revision of Airman Medical Standards and Certification Procedures	07/09/82	10/21/94	03/19/96	
2	Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking and at Training Centers	01/07/83	08/11/92	07/02/96	
3	Improved Standards for Determining Rejected Takeoff and Landing Performance	10/07/83	11/30/87	02/18/98	
4	Passenger-Carrying and Cargo Air Operations for Compensation or Hire	05/18/84	10/12/88	12/20/95	
5	Flight Attendant Requirements	02/04/86	04/14/89		06/06/96
6	Part 145 Review: Repair Stations	09/18/86	06/21/99	not yet published	
7	Type and Number of Passenger Emergency Exits Required in Transport Category Airplanes	10/15/86	02/22/90	11/08/96	
8	Improved Survival Equipment for Inadvertent Water Landings	05/01/85	06/30/88	not yet published	
9	Air Carrier and Commercial Operator Training Programs	08/01/88	12/13/94	12/20/95	
10	Retrofit of Improved Seats in Air Carrier Transport Category Airplanes	01/26/88	05/17/88	not yet published	
11	Drug Enforcement Assistance	11/18/88	03/12/90	not yet published	
12	Sole Radio Navigation System; Minimum Standards for Certification	05/12/89	not yet published		
13	Airworthiness Standards; Occupant Protection Standards for Commuter Category Airplanes	05/29/87	07/14/93		06/30/98
14	Fatigue Evaluation of Structure	04/18/88	07/19/93	03/31/98	
15	Fatigue Test Requirements for Aging Aircraft	12/01/89			07/07/95
16	Aircraft Operator Security	03/10/87	08/01/97	not yet published	
17	Airport Security	03/10/87	08/01/97	not yet published	
18	Alternative Means of Compliance	11/02/89			02/03/97
19	Pilot Operating and Experience Requirements	10/11/90	03/23/93	04/27/95	
20	Child Restraint Systems	05/30/90			02/13/96

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	Rule title	Initiation date	Publication of a proposed rule in the *Federal Register*	Publication of the final rule in the *Federal Register*	Terminated or withdrawn
21	Cost of Services and Transfer of Fees to Part 187 from Parts #47, #49, #61, #63, #65, and #143	06/07/90	not yet published		
22	Unescorted Access Privilege	11/27/90	02/13/92	10/03/95	
23	Aging Aircraft Safety	10/29/91	10/05/93	not yet published	
24	Airworthiness Standards: Systems and Equipment Rules based on European Joint Aviation Requirements	03/01/94	07/22/94	02/09/96	
25	Airworthiness Standards: Powerplant Rules based on European Joint Aviation Requirements	03/01/94	06/30/94	02/09/96	
26	Airworthiness Standards: Flight Rules Based on European Joint Aviation Requirements	07/23/91	07/25/94	02/09/96	
27	Airport Noise Compatibility Planning	08/14/90	not yet published		
28	Anti-Drug and Alcohol Misuse Prevention Programs for Employees of Foreign Air Carriers Engaged in Specified Aviation Activities	10/29/91	12/05/92		01/13/00
29	Corrosion Control Program	03/09/93	not yet published		
30	Revised Access to Type III Exits	10/30/92	01/30/95	not yet published	
31	Flight Operational Quality Assurance Program	01/11/93	07/05/00	not yet published	
32	National Air Tour Safety Standards	10/11/90	not yet published		
33	Revision of Emergency Evacuation Demonstration Procedures to Improve Participant Safety	11/18/93	07/18/95	not yet published	
34	Traffic Alert and Collision Avoidance System (TCAS 1)	04/22/93	03/31/94	12/29/94	
35	Operations of Jet Aircraft in Commuter Slots at LaGuardia Airport and John F. Kennedy International Airport	11/10/92			02/14/96
36	Rules of Practice for Federally-Assisted Airport Proceedings	04/06/94	06/09/94	10/16/96	
37	Overflights of Units of the National Park System	02/17/94	not yet published[a]		
38	Child Restraint Systems	07/18/94	06/09/95	06/04/96	
39	Controlled Rest on the Flight Deck	03/10/93	not yet published		

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	Rule title	Initiation date	Publication of a proposed rule in the *Federal Register*	Publication of the final rule in the *Federal Register*	Terminated or withdrawn
40	Commuter Operations and General Certification and Operations Requirements	12/06/94	03/29/95	12/20/95	
41	Flight Crewmember Duty Period Limitations, Flight Time Limitations and Rest Requirements	05/24/94	12/20/95	not yet published	
42	Submission to Drug Tests	12/01/89			02/09/00
43	Mountain Flying	01/03/95			03/26/98
44	Type Certification Procedures for Changed Products	10/14/94	05/02/97	6/07/00	
45	Passenger Facility Charges	06/03/94	04/16/96		04/10/00
46	Revisions to Flight Data Recorder Rules	03/08/95	07/16/96	07/17/97	
47	Special Flight Rules in the Vicinity of Grand Canyon National Park	03/01/95	07/31/96	12/31/96	
48	Financial Responsibility Requirements for Licensed Launch Activities	01/11/96	07/25/96	08/26/98	
49	Commercial Space Transportation Licensing Regulations	01/11/96	03/19/97	04/21/99	
50	Duration Between Examinations for First- and Second-Airman Medical Certificates	12/16/94			02/09/00
51	False and Misleading Statements Regarding Aircraft Parts	08/22/94	not yet published		
52	Special Flight Rules in the Vicinity of the Rocky Mountain National Park	02/26/96	05/15/96	01/08/97	
53	Placarding Certain Cargo or Baggage Compartments	06/10/96			07/21/97
54	Security Programs of Foreign Air Carriers	06/06/96	11/23/98	not yet published	
55	Fees for Providing Production Certification-Related Services Outside the United States	07/15/96	07/15/97	10/27/97	
56	Civil Aviation Security User Fees	05/30/96			02/05/98
57	Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park	12/24/96	12/31/96	not yet published	
58	Prohibition of the Transportation of Devices Designed as Chemical Oxygen Generators as Cargo in Aircraft	12/11/96	08/27/98	not yet published	

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	Rule title	Initiation date	Publication of a proposed rule in the *Federal Register*	Publication of the final rule in the *Federal Register*	Terminated or withdrawn
59	Protection of Voluntarily Submitted Information	12/11/96	07/26/99	not yet published	
60	Licensing and Safety Requirements of Launch From Non-Federal Launch Site	01/13/97	not yet published		
61	Establishment of Corridors in the Grand Canyon National Park Special Flight Rules Area	03/01/97	05/15/97		07/15/98
62	Revised Standards for Cargo or Baggage Compartments in Transport Category Airplanes	10/12/96	06/13/97	2/17/98	
63	Child Restraint Systems	04/07/97	not yet published		
64	Air Tour Operators in the State of Hawaii	06/09/94	08/28/00	09/29/00	
65	Terrain Awareness and Warning System	02/11/97	08/26/98	03/29/00	
66	High Density Airports; Allocation of Slots	09/26/97	01/12/99	10/01/99	
67	Security of Checked Baggage on Flights Within the United States	07/08/97	04/19/99	not yet published	
68	Transport Airplane Fuel Tank System Design Review	03/12/98	10/29/99	not yet published	
69	Commercial Air Tour Limitations in the Grand Canyon National Park Special Flight Rules Area	10/04/98	07/09/99	04/04/00	
70	Modification of the Dimensions of the Grand Canyon National Park Special Flight Rules Area	12/14/98	07/09/99	04/04/00	
71	Certification of Screening Companies	05/20/98	01/05/00	not yet published	
72	Revisions to Digital Flight Data Recorder Regulations for Boeing 737 Airplanes and Part 125 Operations	05/10/99	11/18/99	not yet published[b]	
73	Emergency Medical Equipment	10/05/98	05/24/00	not yet published	
74	Traffic Alert and Collision Avoidance Systems	05/28/98	not yet published		
75	Improved Flammability Standards for Thermal/Acoustic Insulation Materials Used in Transport Category Airplanes	12/04/98	09/25/00	not yet published	
76	Certification of Airports	02/28/97	07/05/00	not yet published	

[a]In commenting on the draft report, FAA officials noted that the proposed rule had been published on April 27, 2001.

[b]In commenting on the draft report, FAA officials noted that the proposed rule had been published on April 4, 2001.

Survey of Federal Aviation Administration Rulemaking Participants

GAO Survey of Federal Aviation Administration Rulemaking Participants

Introduction

The U.S. General Accounting Office (GAO), a congressional agency that reviews federal programs, has been asked by Congress to review the Federal Aviation Administration's (FAA) rulemaking efforts and obtain information on the results of the recent reengineering of the process. We are focusing on significant rulemaking, for example, those rules with substantial impact on safety problems, those that are controversial, or those that have a potential economic impact on the aviation industry of $100 million or more. As part of this effort, we are: (1) developing a data base of time required to process significant rules, (2) conducting a survey of rulemaking team members, (3) interviewing selected staff, and (4) conducting case studies.

We are sending this questionnaire to all FAA staff that were team members on significant rules listed in the Unified Agenda of Federal Regulatory and Deregulatory Actions from October 1999. This questionnaire asks your opinions of the rulemaking process based on your participation on a rulemaking team(s) for a significant rule. We plan to aggregate the survey responses and use the resulting information in our report on the status of FAA's rulemaking process.

We recognize that there are great demands on your time and appreciate your efforts in helping us collect information on the rulemaking process.

BEFORE YOU CONTINUE:

Have you participated in formulating significant security or safety rules since October 1993 (beginning of fiscal year 1994)? *(Check one)*

1. [ ] Yes Please continue with this survey.

2. [ ] No **STOP!** Please return this survey in the enclosed postage-paid envelope.

Instructions

In order to gather consistent information, we are providing definitions for key terms used in this questionnaire. If you have any questions regarding these terms, please contact Chris Keisling, GAO Senior Evaluator at 404-679-1917 (email is keislingc.atlro@gao.gov) or Mark Lambert, GAO Senior Evaluator at 404-679-1965 (email is lambertm.atlro@gao.gov).

Please return the completed survey to:

Mark Lambert/Chris Keisling
U.S. General Accounting Office
Room 6K17R
441 G St., NW
Washington, D.C. 20548

Thank you in advance for your assistance.

Definitions of Key Terms

"Teams" refer to your personal experience as a member of a cross-functional rulemaking team.

"Office" refers to your organizational affiliation (e.g., AAM, ACP, AFS, AGC, AIR, ARM, or APO).

"ARAC" refers to the Aviation Rulemaking Advisory Committee

"NTSB" refers to the National Transportation Safety Board

"OST" refers to the Office of the Secretary of Transportation

"OMB" refers to the Office of Management and Budget

"Team leader" refers to the individual representing the Office of Primary Interest

"Project manager" refers to the individual representing the Office of Rulemaking

Do you agree or disagree with each of the following statements as they relate to your involvement in rulemaking? ***(Check one box in each row.)***

	Strongly agree (1)	Generally agree (2)	Neither agree nor disagree (3)	Generally disagree (4)	Strongly disagree (5)	No basis to judge/ too early to tell (6)	Did not answer question (7)
Adaptability							
1. In the past 2 years, I have been given more flexibility in how I accomplish my work.	4.59% (5)	26.61% (29)	26.61% (29)	16.51% (18)	11.93% (13)	11.93% (13)	1.83% (2)
2. Rulemaking team **leaders** are receptive to change.	5.50% (6)	52.29% (57)	17.43% (19)	16.51% (18)	3.67% (4)	3.67% (4)	0.92% (1)
3. Rulemaking team **members** are receptive to change.	3.67% (4)	57.80% (63)	19.27% (21)	13.76% (15)	1.83% (2)	3.67% (4)	00.0% (0)
4. New ways of doing business are encouraged.	3.67% (4)	34.86% (38)	24.77% (27)	24.77% (27)	6.42% (7)	3.67% (4)	1.83% (2)
5. Risk-taking is encouraged without fear of punishment for mistakes.	2.75% (3)	12.84% (14)	27.52% (30)	32.11% (35)	15.60% (17)	5.50% (6)	3.67% (4)
Accountability							
6. Senior management focuses on the prevention of problems rather than on the correction of problems.	10.09% (11)	17.43% (19)	22.94% (25)	27.52% (30)	18.35% (20)	3.67% (4)	0.00% (0)
7. Senior management holds team members accountable when teams do not meet milestones.	8.26% (9)	39.45% (43)	15.60% (17)	24.77% (27)	6.42% (7)	4.59% (5)	0.92% (1)
8. Senior management is held accountable when teams do not meet milestones.	0.92% (1)	19.27% (21)	19.27% (21)	31.19% (34)	16.51% (18)	11.93% (13)	0.92% (1)
9. Rulemaking teams have sufficient control over the rulemaking process to set realistic milestones.	2.75% (3)	16.51% (18)	8.26% (9)	32.11% (35)	36.70% (40)	2.75% (3)	0.92% (1)
10. There is trust between team members and team leaders.	12.84% (14)	59.63% (65)	15.60% (17)	7.34% (8)	1.83% (2)	2.75% (3)	0.00% (0)

11. Team leaders ask for team members' ideas and opinions before making important work decisions.	12.84% (14)	65.14% (71)	8.26% (9)	9.17% (10)	0.92% (1)	2.75% (3)	0.92% (1)
12. Team leaders communicate what is expected of team members in terms of task responsibilities.	10.09% (11)	53.21% (58)	15.60% (17)	15.60% (17)	2.75% (3)	2.75% (3)	0.00% (0)
13. Project managers communicate what is expected of team members regarding milestones.	11.93% (13)	49.54% (54)	19.27% (21)	12.84% (14)	1.83% (2)	4.59% (5)	0.00% (0)
14. As a rulemaking team member, I have the authority to speak for my office.	10.09% (11)	55.96% (61)	18.35% (20)	10.09% (11)	2.75% (3)	2.75% (3)	0.00% (0)
	Strongly agree (1)	Generally agree (2)	Neither agree nor disagree (3)	Generally disagree (4)	Strongly disagree (5)	No basis to judge/ too early to tell (6)	Did not answer question (7)
Coordination							
15. Team members share their knowledge with each other.	17.43% (19)	73.39% (80)	3.67% (4)	4.59% (5)	0.0% (0)	0.92% (1)	0.00% (0)
16. Management from my office provides an environment that supports my involvement, contributions, and teamwork on the rulemaking team.	13.76% (15)	55.96% (61)	15.60% (17)	6.42% (7)	6.42% (7)	0.92% (1)	0.92% (1)
17. Rulemaking team leaders provide an environment that supports team members' involvement, contributions, and teamwork.	7.34% (8)	66.97% (73)	14.68% (16)	4.59% (5)	2.75% (3)	2.75% (3)	0.92% (1)
18. Team members from different offices cooperate to get the job done.	7.34% (8)	62.39% (68)	16.51% (18)	8.26% (9)	3.67% (4)	0.92% (1)	0.92% (1)

19. I am appropriately rewarded for teamwork in the rulemaking process (e.g., performance ratings, cash awards, certificates, or public recognition).	3.67% (4)	23.85% (26)	22.02% (24)	20.18% (22)	23.85% (26)	5.50% (6)	0.92% (1)
Mission focus							
20. Team **members** have an understanding of the rulemaking mission.	14.68% (16)	60.55% (66)	6.42% (7)	14.68% (16)	2.75% (3)	0.92% (1)	0.00% (0)
21. Team **leaders** have an understanding of the rulemaking mission.	17.43% (19)	59.63% (65)	11.01% (12)	7.34% (8)	3.67% (4)	0.92% (1)	0.00% (0)
22. The missions of the different offices involved in rulemaking do not conflict.	1.83% (2)	24.77% (27)	29.36% (32)	24.77% (27)	16.51% (18)	2.75% (3)	0.00% (0)
23. Senior managers support the steering committee's decisions regarding priorities.	2.75% (3)	27.52% (30)	33.03% (36)	8.26% (9)	8.26% (9)	19.27% (21)	0.92% (1)
24. Changing priorities in the rulemaking process cause delays.	55.96% (61)	26.61% (29)	12.84% (14)	0.00% (0)	1.83% (2)	2.75% (3)	0.00% (0)
Performance Measurement							
25. Milestones are used to assess the overall performance of rulemaking teams.	9.17% (10)	41.28% (45)	25.69% (28)	11.01% (12)	3.67% (4)	9.17% (10)	0.00% (0)
26. My office provides incentives based on the milestones of the rulemaking process.	0.00% (0)	8.26% (9)	28.44% (31)	31.19% (34)	24.77% (27)	7.34% (8)	0.00% (0)
27. Rulemaking teams set realistic schedules.	0.00% (0)	35.78% (39)	17.43% (19)	27.52% (30)	15.60% (17)	2.75% (3)	0.92% (1)
28. Milestones for steps in the rulemaking process are monitored.	17.43% (19)	52.29% (57)	11.01% (12)	10.09% (11)	3.67% (4)	5.50% (6)	0.00% (0)
29. Quality in rulemaking is clearly defined.	4.59% (5)	21.10% (23)	19.27% (21)	28.44% (31)	22.94% (25)	1.83% (2)	1.83% (2)

	Strongly agree (1)	Generally agree (2)	Neither agree nor disagree (3)	Generally disagree (4)	Strongly disagree (5)	No basis to judge/ too early to tell (6)	Did not answer question (7)
Reengineering							
30. The Office of Rulemaking has made the changes necessary to improve the rulemaking process.	2.75% (3)	16.51% (18)	21.10% (23)	23.85% (26)	20.18% (22)	14.68% (16)	0.92% (1)
31. In the past 2 years, the rulemaking process has become more efficient and effective.	1.83% (2)	18.35% (20)	18.35% (20)	22.94% (25)	26.61% (29)	11.93% (13)	0.00% (0)
32. Team members use the automated management information system to record rulemaking actions.	3.67% (4)	19.27% (21)	23.85% (26)	27.52% (30)	7.34% (8)	17.43% (19)	0.92% (1)
33. I find the revised rulemaking manual useful.	3.67% (4)	23.85% (26)	29.36% (32)	17.43% (19)	11.01% (12)	13.76% (15)	0.92% (1)
34. Layers of review within the agency do not interfere with the timely processing of rules.	0.00% (0)	3.67% (4)	11.01% (12)	34.86% (38)	46.79% (51)	3.67% (4)	0.00% (0)
35. Sequential processing does not impact the time required to complete the rulemaking process.	0.00% (0)	11.01% (12)	20.18% (22)	34.86% (38)	25.69% (28)	6.42% (7)	1.83% (2)
36. Roles and responsibilities in the rulemaking process are clearly established.	1.83% (2)	44.95% (49)	19.27% (21)	23.85% (26)	7.34% (8)	2.75% (3)	0.00% (0)
37. Roles and responsibilities in the rulemaking process are clearly understood.	0.92% (1)	38.53% (42)	19.27% (21)	30.28% (33)	8.26% (9)	2.75% (3)	0.00% (0)
38. My role on the rulemaking team makes good use of my skills and abilities.	12.84% (14)	60.55% (66)	11.93% (13)	6.42% (7)	5.50% (6)	2.75% (3)	0.00% (0)
39. My team leader has organized the team effectively to get the work done.	9.17% (10)	38.53% (42)	37.61% (41)	6.42% (7)	2.75% (3)	5.50% (6)	0.00% (0)

	Strongly agree (1)	Generally agree (2)	Neither agree nor disagree (3)	Generally disagree (4)	Strongly disagree (5)	No basis to judge/ too early to tell (6)	Did not answer question (7)
Training/Resources							
40. I receive the training I need to perform my job (e.g., on-the-job-training,	4.59% (5)	45.87% (50)	16.51% (18)	18.35% (20)	11.01% (12)	1.83% (2)	1.83% (2)
41. I have enough information to do my job	5.50% (6)	58.72% (64)	15.60% (17)	11.93% (13)	6.42% (7)	0.00% (0)	1.83% (2)
42. I have been provided with training when new technologies and tools	2.75% (3)	39.45% (43)	19.27% (21)	17.43% (19)	13.76% (15)	5.50% (6)	1.83% (2)
43. Team members receive the training they need to perform their rulemaking tasks (e.g., on-the-job-	1.83% (2)	28.44% (31)	25.69% (28)	20.18% (22)	10.09% (11)	11.93% (13)	1.83% (2)
44. Team members have the job-relevant knowledge and skills necessary to	5.50% (6)	60.55% (66)	16.51% (18)	9.17% (10)	1.83% (2)	4.59% (5)	1.83% (2)
45. Team members are provided with training when new technologies and tools are introduced.	1.83% (2)	23.85% (26)	26.61% (29)	19.27% (21)	9.17% (10)	17.43% (19)	1.83% (2)
46. Management from my office provides sufficient staff to support and promote improvement in the rulemaking process.	1.83% (2)	28.44% (31)	18.35% (20)	23.85% (26)	20.18% (22)	4.59% (5)	2.75% (3)
47. Management from my office provides sufficient resources (e.g., time, training, and dollars) to support and promote improvement in the rulemaking process.	2.75% (3)	26.61% (29)	16.51% (18)	27.52% (30)	19.27% (21)	5.50% (6)	1.83% (2)
48. The amount of work is reasonable, allowing team members to produce high-quality products and services.	0.92% (1)	16.51% (18)	22.02% (24)	31.19% (34)	23.85% (26)	2.75% (3)	2.75% (3)
External Factors							
49. FAA's use of ARAC improves the effectiveness of the rulemaking process.	2.75% (3)	17.43% (19)	24.77% (27)	19.27% (21)	20.18% (22)	13.76% (15)	1.83% (2)

50. FAA responds effectively to industry concerns in the rulemaking process.	5.50% (6)	47.71% (52)	20.18% (22)	9.17% (10)	8.26% (9)	7.34% (8)	1.83% (2)
51. FAA responds effectively to NTSB's concerns in the rulemaking process.	3.67% (4)	44.04% (48)	24.77% (27)	13.76% (15)	0.92% (1)	11.01% (12)	1.83% (2)
52. OST's reviews improve the quality of rulemaking.	0.92% (1)	13.76% (15)	19.27% (21)	25.69% (28)	31.19% (34)	7.34% (8)	1.83% (2)
53. OST's reviews improve the timeliness of rulemaking.	0.00% (0)	1.83% (2)	8.26% (9)	22.94% (25)	58.72% (64)	6.42% (7)	1.83% (2)
54. OMB's reviews improve the quality of rulemaking.	0.92% (1)	17.43% (19)	21.10% (23)	23.85% (26)	22.94% (25)	11.93% (13)	1.83% (2)
55. OMB's reviews improve the timeliness of rulemaking.	0.92% (1)	2.75% (3)	13.76% (15)	26.61% (29)	43.12% (47)	9.17% (10)	3.67% (4)
56. Congressionally mandated time frames for rulemaking actions improve the overall timeliness of the rulemaking process.	8.26% (9)	19.27% (21)	25.69% (28)	16.51% (18)	23.85% (26)	3.67% (4)	2.75% (3)
Overall Performance Ratings	Excellent (1)	Good (2)	Fair (3)	Poor (4)	Very poor (5)	No basis to judge (6)	Did not answer question (7)
57. Overall, how would you rate the quality of FAA's rulemaking process?	1.83% (2)	23.85% (26)	42.20% (46)	20.18% (22)	9.17% (10)	1.83% (2)	0.92% (1)
58. Overall, how would you rate the timeliness of FAA's rulemaking process?	0.0% (0)	8.26% (9)	32.11% (35)	33.03% (36)	21.10% (23)	2.75% (3)	2.75% (3)

Demographics

59. What is your office or affiliation? (C*heck one*)

1. ARM [10.09% (11)]
2. AGC [12.84% (14)]
3. APO [12.84% (14)]
4. AIR [14.68% (16)]

5. AFS [19.27% (21)]
6. ANM [5.50% (6)]
7. AAM [2.75% (3)]
8. Other (Specify) [19.27 % (21)]

Missing [2.75% (3)]

60. How many years of experience do you have in rulemaking at FAA? (C*heck one*)

1. 0-2 years [15.60% (17)]
2. 3-5 years [17.43% (19)]
3. 6-9 years [24.77% (27)]
4. 10 or more years [41.28% (45)]

Missing [0.92% (1)]

61. How many years of experience do you have in rulemaking outside of FAA? (C*heck one*)

1. 0-2 years [80.73% (88)]
2. 3-5 years [10.09% (11)]
3. 6-9 years [4.59% (5)]
4. 10 or more years [1.83% (2)]

Missing [2.75% (3)]

62. If you have any comments on issues raised in this survey, please use the space below. You may attach additional pages if necessary.

Thank you for your cooperation.

Status of FAA's Rules Subject to 1996 Reauthorization Act Requirement that Rules be Finalized Within 16 Months

Proposed rules	Close of comment period for proposed rule	Date for required final action	Date of final action	Days overdue/met requirement
Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park	03/31/97	07/24/98	not yet published	981
Establishment of Corridors in the Grand Canyon National Park Special Flight Rules Area	06/16/97	10/09/98	07/15/98	met requirement
Commercial Space Transportation Licensing Regulations	08/04/97	11/27/98	04/21/99	145
Fees for Providing Certification-Related Services Outside the U.S	08/14/97	12/07/98	10/27/97	met requirement
Type Certification Procedures for Changed Products	09/02/97	12/26/98	06/07/2000	529
Revised Standards for Cargo or Baggage Compartments in Transport Category Airplanes	09/11/97	01/04/99	2/17/98	met requirement
Airport Security	06/26/98	10/19/99	not yet published	529
Prohibition on the Transportation of Devices Designed as Chemical Oxygen Generators as Cargo in Aircraft	10/26/98	02/18/00	not yet published	407
Terrain Awareness and Warning System	11/24/98	03/18/00	03/29/00	11
High Density Airports; Allocation of Slots	02/11/99	06/05/00	10/01/99	met requirement
Security Programs of Foreign Air Carriers	05/24/99	09/15/00	not yet published	197
Security of Checked Baggage on Flights Within the United States	06/18/99	10/10/00	not yet published	172
Commercial Air Tour Limitations in the Grand Canyon National Park Special Flight Rules Area	09/07/99	12/30/00	04/04/00	met requirement

(Continued From Previous Page)

Proposed rules	Close of comment period for proposed rule	Date for required final action	Date of final action	Days overdue/met requirement
Modification of the Airspace for Grand Canyon National Park	09/07/99	12/30/00	04/04/00	met requirement
Aircraft Operator Security	09/24/99	01/16/01	not yet published	74
Protection of Voluntarily Submitted Information	11/04/99	02/26/01	not yet published	33
Part 145 Review: Repair Stations	12/03/99	03/27/01	not yet published	4
Air Tour Operators in the State of Hawaii	09/22/00	01/15/02	09/29/00	met requirement

Status of Federal Aviation Administration's Rules With Legislative Mandates (as of March 31, 2001)

Rule title	Mandated action	Action(s) taken in response to mandate	Status
Improved Survival Equipment for Inadvertent Water Landings	Initiate rulemaking by 6/30/88	Rulemaking initiated 5/1/85; Proposed rule published 6/30/88	This rulemaking project is currently a priority "A" project. FAA planned to issue a final rule in 2001.
Retrofit of Improved Seats in Air Carrier Transport Category Airplanes	Publish a proposed rule by 4/28/88	Proposed rule published 5/17/88	This rulemaking project is currently a priority "A" project. FAA planned to issue a final rule in 2001.
Drug Enforcement Assistance	Publish a final rule by 9/18/89	Notice of proposed rule published 3/12/90	This rulemaking project is currently a priority "B" project and had no scheduled date for a final rule.
Sole Radio Navigation System Minimum Standards for Certification	Publish a final rule by 9/30/89	Advanced notice of proposed rule published 1/22/90	To be withdrawn
Unescorted Access Privileges	Publish a final rule by 4/24/92	Final rule published in 10/3/95	Completed
Aging Aircraft Safety	Initiate rulemaking by 4/24/92	Rulemaking initiated 10/29/91; 1st notice of proposed rulemaking published 10/5/93; 2nd notice of proposed rulemaking published 4/2/99	This rulemaking project is currently a priority "A" project. FAA planned to issue a final rule in 2001.
Anti-Drug and Alcohol Misuse Prevention Programs for Employees of Foreign Air Carriers Engaged in Specified Aviation Activities	Publish a final rule by 10/28/92	Withdrawal notice published 1/13/00	Withdrawn

Comments From the Department of Transportation

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

U.S. Department of Transportation

Assistant Secretary for Administration

400 Seventh St., S.W.
Washington, D.C. 20590

June 13, 2001

Dr. Gerald Dillingham
Director, Transportation Issues
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Dr. Dillingham:

Thank you for the opportunity to review and comment on the General Accounting Office's (GAO) draft report regarding the Federal Aviation Administration (FAA) rulemaking process. We offer the following comments for your consideration as the report is finalized.

Rulemaking Is A Complex, Time Consuming Process

See comment 1.

The rulemaking process, which identifies the specific means for achieving statutory compliance, is necessarily complex and time consuming. The process is intended to ensure that all aspects of a proposed action are fully analyzed and considered before being implemented. Each rulemaking project potentially entails complex technical, legal, and economic analysis, whose time requirements vary in proportion to the complexity of the issues at hand. It must also, by law, provide ample opportunity for, and full consideration of, comments by those to be regulated, as well as those served by the regulation, the general public. In compiling statistics on various rulemaking projects, it is important to realize that each rulemaking project includes its own set of difficulties and challenges. As a result, straightforward arithmetical comparisons across projects cannot adequately disclose the nature and extent of challenges associated with each, or sufficiently explain the timing behind each rulemaking effort.

FAA Rulemaking Process is Sound and Getting Better

See comment 2.

The Department is gratified to see, from the results of GAO's analysis, that FAA's rulemaking process is comparable to other agencies in the Federal Government. Further, it was particularly pleasing to note that FAA has made progress in shortening the duration of the process. In particular, we note that GAO found that the median age of FAA's significant final rulemaking projects - those rulemaking projects that have gone through the public comment period but have not yet been issued as final rules - decreased by about 7 months between 1997 and 2000. Nonetheless, it is likely that the full effect of FAA's rulemaking reforms have not yet been fully discerned, as many of the projects that GAO based its analysis upon predate the reforms. In any case, the Department will continue to seek opportunities to expedite and improve its rulemaking processes.

See comment 3.

Rulemaking Priorities Require Flexibility

Within the complex world of aviation safety, it is necessary to simultaneously address multiple high priority rulemakings and to recognize the need for flexibility in setting priorities. Since FAA's rulemaking reform, priorities have been clearly established and communicated by the Administrator. However, the varied real world forces that affect FAA's rulemaking schedule necessitate periodic reevaluation of priorities and adjustment to accommodate newly identified safety issues, any findings that result from accident investigations, as well as congressional priorities. While these priority adjustments may not facilitate optimal processes for completing rulemakings, they are a fact of life.

See comment 4.

OST Rulemaking Review Adds Value

The vast majority of FAA rules that have been reviewed by the Office of the Secretary of Transportation (OST) were completed timely and the review added value to the process by ensuring the rulemaking package was complete and ready for review by the Office of Management and Budget (OMB) and the public. The draft report's analysis of the time OST took to review FAA rules included the time for FAA's response and, if necessary, changes to the rule or proposal. As a result, it does not reveal the actual time taken for OST review. The report's analysis of median time for OST review is also skewed by a few rules which involved complex issues that required extensive efforts to resolve satisfactorily. Finally, although it may not be immediately apparent to all the rulemaking team members that responded to GAO's questionnaire, OST review adds value to the process, in part by anticipating issues that may not be noted by those closer to the regulated industry and that could be raised by OMB and the public in comments. In fact, OMB officials have, in the past, praised OST's efforts, and repeatedly emphasized the value of OST review in shortening its own reviews of FAA rulemakings.

Once again, we appreciate the opportunity to offer comments on this draft report. Please contact Martin Gertel on 366-5145 with any questions.

Sincerely,

Melissa J. Allen

Melissa J. Allen

The following are GAO's comments on the Department of Transportation's letter dated June 13, 2001.

GAO's Comments

1. We agree that rulemaking can be a complex and time-consuming process, and we reflected this understanding at appropriate sections throughout the text of the report. We also agree that measuring and comparing the times required to complete steps in the process cannot capture the qualitative nature and extent of the challenges FAA faces in many of its rulemaking efforts. Yet quantitative measurements are necessary to evaluate the process as a whole and to identify process improvements. The time FAA took to complete steps of the process along with the number of rulemaking projects completed over selected time periods are among the few quantitative measures of the rulemaking process. We therefore continue to believe that they are valuable measures of the agency's performance and the results of its efforts to reform the process.

2. Regarding the Department's comments that FAA's rulemaking process is sound and getting better, we believe it is important that the Department not focus on the observations cited without the entire context in which they were presented. For example, the Department's statement that GAO's analysis concluded that the timeliness of FAA's rulemaking process is comparable to other agencies in the Federal government is an overstatement of the facts presented. The report notes that, for one step in the process—publishing final rules after considering public comments—FAA's timeliness was comparable to that of four other agencies we examined. However, we also stated that, because agencies vary in how they initiate and document their rulemaking processes, it was not within the scope of this report to attempt to collect and compare information on the time other agencies took to initiate the rulemaking process or to develop proposed rules up until their release for public comment. Similarly, the Department's focus on our draft report's finding that the median age of FAA's significant final rulemaking projects decreased by about 7 months between 1997 and 2000 does not reflect the fact that all other measures of the process, including the time to complete the entire process and steps within the process, showed, at best, no improvement. (Note: In the draft report provided to the Department for comment, we stated that the median time FAA's unpublished significant final rules had remained in the process (see fig.16) had decreased by about 7 months, as stated in the Department's letter. However, in finalizing our

calculations, we found that this measure showed an increase of approximately 5 months.) In fact, our analysis suggests that the productivity of the process decreased after FAA's reform. The fact that FAA met its own suggested time frames for completing the process less than half the time belies the Department's assertion that the process is sound. Finally, the Department noted that our analysis included rulemaking projects that predate FAA's reforms. As we noted in the report, we used 3-year periods before and after FAA's reform as a basis for our analysis of the impact of the reforms on processing times.

3. We agree with the Department that rulemaking priorities must remain flexible. However, real improvement in the rulemaking process can be achieved only through strategic management of the agency's resources. Since the rulemaking process can take years, sudden shifts of priority and staffing resources often result in delays and reinforce a public perception that FAA's rulemaking is primarily reactive, focusing on responding to accidents and highly-publicized incidents, rather than proactive, focusing on the rules that will best increase aviation safety and security. As a regulatory agency, FAA rulemakers must make difficult decisions regarding how best to focus the agency's efforts and resources and resist pressures to expand its list of highest priority rules beyond the number it has the resources to aggressively pursue.

4. Regarding the value of departmental review, we were unable to compare the time required to complete the process for significant rules that underwent review and approval by the Department to the time required for those significant rules that did not because the Department and FAA have not implemented legislation that eliminated departmental review for some of FAA's significant rules. Similarly, OMB officials responsible for reviewing FAA's significant rules said that they were unable to evaluate the impact or value of OST's review as they had not yet received significant rules that had not gone through OST's review process. The Department also stated that the report's analysis of the median time for OST's review was skewed by a few rules that involved complex issues that required extensive efforts to resolve satisfactorily. This is incorrect. As we noted in our analysis, we used medians rather than means. While the mean, or average, may give greater weight to extreme values, the median, or middle observation, identifies the midpoint at which half of the observations are more and half are less. Thus, the median analysis is not skewed by the magnitude of individual observations.

GAO Contacts and Staff Acknowledgments

GAO Contacts

Gerald L. Dillingham, PhD., (202) 512-2834

Acknowledgments

In addition to the individual named above, Janet Barbee, Alice Feldesman, Bert Japikse, Mitch Karpman, Chris Keisling, Mark Lambert, Matthew Ullengren, Alwynne Wilbur, and Mario Zavala made key contributions to this report.

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