GAO

Testimony

Before the Subcommittee on Transportation and
Related Agencies, Committee on Appropriations
House of Representatives

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FAA BUDGET

Issues Related to the Fiscal Year 1996 Request

Statement of Kenneth M. Mead,
Director, Transportation Issues
Resources, Community, and Economic
Development Division

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify on the Federal Aviation Administration's (FAA) budget and programs. We will focus our testimony on (1) the Facilities and Equipment (F&E) account, which funds air traffic control (ATC) modernization; (2) the Airport Improvement Program (AIP) account, which funds airport improvement projects; and (3) the Operations account, which supports FAA's day-to-day operations and safety oversight functions. The administration is requesting $8.4 billion for FAA programs in fiscal year (FY) 1996, which represents a 1-percent increase over the appropriation for FY 1995. (See app. I for historical trends in FAA's budget.) The budget request includes about $2.1 billion in General Fund support, and the remaining $6.3 billion would be funded from the Airport and Airway Trust Fund. FAA estimates the Trust Fund will receive about $6.8 billion in revenue during FY 1996.

Our statement today deals with major programmatic issues relevant to this Subcommittee's consideration of FAA's FY 1996 budget. The statement does not address issues related to FAA organization or structure, such as the administration's proposal to create an ATC corporation. We testified on this issue last month and plan to testify on it before this Subcommittee in the near future.[1] Our statement today is based on reports and testimonies we have issued, as well as our analysis of selected elements of FAA's FY 1996 budget request. In summary:

-- For the F&E account, the Advanced Automation System, which has been the centerpiece of the ATC modernization program, has been restructured into more manageable parts under the Advanced Automation Program. The budget for the Advanced Automation Program at $419 million represents 22 percent of the FY 1996 F&E request. Whether FAA spends this money wisely depends on how well its ongoing restructuring is implemented and managed. While we are encouraged by several initiatives to strengthen program controls, several critical challenges remain in developing a key component. For example, FAA is accepting substantial risk by planning to spend about three-fourths of total program costs before completing operational testing--a step that enables the agency to determine if a new system meets its needs. Establishing effective mechanisms for gaining insight into the contractor's progress in software development could minimize that risk. Regarding other F&E projects, FAA is now commissioning major new systems such as the Airport Surface Detection Equipment Radar and the Terminal Doppler Weather Radar. However, others, such as the Voice

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[1]Air Traffic Control: Issues Presented by Proposal to Create a Government Corporation (GAO-T/RCED-95-114, Feb. 23, 1995).

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Switching and Control System, are still experiencing cost increases and schedule delays. If F&E funding does not grow and cost overruns continue, FAA may need to defer or cancel lower-priority projects.

-- The budgeted request for the FY 1996 Operations account includes an additional 24 aircraft certification staff and 237 airworthiness inspection staff. These requests are in addition to increases of 74 certification staff and 201 inspectors funded last year. Our work has shown that FAA's technical competence in certification was behind its industry counterparts, particularly in the area of advanced technologies. However, FAA has no plan to specifically focus this hiring on critical areas of advanced technologies such as computer software where the gap between FAA's and the industry's capabilities was greatest. In addition, we have reported that FAA needs to more effectively target the inspection resources it already has but that an inspection resource targeting system FAA is developing will not be fully deployed until 1997 and the data on which it is based may not be reliable. Furthermore, FAA has not provided the technical training that both the certification and inspection staffs need to be fully effective. FAA must address these concerns if it is to make the best use of the staffing increases it received in 1995 and be in the best position to accommodate any additional staff. There are also a number of other areas that raise questions about whether FAA will be able to spend all the requested funds efficiently or for the requested purposes, including funding for contract maintenance, contracting out towers, and reassignment of controllers.

-- FAA has made progress responding to our recommendations for strengthening its management and providing for the more cost-effective use of Airport Improvement Program funds. The agency may take up to 2 years to complete such ongoing initiatives as (1) analyzing how funding for reliever airports should be adjusted and (2) controlling costs for airport security access control systems. FAA requested a net increase of 50 staff positions to, among other things, help prevent airports that receive AIP funds from illegally diverting airport revenues for purposes not related to airport operations or development. This increase in personnel may be premature because FAA's ongoing efforts to strengthen its AIP management could result in program efficiencies.

FACILITIES AND EQUIPMENT ACCOUNT

FAA's request of $1.9 billion in FY 1996 for the Facilities and Equipment appropriation represents a 9-percent decrease over

the level enacted in FY 1995. As in past years, we plan to report to this Subcommittee next month on the status of major ATC modernization projects. Our statement today will discuss the status of some of those projects and challenges FAA faces with its restructured Advanced Automation Program.

Much Remains to Be Accomplished
on the Advanced Automation Program

Last year at this time, FAA was grappling with the steps it should take to address major cost and schedule problems with the Advanced Automation System (AAS)--the centerpiece of its ATC modernization program. As a result of various internal and external reports, the FAA Administrator in June 1994 terminated portions of the AAS contract with Loral Corporation and created an Advanced Automation Program. The new program has three separate parts representing the major types of ATC facilities: en route, terminal, and tower. FAA's total estimated cost for the restructured program is about $6 billion, compared to the $7.6 billion it estimated last year. In general, FAA estimates that the new program adds 3 to 6 months to schedules. See appendix II for more details on automation program costs and appendix III for more details on automation program schedules.

Status of the Advanced Automation Program

As part of our work for the Subcommittee, we are reviewing the status of the Advanced Automation Program and will provide this information today. Faced with lengthy schedule delays and sizeable cost growth, FAA greatly scaled back its Initial Sector Suite System (ISSS) for **en route facilities** and renamed it the Display System Replacement (DSR). FAA estimates the total costs for en route automation at $4.5 billion, including $1.8 billion in ISSS sunk costs, $1.0 billion for DSR, and $1.7 billion for other en route projects. DSR is expected to replace existing en route hardware and software. FAA hopes DSR will provide the platform for adding more advanced capabilities. Basically, DSR will provide fewer capabilities than those proposed for ISSS and is therefore expected to require about 50 percent less software, excluding commercially available software. For example, ISSS was designed to provide electronic flight strips while DSR will not.

FAA's decision on whether to stay with Loral or to rebid the DSR development contract is not expected until the end of April 1995. In the interim, FAA has directed Loral to spend no more than $99.5 million to stabilize ISSS and complete preliminary DSR development tasks. If FAA chooses to remain with Loral, it plans to use the ISSS hardware architecture and part of the ISSS software as the baseline for DSR, and it anticipates commissioning the first system in September 1998.

FAA stopped development of the Terminal Advanced Automation System, which was designed to provide controller work stations and supporting computers for up to 9 consolidated **terminal facilities**. The agency now plans to implement the Stand-alone TRACON Automation Replacement System (STARS) at all terminal facilities. FAA estimates $1.3 billion for terminal automation: $317 million in sunk costs and $940 million for STARS. FAA plans a competitive procurement for STARS, with contract award scheduled for July 1996 and commissioning of the first site in December 1998.

FAA is continuing to develop a modified Tower Control Computer Complex (TCCC) system, which is designed to provide controller work stations for **tower facilities**. The modified system is designed to meet generally less demanding requirements than the previous version. The agency's current plan is to install TCCC at significantly fewer towers than was originally planned (70 versus 150). FAA expects to complete contract negotiations with Loral by April 1995. The agency estimates tower automation costs at $300 million, and initial commissioning is scheduled for April 1997.

FAA Still Faces Challenges With En Route Software

Whether FAA wisely spends its funds for the Advanced Automation Program will depend on how well its ongoing restructuring of the program is carried out.[2] FAA has initiated a number of actions to strengthen program controls. For example, FAA divided the program into more manageable segments. Also, FAA began to develop new baselines from which it can assess the status of work planned and accomplished. Moreover, in accordance with this Subcommittee's direction and our recommendation, FAA submitted to the Congress a comprehensive automation plan--including projected timeframes and funding levels.[3] According to FAA, it has also put in place a new, strengthened, and expanded program management team.

While we are encouraged by some of the steps FAA is taking, it remains to be seen whether these steps will be properly implemented, thereby permitting the delivery of a quality product on time and within cost and preventing a repeat of past problems. We would like to highlight three primary challenges facing the DSR program: (1) whether ISSS software will provide a stable baseline from which to develop DSR, (2) whether the process and guidance improvements that FAA and Loral have made on the program will prove successful, and (3) whether FAA can avoid past mistakes and not

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[2]FAA has submitted a $419 million request for fiscal year 1996 for the restructured AAS, which includes $335.1 million for en route, $54.4 million for terminal, and $29.5 million for tower facilities.

[3]Advanced Automation System: Implications of Problems and Recent Changes (GAO/T-RCED-94-188, Apr. 13, 1994).

spend sizeable sums of money before it can determine that the system will meet its needs.

With respect to the first challenge, we reported last year that the ISSS software was immature with almost 2,100 unresolved trouble reports (PTRs) and 100 percent software volatility--on average each line of code had to be rewritten once. Further, the Software Engineering Institute and Lincoln Laboratory reported that while the ISSS software architecture was good, the code was only fair, and the software documentation was poor. According to Loral officials, progress is being made to stabilize the ISSS baseline, which is expected to comprise about 80 percent of the DSR code, excluding commercially available software. As evidence they cite that as of February 1995, outstanding PTRs had decreased from 2,100 to 585.

Despite this, we believe that the stability of en route software development remains an issue for several reasons. First, over 1,000 PTRs were set aside only because they relate to ISSS software that will not be part of DSR. Second, about 25 percent of the DSR software will consist of either modified or new code. Modifying or adding code can affect countless lines of unmodified code and thus open the door for more software problems. Third, defects arising from software inspections and documentation reviews are not included in the PTR count, thus masking the full extent of the outstanding software problems. Fourth, FAA has begun working with Loral to reclassify the outstanding ISSS PTRs and has established a goal of having no PTRs in the most critical two categories. However, after reclassification of about 200 PTRs, over 100 have already been assigned to the most critical categories.

With respect to the second challenge, the Software Engineering Institute and Lincoln Laboratory reported last year that FAA and the contractor lacked adequate software development processes. According to FAA and Loral officials, a number of improvements have been made to address these concerns. For example, they point to adoption of Loral's corporate integrated engineering process, establishment of detailed guidance for software design documents, creation of a systems engineering process improvement organization, and expansion of their respective quality assurance activities. We support these improvements but remain cautious because their success depends on FAA and Loral's implementation.

Concerning the third challenge, we testified last year that FAA did not adequately oversee the contractor's development of ISSS. As a result, FAA found out only after spending $1.8 billion that the program was in "dire straits." The challenge now for FAA is to establish a means of surfacing development problems earlier and thus avoiding its past mistakes. FAA plans to spend about $785 million of the estimated $1.1 billion in total costs for DSR before it completes operational testing, a step that enables the agency to

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determine if a system meets its needs. The government accepts substantial risk with this upfront funding of an acquisition. Given this risk, it is critical that FAA establish effective mechanisms for gaining early and continuous insight into the contractor's progress. FAA and Loral officials told us that the contractor is using new software metrics to provide improved visibility into software progress. If this effort proves successful, FAA would be better able to determine problems with DSR in enough time to take necessary actions.

FAA Has Made Some Progress In Other Major Projects, But Problems Remain

Other major projects in the F&E budget still have cost and schedule problems, although FAA is making progress deploying some new systems. FAA is also making progress in reducing its unobligated balance, which decreased from $1.8 billion to $1.3 billion in FY 1994 and is projected to fall below $1 billion by the end of FY 1995. We cannot yet report on the latest cost and schedule trends for all major projects, but we would like to update the Subcommittee on some projects and the budgetary implications of continuing problems with those projects.

-- As of February 1995, FAA commissioned 8 of 40 planned Airport Surface Detection Equipment (ASDE-3) radars to improve the ground surveillance of aircraft. It plans to commission another nine radars by the end of April 1995. However, according to FAA officials, project completion has slipped from November 1995 to November 1999 because of difficulty in finalizing a second contract and the need to complete new towers at some locations. Total estimated costs for ASDE-3 are now $223.8 million and could increase by an additional $23.5 million.

-- FAA has commissioned 2 of 45 planned operational Terminal Doppler Weather Radars (TDWR) designed to help detect dangerous wind conditions. FAA officials said they anticipate implementing TDWR at another 11 sites by July 1995. However, as of January 1995, FAA has issued stop work orders at 11 other TDWR sites because of site unavailability or land acquisition problems. TDWR total costs are now estimated at $373.3 million and could increase by an additional $7.6 million due to the lengthening project schedule.

-- FAA continues to experience delays in its new long range radar project--the Air Route Surveillance Radar (ARSR-4), which will track aircraft en route. Commissioning of the first radar has been delayed 8 months from September 1994 to May 1995 because of problems interfacing with other systems. The new implementation milestone is still uncertain because of continued testing issues.

-- FAA's schedule for commissioning the first Voice Switching and Control System (VSCS), which is designed to provide improved ground-to-ground and air-to-ground communications, has been delayed from April 1995 to early June 1995. Additionally, FAA's internal oversight groups believe this milestone may be further delayed until October 1995 because there is not enough time to resolve problems that surfaced during testing. VSCS total costs will increase at least $45.9 million because restructuring of the automation program will cause FAA to stretch out the VSCS schedule.

In a no-growth budget environment, cost overruns on major projects may cause FAA to reconsider the affordability of many other projects in the F&E budget. In the 1980s and early 1990s, FAA could absorb cost increases on major projects and fund other projects because annual F&E appropriations were increasing substantially. However, the FY 1996 budget request for F&E is 9 percent lower than the FY 1995 level and the administration does not project increases in F&E funding in the near future. If the F&E budget does not grow and FAA cannot control cost increases on major projects such as VSCS, the agency may have to defer or cancel lower priority projects.

OPERATIONS ACCOUNT

The administration is requesting $4.70 billion for FAA's operations in FY 1996, compared with the $4.58 billion level enacted last year--a 2.6 percent increase.

Increasing Staff Will Not Fully Address FAA's Needs Unless Hiring Is Targeted and Technical Training Is Provided

In FY 1995, FAA received funding to increase its inspection staff by 201 and its certification staff by 74. FAA's budget for this year requests funding for an additional 237 inspectors and 24 certification staff. If this request is approved, it will continue to be important that FAA target its hiring to areas of greatest need and provide both its current staff and any new hires with the technical training necessary to be fully effective. In the past, FAA has experienced difficulties in hiring, training, and retaining staff, particularly those proficient in the area of advanced technologies being deployed on modern aircraft. For example, we reported in 1993 that FAA's technical competence in certification was far behind its industry counterparts, particularly in the area of advanced technologies.[4] However, its current hiring plans are not specifically focused on critical skill areas of advanced technologies, such as software, to help it bridge the gap between

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[4]Aircraft Certification: New FAA Approach Needed to Meet Challenges of Advanced Technology (GAO/RCED-93-155, Sept. 16, 1993).

the agency's capabilities and that of the industry. Furthermore, FAA has not provided the technical training that its certification and inspection staffs need to be fully effective. To fully utilize staff increases, FAA will have to overcome these problems.

Targeted Hiring of Certification Staff Needed

FAA's most critical certification staffing needs are in areas of rapidly evolving technologies, such as avionics and software. FAA received funding to increase its certification staff by 74 in FY 1995 and has requested an additional increase of 24 staff in this area for FY 1996. FAA's plans call for spreading the new staff among the agency's field offices and headquarters, but FAA has no specific plan to focus its hiring on these critical areas. FAA will allow its four certification offices to determine how to use their allocated portion of the staff increase. Thus it is unclear whether the critical staffing needs we had previously identified will be met.

In addition, FAA has been unable to enhance the competence of its certification staff by hiring in-house experts, called National Resource Specialists. Although FAA identified a need for 23 such experts, only 8 are currently on board. FAA has identified high-priority needs for specialists in crash dynamics, advanced avionics, and icing, and is hoping to hire four experts by the end of FY 1995. According to FAA, the qualifications for these positions are so high that often no candidates can be located who meet them and/or are willing to consider coming to FAA for the lower pay it offers. FAA is trying to convert these positions to scientific and technical positions that would allow higher pay.

Data Problems May Jeopardize Effective Deployment of Inspectors

FAA is developing a safety performance analysis system (SPAS), that is designed to help FAA better target its limited inspection resources by generating indicators on the financial condition of airlines and pilot flight check failures. SPAS will rely on input from over 25 data bases. However, we recently reported that these data bases contain incomplete, inconsistent, and inaccurate data that will hamper FAA's ability to effectively target its current and requested inspector staff to high-risk conditions.[5]

Inspection and Certification Staff Still Need Additional Technical Training

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[5]Aviation Safety: Data Problems Threaten FAA Strides on Safety Analysis System (GAO/AIMD-95-27, Feb. 8, 1995).

We reported in 1989 that airworthiness inspectors were not receiving training in such areas as maintenance practices for new technologies and state-of-the-art avionics that are critical to carrying out their jobs.[6] Similarly, we reported in September 1993 that FAA has not provided its certification staff with the training needed to ensure their competence in new technologies. Although FAA added a number of technical training courses in FY 1994 and FY 1995, our current work indicates that the need for additional technical training persists for both the certification and inspection staffs. In one of our ongoing reviews, several airworthiness inspectors expressed specific concern about FAA's ability to provide technical training related to their responsibilities and said that the problem of insufficient technical training for inspectors has persisted for years. For example, one veteran inspector said that he is currently responsible for inspecting seven commuter airlines but has never attended maintenance training school for the type of aircraft he inspects. Several inspectors told us that they have to approve global positioning system receivers that are installed in aircraft, but that they have had no formal training on this equipment. Finally, one inspector said that last year he attended courses on computers, management, enforcement, and 737 aircraft systems, but that none of these courses was directly related to his responsibilities.

The FAA Academy in Oklahoma City focuses primarily on technical training for controllers, inspectors, and others, while the Center for Management Development in Palm Coast, Florida, provides nontechnical training on subjects such as supervision, civil rights, and labor relations. However, given the overall budgetary situation, it is unclear whether FAA can continue to afford two separate training facilities.

Funding and Relocation Concerns
for Level 1 Towers

As we reported in 1994, FAA plans to contract out or close its 151 low-activity (level 1) air traffic control towers between FY 1994 and 1997.[7] FAA projects that it will save about $20 million per year after transition costs. FAA received an appropriation of $7.3 million to contract out 25 towers in FY 1994. However, FAA used only about $0.4 million of this funding for contract start-up costs and reprogrammed the balance ($6.9 million) in FY 1994 to fund locality pay. Of the $6.9 million appropriated in fiscal year 1995 for contracting out the next 25 towers, FAA expects to use

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[6]Aviation Training: FAA Aviation Inspectors Are Not Receiving Needed Training (GAO/RCED-89-168, Sept. 14, 1989).

[7]Air Traffic Control: Status of FAA's Plans to Close and Contract Out Low-Activity Towers (GAO/RCED-94-265, Sept. 12, 1994).

only $1.1 million for this purpose largely because it does not anticipate contracting out these towers until late in the fiscal year (August 1995). FAA plans to use the remaining $5.8 million to help fund ongoing costs for the towers contracted out in FY 1994. FAA expects this sequence of delayed contracting out to continue in subsequent years.

FAA's ability to address controller staffing imbalances at its facilities is hampered by an agreement with the National Air Traffic Controllers Association (NATCA) that enables controllers from the closed level 1 towers to move to other FAA facilities that are already overstaffed. As long as this agreement remains in force, FAA's ability to reassign controllers to those facilities where they are most urgently needed will be hampered. As of December 31, 1994, FAA had 138 air traffic control towers and centers above level 1 that were overstaffed by 975 controllers and 163 towers and centers that were understaffed by 787 controllers, according to the agency's staffing standards. Although FAA officials said that they have no plans to revise the agreement, they have worked with NATCA representatives to identify 63 facilities that have historically had controller positions available to which displaced controllers will be encouraged to relocate and 47 facilities to which no level 1 controllers will be allowed to transfer because no meaningful work can be provided. While this appears to be a step in the right direction, this effort does not ensure that displaced controllers will be prevented from relocating to other overstaffed facilities.

FAA's agreement with NATCA also calls for using permanent change of station (PCS) funds to relocate displaced controllers, regardless of whether they move to an overstaffed facility. FAA estimates that a total of about 1,000 controllers could potentially be relocated from level 1 towers. The average cost per PCS move was nearly $37,000 in FY 1994. FAA has allocated $5.6 million in PCS funds to relocate controllers from the 25 towers that were converted in FY 1994. The agreement further provides that relocated level 1 controllers who are unsuccessful in attaining full-performance-level status at their new facilities be given at least one more chance at another FAA facility and that FAA will relocate them if funding is available. In these times of constrained budgets, we question the cost-effectiveness of FAA's paying to relocate controllers to overstaffed facilities.

Some Funding for Delayed Air Traffic Control Systems May Not Be Needed

FAA's budget requests an increase of $32.4 million for contractors to maintain new ATC systems coming on line. However, some of the systems listed in the budget justification are behind schedule, raising the question of whether the full amount requested for contract maintenance is needed. For example, the first Airport Movement Area Safety System, which will help alert controllers to

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potential runway collisions, is not scheduled for delivery until April 1997. In addition, as noted previously FAA has issued stop-work orders at 11 TDWR sites that were scheduled for delivery in FYs 1995 and 1996. Because the budget was not sufficiently disaggregated, we could not determine the amount of maintenance funding allocated for 23 systems mentioned in FAA's justification; some of the $32.4 million requested for contract maintenance may not be needed.

AIRPORT IMPROVEMENT PROGRAM ACCOUNT

FAA's budget request sets a $1.5 billion obligation limitation for the AIP, compared with last year's $1.45 billion level. The AIP helps airports fund planning and development projects that enhance capacity, safety, security, and noise mitigation. FAA has designated about 3,300 airports as critical to the national airport system and eligible for AIP funding.[8] In response to our recommendations and congressional directives, FAA is taking steps to better manage the AIP. As a result, FAA's request for 50 additional positions at a cost of $1.9 million in FY 1996 may be premature if planned improvements, such as a streamlined funding process, produce program efficiencies.

Over the past year, we reported on areas where FAA could improve its management so that AIP funds would be used more cost-effectively. First, our reports on AIP set asides for reliever and military airports highlighted the need for FAA to assess whether this funding was meeting the airport system's needs or should be redirected for other types of development.[9] FY 1995 AIP funding for the reliever and MAP set-asides totals about $95 million. In response, FAA has begun actions to revise its criteria for designating reliever airports and to examine methods for analyzing the impact of the military airport set-aside on reducing systemwide airport delays.

Second, we recently reported to this Subcommittee that FAA could help ensure the cost-effective use of AIP funds by developing detailed guidance and standards for computer-controlled airport

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[8]Airports can also fund projects with Passenger Facility Charges that were authorized by the Congress in 1990 to give commercial airports the option of imposing a per-passenger fee for eligible projects. As of March 1995, FAA estimates that 200 airports will collect about $775 million in Passenger Facility Charges in FY 1996.

[9]Airport Improvement Program: Military Airport Program Has Not Achieved Intended Impact (GAO/RCED-94-209, June 30, 1994) and Airport Improvement Program: Reliever Airport Set-Aside Funds Could Be Redirected (GAO/RCED-94-226, June 30, 1994).

access control security systems.[10] From 1989 through 1998, actual and projected costs for these systems will total about $654 million--over three times FAA's initial estimate for that period. This amount includes $327 million in AIP funding. Absent guidance and standards, airports spent funds to install (1) equipment that FAA later determined was not needed to meet its requirements and (2) systems that did not operate adequately to meet those requirements. Furthermore, without guidance and standards to serve as criteria for evaluating systems, it was difficult for FAA officials to ensure that AIP funds were used only for those system components necessary to meet FAA's access control requirements, as the agency's AIP funding policy directs. FAA is working with aviation industry representatives to develop standards by October 1995. We recommended that FAA develop detailed guidelines and incorporate these guidelines and the standards being developed into its process for reviewing AIP funding requests.

Finally, we reported to this Subcommittee on the security technology for screening checked baggage that, if implemented at airports nationwide, could have major implications for the AIP.[11] FAA has reported that one such technology--an advanced X-ray system--has performed well at its security laboratory. FAA plans to test this technology at airports sometime this year. Testing could help to ensure that the equipment will work as intended and to identify the implementation costs--now estimated at $1.6 million per screening point. It is still unclear when the new technology will be deployed and who--the federal government through the AIP or some other funding mechanism, the airlines, the airports, or some combination of these sources--will finance its installation.

FAA also has several other management initiatives underway that respond to our recommendations and congressional directives. These include:

-- FAA will need to follow through on its new policy for letters of intent.[12] In response to our February 1994 report,[13] the agency issued a policy in October stating that approvals for letters of intent will be based

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[10]Aviation Security: FAA Can Help Ensure That Airports' Access Control Systems Are Cost-Effective (GAO/RCED-95-25, Mar. 1, 1995).

[11]Aviation Security: Development of New Security Technology Has Not Met Expectations (GAO/RCED-94-142, May 19, 1994).

[12]A letter of intent commits FAA to reimburse an airport from future AIP budget authority for airport development projects.

[13]Airport Improvement Program: Better Management Needed for Funds Provided Under Letters of Intent (GAO/RCED-94-100, Feb. 2, 1994).

primarily on its analysis of systemwide benefits in terms of annual airline delay savings.

-- FAA is developing analytical methods to evaluate whether capacity projects proposed for AIP funds address national priorities and provide positive net investment benefits. As of March 1995, FAA has tested various assessment methods on 14 capacity projects, determining that funding for 9 should be approved and funding for the other 5 should be deferred.

-- FAA is establishing policies and procedures to better safeguard against the illegal diversion of airport revenues so that airports do not receive AIP funds while also using airport revenues for purposes not related to airport operations or development. FAA expects to issue a policy statement by April 1995 and compliance procedures by August 1995.

-- FAA is studying ways to streamline the AIP funding process, which FAA's management considers personnel- and paperwork-intensive. The agency has developed a preliminary proposal that would group several projects into one request to reduce the amount of paperwork needed to obtain funding.

According to FAA officials, the agency may take up to 2 years to fully implement all of its management improvements.

One issue before this Subcommittee is whether to approve FAA's request in the Operations account for a 50-position increase in airports office personnel. FAA believes additional staff are needed to, among other things, guard against the illegal diversion of airport revenue. Not only would this request require $1.9 million in FY 1996, it represents a long-term commitment of 50 additional career positions at FAA. FAA is reviewing ways to strengthen its AIP management and the efficiency of its program administration. This bears directly on the program's staffing requirements. Accordingly, until this review is complete, the personnel increase may be premature.

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Mr. Chairman, this concludes our testimony. We will be pleased to respond to any questions you or other Members of the Subcommittee may have.

Total FAA Appropriations
Fiscal Years 1984 to 1996

$ Billions

Fiscal Year
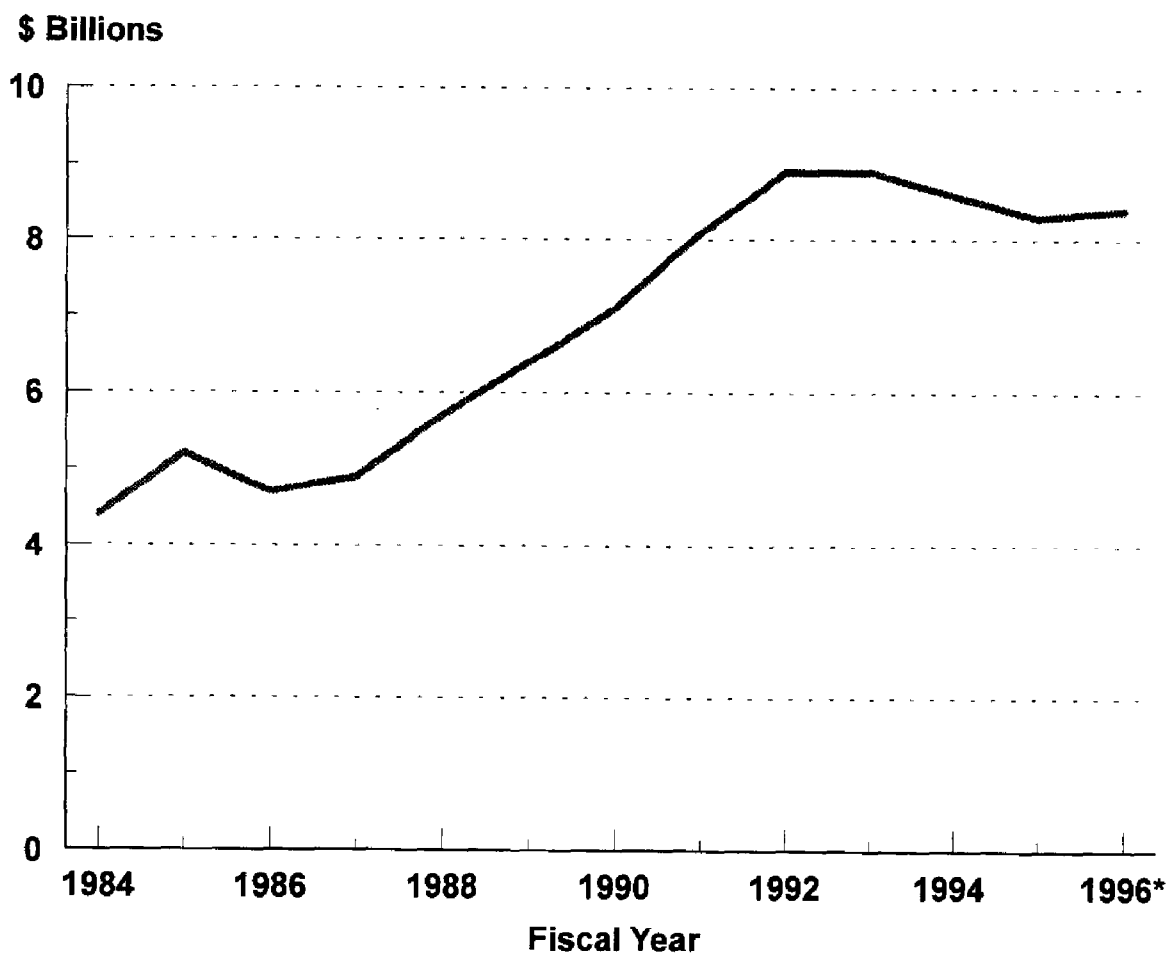
*FY 1996 Request includes $1.5 billion the Administration expects
to fund from the Unified Transportation Infrastructure Investment
Program.

Source: FAA Budget Office.

ADVANCED AUTOMATION PROGRAM
F&E ESTIMATE COMPARISONS
(DOLLARS IN MILLIONS)

AAS Program Elements	Program Office (11/93)	FAA Task Force (02/94)	Restructured Program (02/95)
EN ROUTE			
Peripheral Adapter Module Replacement Item (PAMRI)	$ 46.4	$ 46.4	$ 46.4
Display Channel Complex Rehost (DCCR)	N/A	N/A	30.0
Display System Replacement (DSR)	N/A	N/A	1055.3
Intial Sector Suite System (ISSS)	2974.8	3175.0	1770.8 (Sunk)
Automated En Route ATC (AERA)	343.7	473.2	473.2
HOST/Enhanced Direct Access Radar Channel	N/A	N/A	657.0
Area Control Computer Complex (ACCC)	803.5	1200.0	19.0 (Sunk)
ARTCC Modernization	413.9	413.9	413.9
En Route Subtotal	$4582.3	$5308.5	$4465.6
TERMINAL			
Terminal Advanced Automation System (TAAS)	$ 810.1	$ 969.0	317.2 (Sunk)
TAAS MCF Systems	106.6[a]	106.6[b]	N/A
Standard Terminal Automation Replacement System (STARS)	599.1[a]	599.1[b]	940.2
Automated Radar Terminal System (ARTS) IIIE	N/A	N/A	8.8
Terminal Subtotal	$ 810.1	$ 969.0	$1266.2
TOWER			
Tower Control Computer Complex (TCCC)	$ 541.3	$ 671.0	$259.2
TOTAL	$6639.4[a]	$7634.2[b]	$5991.0

[a]This item not included previously as part of the Advanced Automation Program. Total not including these items is $5933.7
[b]This item not included previously as part of the Advanced Automation Program. Total not including these items is $6948.5
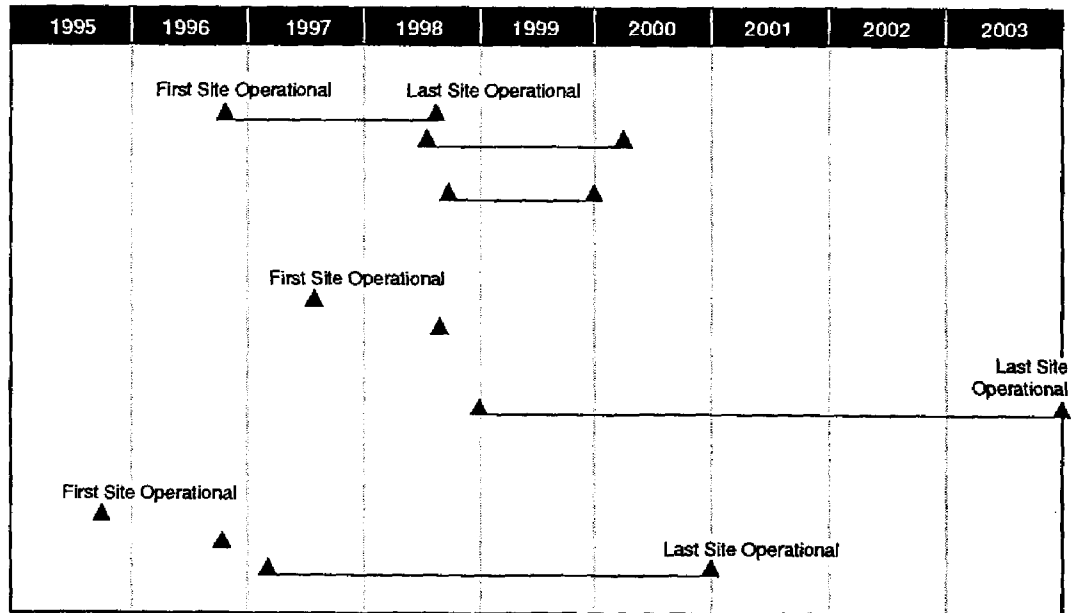
Advanced Automation Program Schedule Comparison

	1995	1996	1997	1998	1999	2000	2001	2002	2003

En Route
Initial Sector Suite System
  • November 1993 Estimate
  • February 1994 Estimate
Display System Replacement
  • February 1995 Estimate

Terminal
Terminal Advanced Automation System
  • November 1993 Estimate*
  • February 1994 Estimate*
Stand-alone TRACON Automation
Replacement System
  • February 1995 Estimate

Tower
Tower Control Computer Complex
  • November 1993 Estimate*
  • February 1994 Estimate*
  • February 1995 Estimate

First Site Operational   Last Site Operational

First Site Operational

Last Site Operational

First Site Operational   Last Site Operational

* FAA did not develop last site operational date.

Source: FAA Review of Cost and Schedule for the AAS Program, March
         3, 1994, and Office of Air Traffic Systems Development,
         Program Master Plan, February 3, 1995.

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United States
General Accounting Office
Washington, D.C. 20548-0001

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