

U.S. Department
of Transportation

Federal Aviation
Administration

FEDERAL AVIATION ADMINISTRATION

BUDGET IN BRIEF

Fiscal Year 1993





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OVERVIEW

The President is proposing \$9.4 billion for the Federal Aviation Administration's (FAA) aviation programs in FY 1993, a 6 percent increase over FY 1992.

There are several important themes around which the FY 1993 budget proposals for the FAA have been structured. These themes reflect the thrusts of The Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508), the Secretary's Statement of National Transportation Policy (NTP), the FAA Strategic Plan, and the concerns raised by the President's Commission on Aviation Security and Terrorism.

Operations

For FAA operations, the FY 1993 request totals \$4.6 billion, a 5.6 percent increase over FY 1992. This budget requests an employment level of 17,871 for air traffic controller work force, an increase of 150 over the estimated 1992 level; and an employment level of 900 for the civil aviation security workforce, an increase of 25 over the estimated 1992 level. These staffing levels will allow the FAA to keep pace with currently projected air traffic activity and to continue its safety enforcement and security efforts.

Facilities and Equipment

The FY 1993 request for Facilities and Equipment (F&E) is \$2.7 billion, a 12.8 percent increase over FY 1992. Included in this request are capital needs contained in the FAA's Capital Investment Plan (CIP). Projects include the Advanced Automation System (AAS) to upgrade air traffic control (ATC) computer technology, the Voice Switching and Control System (VSCS) to modernize the system's communications network (contract award was accomplished December 1991), and the Terminal Doppler Weather Radar (TDWR) and Long Range Radar (LRR) to improve weather services and replace obsolete en-route radar.

Research, Engineering and Development

For research, engineering and development, the budget requests \$230 million, a 5.5 percent increase over FY 1992. The R,E&D budget focuses on increased initiatives in satellite navigation, aircraft safety technology, primarily aging aircraft, security technology, specifically aircraft hardening, and human factors research along with the ongoing development of safety and capacity programs.



OVERVIEW

Airport Programs

The President's Budget provides \$1.9 billion (obligation limitation) in FY 1993 for planning and development of the nations' airports. This amount will fund formula grants for airport development projects at commercial airports, as well as grants to states to improve smaller airports. The Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508) authorized the establishment of a passenger facility charge (PFC) by local authorities who choose to do so. The proceeds from PFC's will be a major source of funding to finance eligible airport-related projects that preserve or enhance capacity, safety or security of the national air transportation system, reduce noise, or furnish opportunities for enhanced competition between or among air carriers. The eventual impact of the PFC translates to an additional billion dollars worth of airport improvement and development resources. The FAA estimates that public agencies may begin collecting fees late in FY 1992 or early FY 1993.

Airport and Airway Trust Fund

The Airport and Airway Improvement Act of 1982, as amended, provides authorization for FAA programs through September 30, 1992. A reauthorization proposal is being developed by the Administration and will be submitted to Congress in the near future. The FY 1993 funding levels in the proposed reauthorization legislation proposes that 85 percent of the FAA's budget be financed from the Airport and Airway Trust Fund.

The Omnibus Budget Reconciliation Act of 1990 revised the fee schedule for the domestic passenger ticket tax from 8 percent to 10 percent; freight waybill tax from 5 percent to 6.25 percent; noncommercial gasoline from \$.12 to \$.15 per gallon; and noncommercial jet fuel from \$.14 to \$.175 per gallon. The new fees became effective December 1, 1990. The international departure fee, which changed from \$5 to \$6 per enplanement, became effective January 1, 1990.



OVERVIEW

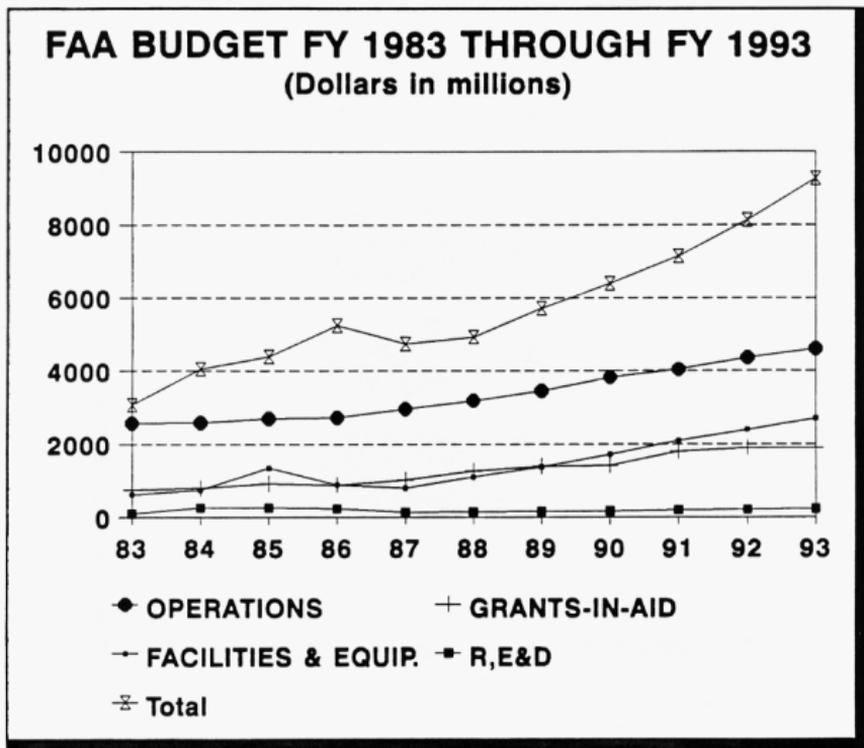


Figure 1

The FAA has seen significant growth in all programs in the last 10 years. For example, in FY 1983, \$2.3 billion supported FAA operations. The FY 1993 budget requests \$4.6 billion and 50,658 direct full-time equivalent (FTE) workyears to support FAA operations. The budget for Grants-in-Aid for Airports for FY 1993 is \$1.9 billion versus \$450 million in FY 1983. To modernize and improve the nation's airspace system (NAS) and to improve air traffic control and airway facilities services, the FAA requires \$2.7 billion in FY 1993 versus \$625 million in FY 1983. In FY 1993, \$230 million is requested to support research in the FAA's major mission areas of safety, security, capacity and efficiency compared to \$103 million in FY 1983.



Appropriations and Obligation Limitations in Annual Appropriation Accounts

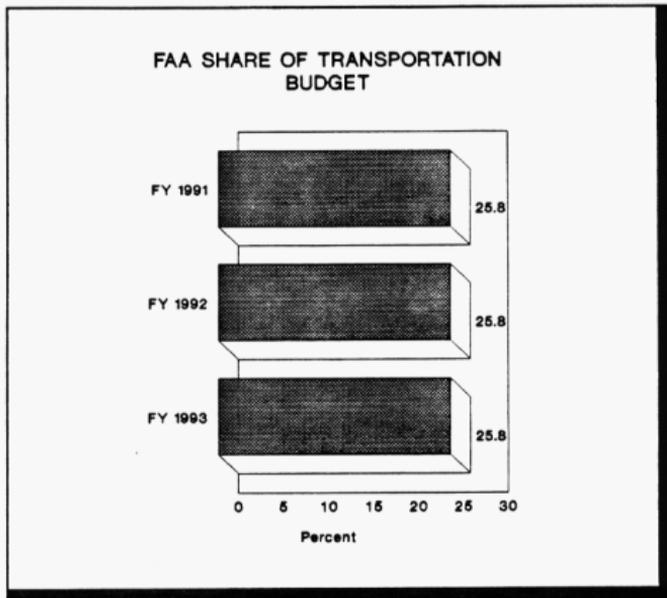


Figure 2



OVERVIEW

Table 1

Appropriations and Obligation Limitation Summary of Funds (Dollars in millions)

Appropriation	FY 1992 <u>Enacted</u>	<u>Increase</u>	FY 1993 <u>Request</u>
Operations	4360.0	246.0	4,606.0
(General)	(2,250.4)	(-835.0)	(1,415.4)
(Trust)	(2,109.6)	(1081.0)	(3,190.6)
Grants-In-Aid-Airports (Obligation Limitation)	1,900.0	0.0	1,900.0
Facilities and Equipment	2,394.0	306.0	2,700.0
Research, Engineering and Development	<u>218.1</u>	<u>11.9</u>	<u>230.0</u>
TOTAL	8,872.0	564.0	9,436.0
(General)	(2,250.4)	(-835.0)	(1,415.4)
(Trust)	(6,621.6)	(1399.0)	(8,020.6)
Contract Authority	1,900.0	0.0	1,900.0
Grants-In-Aid-Airports			

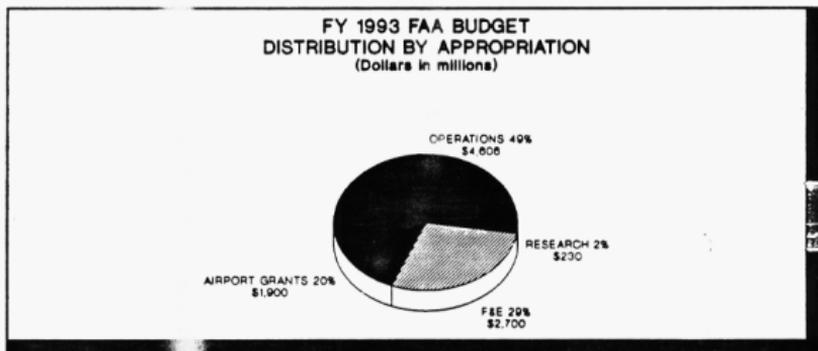


Figure 3

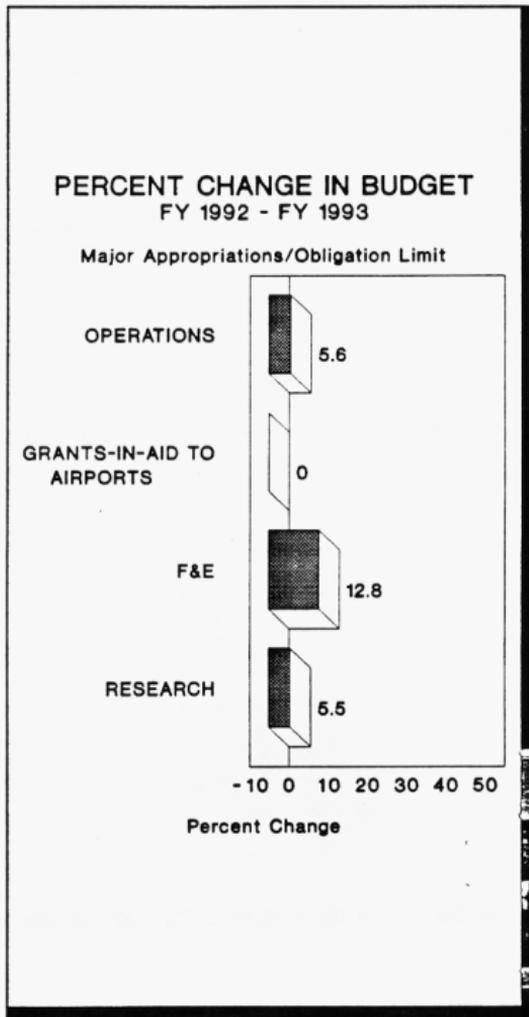


Figure 4



OVERVIEW

Table 2

FAA STAFFING LEVELS

	FY 1991 Actual		FY 1992 Program Level		FY 1993 Request	
	POS	FTE	POS	FTE	POS	FTE
OPERATIONS						
Operations of Traffic Control System	27,800	26,890	28,070	27,537	27,970	27,423
NAS Logistics	1,592	1,632	1,625	1,714	1,625	1,718
Maintenance of Traffic Control System	10,588	9,983	10,848	10,308	10,848	10,438
Aviation Regulation & Certification	5,187	4,291	5,417	4,452	5,417	4,480
Aviation Standards	1,228	1,124	1,397	1,272	1,397	1,329
Civil Aviation Security	861	674	1,031	865	1,031	920
NAS Design & Maintenance	285	298	301	304	301	295
Administration of Airports Program	522	492	550	528	550	528
Direction, Staff & Supporting Services	1,181	1,362	1,182	1,445	1,182	1,445
Human Resources Management	1,456	1,507	1,460	1,604	1,460	1,604
Headquarters Administration	<u>462</u>	<u>465</u>	<u>470</u>	<u>483</u>	<u>470</u>	<u>478</u>
SUBTOTAL, OPERATIONS	51,162	48,758	52,351	50,512	52,251	50,658
FACILITIES AND EQUIPMENT						
	1,743	1,358	2,204	1,800	2,504	2,240
RESEARCH, ENGINEERING AND DEVELOPMENT						
	668	715	645	719	645	692
AVIATION INSURANCE						
	2	2	2	2	2	2
TOTAL, DIRECT PROGRAM	53,575	50,833	55,202	53,033	55,402	53,592
REIMBURSABLE						
Operations	494	356	490	490	490	516
Facilities and Engineering	55	43	55	55	55	55
Research, Engineering and Development	6	2	6	6	6	6
TOTAL, REIMBURSABLE	555	401	551	551	551	577
GRAND TOTAL	54,130	51,234	55,753	53,584	55,953	54,169



OPERATIONS

The FY 1993 budget for the Federal Aviation Administration's Operations appropriation places continued emphasis on safety, security and efficiency of the national airspace system. In support of this, \$4,606 million is required, a 5.6 percent (\$246 million) increase above the FY 1992 funding level. The budget includes funding for 52,251 positions, which is a net decrease of 100 positions from the current FY 1992 enacted level.

The majority of the \$246 million funding increase is to cover inflation, annualization, and other non-discretionary cost increases for FY 1993.

The Operations appropriation budget consists of twelve major activities which provide essential support to the aviation system. Nine out of ten individuals in Operations perform essential safety related duties or directly manage those personnel and programs. Other personnel and activities provide the support which is essential to keep spare parts moving,

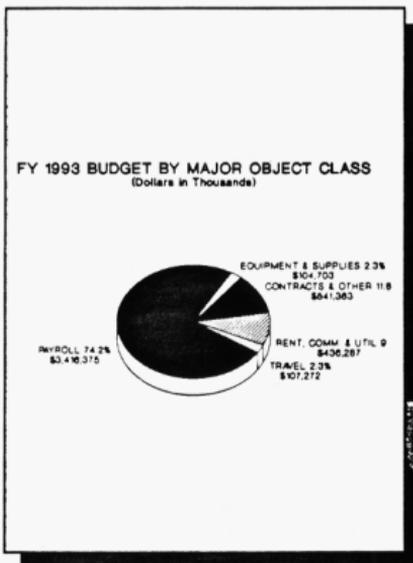


Figure 5

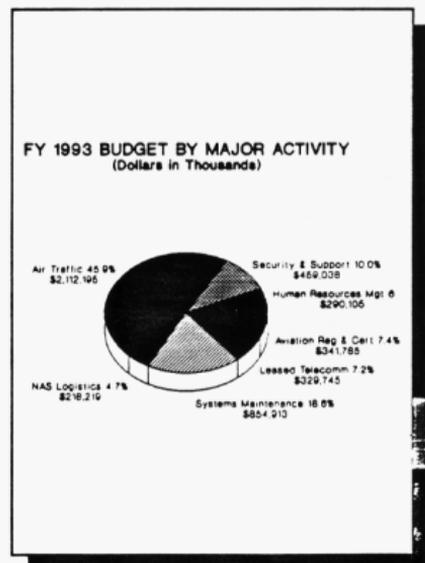


Figure 6

to train personnel and to prevent fraud, waste and mismanagement. The graphs above show the allocation of funds within the major program activities and by major object class for FY 1993.



OPERATIONS

AIR TRAFFIC - 27,970 Positions and \$2,112,195,000

This program provides 24 hour air traffic control service for the United States, U.S. territories and U.S. possessions. With the aid of radar, communications, and other facilities, air traffic control personnel at 24 centers monitor and control en route flights of civil and military aircraft conducted under instrument flight rules to assure safety and to expedite the flow of traffic. Over 400 control towers are operated at airports. Approximately 120 flight service stations (FSS) and 57 automated FSS's provide weather and aeronautical information to pilots, process flight plans, and provide in-flight advisory and emergency service.

On board controller workforce (CWF) staffing in FY 1992 will remain at the FY 1991 level of 17,721. CWF end-of-year onboard staffing for FY 1993 is expected at 17,871. The additional 150 personnel will be placed in terminals to support safety related new initiatives, i.e., Airport Surface Detection Equipment, Parallel Runway Monitor System, and to serve as supplemental local controllers at the busiest sites.

The new method for screening air traffic controllers will allow the agency to hire only those who have indicated a high potential for successful completion of the training. This will save the agency salary costs for those students who previously failed the screening process.

Congressional direction postponed FY 1991 and 1992 flight service consolidations until August 1992, nine months after the Auxiliary Flight Service Plan was made available to Congress. While the FAA has continually maintained that there are minimal technical or operational flight service requirements that justify retention of a flight service station beyond its original consolidation date, 120 sites were studied as possible locations for Auxiliary Flight Service Stations. Of those, 31 were determined to meet the requirements of the Department of Transportation and Related Agencies Appropriations Act, 1991 (P.L. 101-516, November 5, 1990). As flight service stations are consolidated, these auxiliary flight service stations will be implemented during FY 1992, 1993, and 1994.



OPERATIONS

Due to the economy and recent airline bankruptcies, FAA expects actual aircraft traffic in FY 1992 to return to the level of traffic in FY 1990. Key air traffic workload indicators for FY 1988-91 are shown in the following graphs:

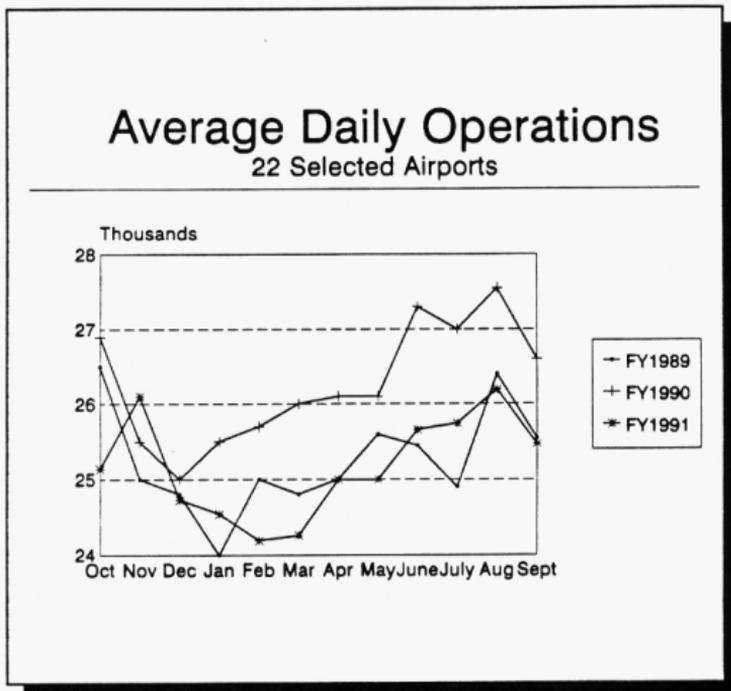


Figure 7



OPERATIONS

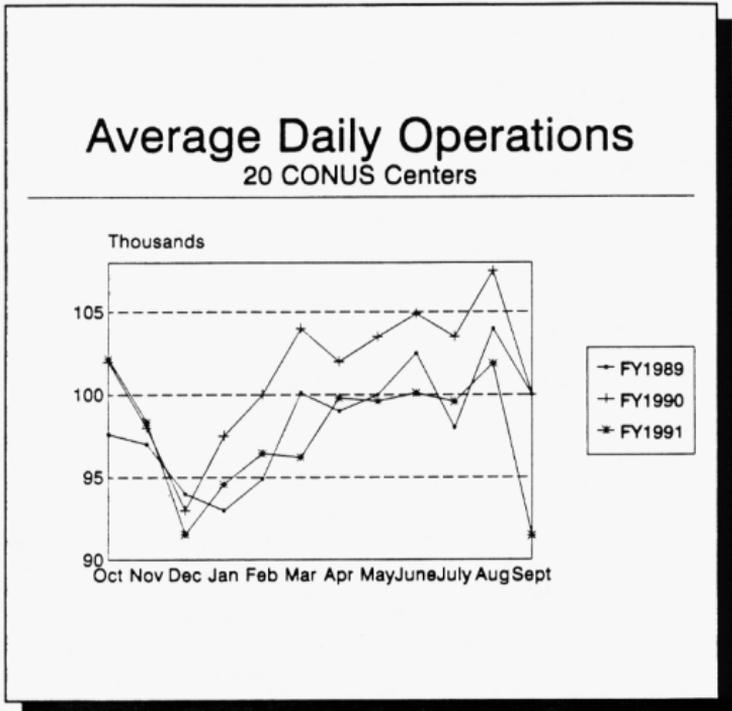


Figure 8



OPERATIONS

NATIONAL AIRSPACE SYSTEM (NAS) LOGISTICS SUPPORT - 1,625 Positions and \$218,219,000

Workload in this activity is a direct result of ensuring the effective and efficient logistical support of air traffic and air navigational control facilities. The agency has embarked on a program of modernization that uses cradle to grave, life cycle acquisition processes. This is a structured process that allows for the acquisition, maintenance, and operation of National Airspace System (NAS) equipment in an efficient and economical manner. Approximately 30 percent of the required life cycle spare parts expenditure is funded through the F&E appropriation. The remaining 70 percent of spare parts and routine repair is funded within the Operations appropriation. This activity covers the logistics portion of NAS equipment maintenance and operations necessary to complete a year of the life cycle.

The FY 1993 funding request will provide \$13,188 for mandatory increase required to sustain current operations.

SYSTEMS MAINTENANCE - 10,848 Positions and \$854,913,000

The Systems Maintenance program provides for the maintenance, repair and engineering of over 28,000 facilities and equipment comprising the NAS including: air traffic control equipment, navigation and landing aids, flight service facilities, and support of FAA plant facilities. The introduction of new solid-state equipment and other new technologies resulting from the implementation of the Capital Investment Plan (CIP) presents this workforce with new challenges and resource requirements. CIP systems requiring new and expanded maintenance support in FY 1993 include: Automated Weather Observing System (AWOS) Data Acquisition system (ADAS); Automated Surface Observation System (ASOS); Enhanced Traffic Management System (ETMS); and Integrated Communications Switching System (ICSS) I and II. In addition, the activity operates the Telecommunications Management and Operations (TM&O) Program which manages the expanding agency-owned telecommunications system in order to improve reliability and achieve projected savings associated with the implementation of a variety of new initiatives.

LEASED TELECOMMUNICATIONS - \$329,745,000

Communication to support and run the aviation system, in the air and on the ground, worldwide is funded by this activity. The FAA leases over 25,000 private line circuits to transmit radar, data and voice signals. While leased telecommunications rates have risen dramatically in the past years, to date, more than \$100 million in cost savings/avoidance have been achieved due to implementation and utilization of FAA owned network resources (e.g., Data Multiplexing Network, National Airspace Data Interchange Network, Radio Communications Link, etc.)



OPERATIONS

This increase of \$39.9 million in FY 1993 will fund: operational and administrative leased telecommunications requirements for existing as well as new NAS Plan initiatives (e.g., Direct User Access Service, Remote Maintenance Monitoring System, circuit backup and special satellite applications projects, etc.)

AVIATION REGULATION AND CERTIFICATION - 5,417 Positions and \$341,785,000

Civil aviation safety is promoted through this activity by assuring the airworthiness of aircraft and the competence of pilots, aviators and aviator technicians. In addition, the program includes the development, publication, and administration of the safety standards, rules and regulations applicable to airmen, aircraft, and operations involved in all United States civil aviation throughout the world, as well as foreign operations into and over United States territory.

The FY 1993 request provides for continued support to aviation safety enforcement efforts.

AVIATION STANDARDS - 1,397 Positions and \$122,732,000

Aviation safety is promoted through this activity by assuring the adequacy of flight procedures and air operations and the evaluation of in-flight performance for compliance with prescribed standards. Monitoring signal accuracy emitted by the aids to air navigation, development of flight procedures for use of United States civil and military aviation and foreign air carriers operating in this country, and registration and recordation of airmen and aircraft certificates are also assured through this program. Aviation safety is further promoted by participating in accident investigations and assuring the health of pilots and aviators through the medical certification program.

The FY 1993 request provides for continued support to aviation safety enforcement efforts.



OPERATIONS

AVIATION SECURITY - 1,031 Positions and \$70,146,000

The Aviation Security Program operates under the concept of shared responsibilities among air carriers, airports, Federal, State, and local governments. The FAA is responsible for establishing and enforcing regulations, policies, and procedures; identifying potential threats and appropriate countermeasures; and in general, providing guidance for the safety of passengers, baggage, and cargo, and the safeguarding of the aircraft. The air carriers provide screening for passengers and baggage. The responsibility for maintaining a secure ground environment and for providing local law enforcement support for airline and airport security measures belongs to the security personnel of the airport operators.

The FAA conducts foreign airport security assessments on behalf of the Secretary of Transportation. Assessments consist of in-depth analyses of the security measures at airports. Currently, there are approximately 250 foreign airports that meet the assessment requirement. The Civil Aviation Security Program also develops and reviews policies for the security of FAA operations, resources, and facilities, including communications/telecommunications, automatic information security, personnel, and industrial security programs. The FAA's security program also supports Federal, State, and local law enforcement agencies engaged in the investigation and interdiction of drug smuggling.

The FY 1993 request provides funding for an increased employment level of 25, resulting in a total of 900 for the civil aviation security workforce.

NATIONAL AIRSPACE SYSTEM DESIGN AND MANAGEMENT - 301 Positions and \$23,669,000

This activity covers a portion of the systems engineering, technical and administrative leadership for the \$31 billion (FY 1982-FY 2000) CIP. The program supports Research, Engineering and Development and Facilities and Equipment programs that will lead to development and implementation of a global aviation system designed to exceed user demand for increasing system safety, capacity, and productivity, and dedicated to achieving the mission of the FAA. The program also provides for the development and promulgation of national aviation policy, as it relates to environmental matters and the development and coordination of the overall FAA energy conservation initiatives.

The 1993 funding request will continue support for environmental issues and global aviation systems.



OPERATIONS

ADMINISTRATION OF AIRPORTS - 550 Positions and \$41,718,000

The Airports Program covers the identification, planning, development, capacity enhancement, and safety certification of the nation's system of public airports to serve the needs of civil aviation in the fifty states and territories. Principal activities in the program include: planning and promoting efforts to enhance airport capacity and reduce delays; participating in safety efforts at national and international airports; administering grants for the Airport Improvement Program; and certifying the safety of the nation's airports.

The Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508) authorized the establishment of a passenger facility charge (PFC) by local authorities. PFC's will give public agencies, who own commercial service airports, access to an important source of revenue to fund needed capital projects which will enhance the safety and capacity of the nations airports. Applications for authority to impose a PFC of \$1, \$2, or \$3 and to use the PFC revenue must be approved by the FAA. Projects proposed may be small requiring less than 3 years to complete and cost less than \$200,000 or be as broad as requiring more than 30 years to complete and cost in excess of \$1.4 billion.

Funding in FY 1993 will support the FAA's continued emphasis on expansion and anticipation of the future needs of the airport system.

DIRECTION, STAFF AND SUPPORT SERVICES - 1,182 Positions and \$153,486,000

The FAA's essential administrative and infrastructure services are supported in this program. Activities associated with direction and management, public affairs, international aviation, legal, policy and plans, as well as requirements for administrative payrolls, communications, administrative supplies and other support services at the center, regional and overseas offices are funded in the program.

HUMAN RESOURCES MANAGEMENT - 1,460 Positions and \$290,105,000

The administration of the agency's employee recruitment, development, and training, compensation and labor-management relations activities are supported in the Human Resources Management Program. The most important goal of the program is to provide a cadre of highly skilled, competent, and motivated professionals to accomplish ongoing objectives in improving air safety while promoting aviation-related activities. Funding is provided for technical and management training programs; recruitment and placement of personnel; initiation of labor relations activities; targeting increased employee productivity; and administration of the Airway Science Grant Program intended to foster and encourage



OPERATIONS

academic and industry participation in aviation education. A revised Air Traffic Controller Screen training process will be fully implemented during FY 1993. The new screen training process will dramatically reduce the failure rate during initial training of new controllers while improving the overall quality of training being provided. The HRM activity includes a payment in excess of \$71 million to the Department of Labor for workers' compensation for former FAA employees.

Emphasis in FY 1993 will focus on the continued modernization of the agency's technical training program for air traffic training, applicant testing, screening, and other requirements to accommodate NAS plan technology.

HEADQUARTERS ADMINISTRATION - 470 Positions and \$47,287,000

This activity supports all of the Washington headquarters administrative functions that establish policy and direct and develop programs, which provide the following administrative services: Policy and Plans, Accounting, Budget, Civil Rights, International Aviation, and Management and Data Systems. The Office of Aviation Safety, whose primary objective is to help FAA maximize aviation safety, was realigned into the Headquarters Administration budget activity in FY 1992. The FY 1993 proposed level reflects mandatory wage and inflationary increases.



OPERATIONS

Table 3

FY 1993 BUDGET REQUEST DOLLAR RESOURCES (Dollars in thousands)

	FY 1991 <u>Actual *</u>	FY 1992 <u>Estimate</u>	FY 1993 <u>Request</u>	FY 92-93 Percent <u>Change</u>
Operation of Traffic Control System	\$1,861,914	\$1,981,880	\$2,112,195	6.6%
NAS Logistics Support	189,946	205,031	218,219	6.4%
Maintenance of Traffic Control System	735,831	787,571	854,913	8.6%
Leased Telecommunications Services	269,650	321,476	329,745	2.6%
Aviation Regulations and Certification	297,882	325,607	341,785	5.9%
Aviation Standards	104,836	117,339	122,732	4.6%
Civil Aviation Security	53,851	66,984	70,146	4.7%
NAS Design & Management	23,356	23,926	23,669	-1.0%
Administration of Airports Programs	37,671	41,356	41,718	0.8%
Direction, Staff & Supporting Services	144,127	153,669	153,486	-0.1%
Human Resources Mgmt	273,326	287,826	290,105	-0.8%
Headquarters Administration	<u>43,877</u>	<u>47,335</u>	<u>47,287</u>	<u>-0.1%</u>
TOTAL, Operations	\$4,036,267	\$4,360,000	\$4,606,000	5.6%

(* Reflects actual obligations)



OPERATIONS

SPECIAL INTEREST WORKFORCE

Controller Workforce

- o One of the FAA's highest and most essential priorities is to ensure that flying remains one of the safest and most efficient forms of transportation. The current workforce is doing an outstanding job. Safety has not been and will not be jeopardized.
- o As of September 30, 1991, the controller workforce (CWF) employment was 17,721. Because overall traffic has been level or, in some cases, below 1990 levels, FAA is committed to maintaining a minimum CWF of 17,721 throughout FY 1992.
- o For FY 1993, we will expand the on-board CWF to 17,871.
- o The 17,495 position level authorized for FY 1991 and 17,945 requested and enacted in FY 1992 was based on projections of workload related to forecasted traffic growth as well as organizational changes, such as airspace reconfiguration, sector changes, addition/expansion of terminal control areas and buffer zones and the delivery schedule for new controller work stations. Traffic has not increased at the rate forecasted. Therefore, the CWF will remain constant at the 17,721 on-board at year end FY 1991.
- o In FY 1991 and FY 1992, greater emphasis was placed on ensuring that a sufficient number of trained controllers were moved from the lower activity Level I, II, and III airport control tower facilities to the higher activity Level IV and V airport control tower facilities and to certain en route centers to correct staffing imbalances. This relocation effort will continue throughout FY 1993.

Flight Standards Staffing

- o For FY 1993 Flight Standards Staffing will be maintained at the FY 1992 employment level of 3,542.
- o Major program initiatives such as international expansion to provide certification and surveillance services to the global aviation community and Strategic Quality Management of all Flight Standards programs will continue as planned.

Aircraft Certification

- o For FY 1993 Aircraft Certification Staffing will be maintained at the FY 1992 employment level of 912.
- o The Aircraft Certification Service will continue to address enhanced activity and growth in international work, aging aircraft, and continued commonality both here and abroad.



OPERATIONS

- o Increased emphasis on internationalization in the certification process of civil aviation industries will continue to be a top mission priority. Continued operational safety, regulatory policy development and new certifications, appointments and approvals will ensure maximum aviation safety to the public.

Field Maintenance Staffing

- o Field maintenance technicians are responsible for maintaining and repairing facilities and equipment comprising the National Airspace System. The NAS includes the following major types of facilities: navigation and landing aids, radar, automation systems, and communication equipment. The workforce is responsible for the maintenance of physical structures and grounds.
- o It is expected that the end-of-year employment level for FY 1993 will be comprised of 9,160 personnel in the field maintenance workforce, which is responsible for maintaining over 28,000 facilities. Of the 9,160 about 65 percent are electronics technicians.

Civil Aviation Security Staffing

- o In FY 1993, FAA will reach an end-of-year employment level of 900 in the Civil Aviation Security workforce, an increase of 25 over FY 1992 end-of-year level.
- o Aviation security personnel safeguard passengers, crew, aircraft, and airports from the threat of violence from hijacking, sabotage, and other criminal acts. These initiatives include implementation of effective security programs, increased use of Federal Air Marshals (FAM) and enhanced assessment and monitoring of foreign/domestic airports and air carriers. Some of these agents will perform Federal Air Marshal duties, and others will be utilized to support the increased level of foreign airport assessments, U.S. and foreign airport/air carrier station inspections and assessments (including inspection and enforcement activity to ensure compliance with security requirements), review and approval of foreign air carrier security programs, implementation of explosives detection security programs, development of critical terrorist threat information through intelligence analyses, and protection of those traveling in air commerce

**OPERATIONS****Table 4****SPECIAL INTEREST STAFFING**
End-of-Year Employment

	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u> <u>EST</u>	<u>1993</u> <u>EST</u>
Controller Workforce	16,436	16,832	17,226	17,721	17,721	17,871
Flight Standards Workforce	2,909	3,193	3,479	3,563	3,542	3,542
Aircraft Certification Workforce	733	751	806	847	912	912
Civil Aviation Security	478	511	627	810	875	900
Field Maintenance Workforce	8,646	8,687	8,904	8,994	9,160	9,160



GRANTS-IN-AID TO AIRPORTS

The FY 1993 request for a \$1.9 billion obligation limitation to authorize funds for grants to eligible airports in accordance with provisions contained in the Airport and Airway Improvement Act of 1982, as amended..

The Aviation Safety and Capacity Expansion Act of 1990 includes a provision to provide not less than 1.5 percent of AIP (discretionary funds) for the development of current and former military airports to improve the capacity of the national air transportation system. An estimated \$85 million will be available in both FY 1992 and FY 1993.

Letter of Intent

In FY 1988, the FAA was authorized to issue a letter of intent (LOI) for certain airport development projects. Under this provision, a sponsor may notify the FAA of an intention to carry out a project without Federal funds and request that the FAA issue an LOI. Reimbursements are provided to the sponsor in future years as the funds become available. The benefit to the sponsor is that they may proceed with a project without waiting for a grant, and, they may receive more favorable private financing (e.g., bond ratings) due to the announced Federal support for the project.

LOI's may be issued to cover work only at primary and reliever airports and the projects must enhance system-wide airport capacity. The FAA's commitments to date will reimburse airport sponsors a total of \$1,181.3 million (formula and discretionary) from FY 1992 through FY 1999, subject to fund availability.

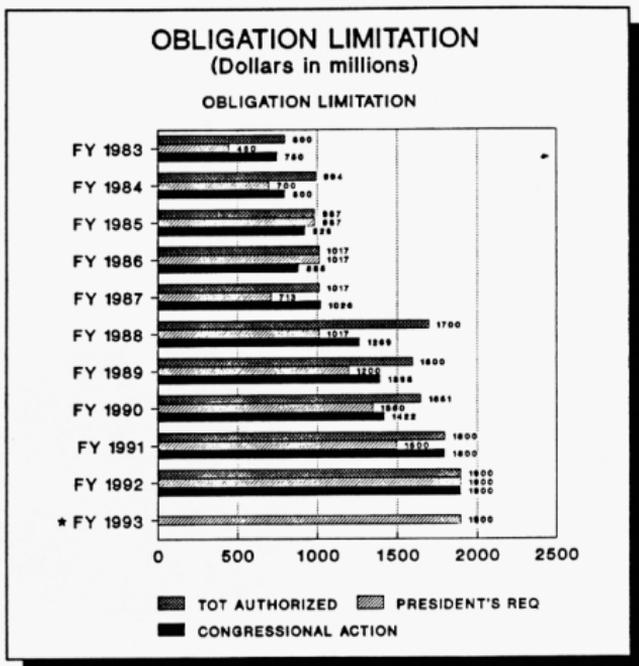


Figure 9 * Reauthorization to be proposed for FY 1993



GRANTS-IN-AID TO AIRPORTS

AIRPORT IMPROVEMENT PROGRAM FY 1993 FORMULA/DISCRETIONARY GRANTS Airport and Airway Safety and Capacity Expansion Act of 1987

AIRPORT IMPROVEMENT PROGRAM FY 1993 FORMULA (Dollars in millions)

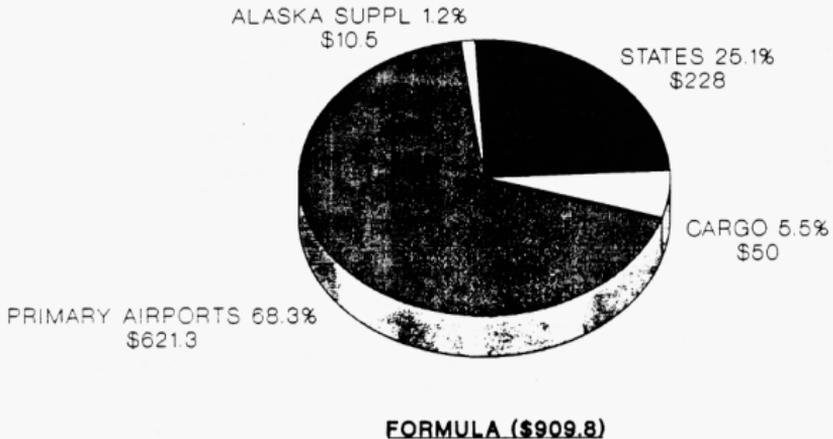


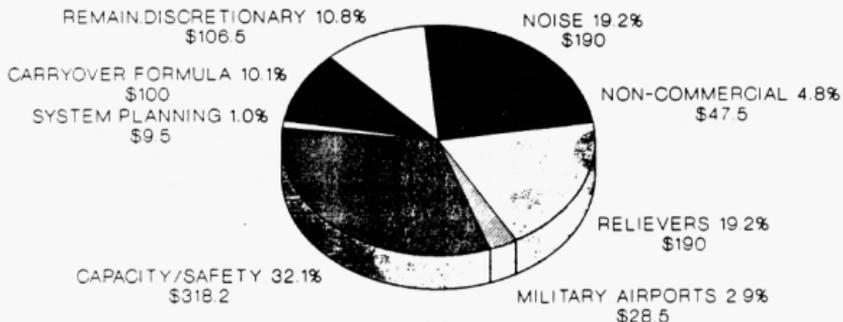
Figure 10



GRANTS-IN-AID TO AIRPORTS

AIRPORT IMPROVEMENT PROGRAM FY 1993 DISCRETIONARY GRANTS

(Dollars in millions)



DISCRETIONARY (\$990.2)

Figure 11



FACILITIES AND EQUIPMENT

For FY 1993, \$2.7 billion, a 12.8 percent increase (\$306 million) over FY 1992, is requested to fund planned facilities and equipment procurement and installations. The funding requested for FY 1993 supports the FAA's comprehensive plan to modernize and improve the National Airspace System (NAS) and to improve air traffic control and airway facilities services. To this end, the funds requested would provide for continued implementation of NAS modernization projects such as the Advanced Automation System (AAS) designed to upgrade the system's air traffic control computer technology and the Voice Switching and Control System (VSCS) designed to modernize the system's outdated communications network.

At the same time, the requested funds would sustain the current infrastructure by making the capital investments needed to keep today's systems operating until the late 1990's, when concurrent modernization efforts can put new equipment in place. Among numerous requirements for funding are the consolidation and expansion of radar approach control facilities for all of southern California, relocation of radar approach control for Chicago's O'Hare Airport and surrounding airports, and replacement of obsolete radio control equipment at various control towers so that controllers can communicate with pilots without interruption. The requested funding would also provide FAA radar and related equipment for new capacity-enhancing airport facilities at Dallas/Ft. Worth and Denver, which will benefit not only the surrounding areas, but also improve traffic flow throughout the country.

Major FY 1993 programs are: (\$ in millions)

Advanced Automation System (AAS)	\$522
Voice Switching and Control System (VSCS)	283
Systems Engineering and Support Services	132
Long Range Radar (LRR)	91
Terminal Air Traffic Control Facilities - Replace	38
Microwave Landing System (MLS)	79
Dallas/Fort Worth Metroplex Expansion	44
Flight Inspection Aircraft procurement	117
Southern California TRACON Facility	10
Chicago Terminal Radar Approach Control Relocation	21
New Denver Airport Establishment	26



FACILITIES & EQUIPMENT

The FY 1992 House and Senate reports and the reconciling report of the Committee of Conference define the Congressional intent for the Facilities and Equipment Appropriation to be structured. The restructuring will reduce prior year activities from eight to five. The restructuring would complement the FAA's A-109 acquisition process, separating procurement, construction, and support costs.

The Facilities and Equipment appropriation budget consists of five major budget activities, which fund the FAA's efforts to modernize and improve air traffic control systems and airway facilities services. Summaries of those activities follow.

ENGINEERING, DEVELOPMENT, TEST AND EVALUATION

This new Facilities and Engineering (F&E) Activity includes programs which have migrated from the R,E&D appropriation, those programs requiring developmental efforts that have been started in F&E and are to continue in F&E (grandfathered), and those programs that are in acquisition phases required prior to Key Decision Point 4 (KDP-4) in accordance with Office of Management and Budget (OMB) circular A-109. This effort does not duplicate any R,E&D program work. The acquisition phase tasks of determination of mission needs, identification and explanation of alternative design concepts, demonstration of alternative design concepts, and full scale development and limited production would be characteristics of programs in this activity.

The advanced automation system (AAS) will progress toward an FY 2000 completion date. Total requirements for this \$4,472 million multiyear program will result in improvement of the safety and efficiency of the NAS, provide the ability to handle the growing air traffic projected beyond the year 2000, and improve the productivity of the air traffic controllers. Delivery of Peripheral Adapter Module Replacement Item systems (PAMRI) will continue to Air Route Traffic Control Centers (ARTCC) with testing and acceptance of already delivered systems. The first PAMRI was commissioned October 1991. Software design and testing will continue. Operational test and evaluation will begin on the Initial Sector Suite System (ISSS) at the FAA Technical Center.

The Voice Switching and Control System (VSCS) is an integrated air/ground and ground/ground voice communication system that will meet future operational and maintenance requirements. During FY 1993, acceptance testing is planned to be completed and operational test and evaluation of the first prototype will be completed.

Other major initiatives continuing in FY 1993 include Microwave Landing Systems; aviation weather services improvement; and continuing FAA efforts to improve test and evaluation facilities.



FACILITIES & EQUIPMENT

PROCUREMENT AND MODERNIZATION OF AIR TRAFFIC CONTROL FACILITIES AND EQUIPMENT

Funding will support the multiyear long range radar program to replace obsolete hardware with new radars; replace outdated Radar Microwave Link (RML) systems with new Radio Communications Link (RCL) to provide increased reliability of transmission; provide improvements to aviation weather services including Next Generation Weather Radar (NEXRAD); and continue improvements in radar coverage and maintainability.

Initiatives in this activity will reduce delays and improve safety at congested airports. Funding will provide continued support for the establishment and improvement of the Airport Surveillance Radar (ASR) program; establish terminal aviation weather radar capability to detect microbursts and related windshear at additional airports; expand the Mode S surveillance capability; continue the precision runway monitor program to increase airport capacity; add automation enhancements to the Airport Surface Detection Equipment (ASDE) system to prevent and detect runway incursions and accidents; and complete the Automation Radar Terminal System (ARTS III A) program which provides conflict alerts between aircraft.

Consolidation of five Los Angeles Basin Terminal Radar Approach Control facilities (TRACON); the relocation of the Chicago TRACON; and the continued expansion of the Dallas/Fort Worth Metroplex program will result in enhanced safety and reduced delays by improving airspace utilization and increasing capacity.

The Flight Service Station (FSS) modernization program provides for an automated national aeronautical and meteorological information dissemination system to replace the labor-intensive manual technique of providing flight services. This automation program led to the commissioning of Model 1 full capacity Automated Flight Service Stations (AFSS) and the consolidation of existing FSS's. The second phase of automation involves a retrofit of the original Model 1 full capacity systems and the installation of other upgraded systems in the AFSS's.

Installation of Automated Surface Observing Systems (ASOS) at FSS locations and towered airports will continue in FY 1993. This program provides upgraded weather information services at locations where existing FSS's are scheduled to be consolidated or relocated to an AFSS.

In addition the continuing program to upgrade Very High Frequency Omnidirectional Radio Range (VOR) facilities with Distance Measuring Equipment (DME) requires additional funding in FY 1993. VOR and DME facilities are major components of the air navigation system and are used for en route air navigation and approach purposes by pilots to conduct safe flights and landings.



FACILITIES & EQUIPMENT

The FY 1993 budget continues work on the Instrument Landing System (ILS), and other navigational air programs such as the Approach Lighting System Improvement Program (ALSIP), Low Level Windshear Alert System (LLWAS), and Runway End Identification Lights (REIL).

Other initiatives in this activity include the Remote Maintenance Monitoring system (RMM), which will enable NAS subsystems to be monitored and controlled from central locations, thus achieving economies and efficiencies for the maintenance of various equipment and systems; replacement and establishment of terminal air traffic control tower facilities to meet current and future operational requirements; and upgrade airport traffic towers and TRACON's which require modernization. Establishment of the new Denver airport will require continued FAA support for facilities and equipment.

PROCUREMENT AND MODERNIZATION OF NON-AIR TRAFFIC FACILITIES AND EQUIPMENT

This activity includes general facility support requirements which apply to a wide range of FAA installations. Continued funding support is required for the Computer Resources

Nucleus (CORN) project, which will provide FAA with expanded, modern computer resources to accommodate increased operational and administrative programs. This activity also supports special initiatives such as hazardous material management which are necessary to comply with state and Federal regulations.

Requirements for this activity also include the acquisition and modification of aircraft which support the agency flight inspection of navigational aids, training, support, and research and development functions, and the procurement and installation of equipment related to the mission-readiness of the FAA fleet of aircraft. The FAA, in support of its flight inspection mission, took acceptance of six C-29A aircraft transferred from the Air Force on October 1, 1991. Included is funding to procure and equip aircraft for the support of international flight inspection requirements; Mode S transponders for agency aircraft to provide data link communications and interface capability with TCAS II installations; the procurement and installation of an aircraft simulator and other training devices which provide state-of-the-art flight crew training; a flight inspection runway update system; and the procurement and installation of global positioning systems.

Other programs funded under this activity are: renovation of airman and aircraft registry reporting system which includes support of the nation's drug control policy; NAS management automation program to facilitate planning, scheduling and tracking of activities



FACILITIES & EQUIPMENT

required to implement the program defined in the NAS Plan through the year 2000; aviation safety analysis systems to capture safety related inspection data; and provide FAA employee housing.

FACILITIES AND EQUIPMENT MISSION SUPPORT

This activity includes system engineering and integration, and transition engineering support contracts which provide technical and management support in all phases of NAS Plan implementation schedules.

PERSONNEL AND RELATED EXPENSES

Funding for personnel compensation, benefits, travel and related expenses associated with the Facilities and Equipment (F&E) programs are budgeted under one consolidated activity. These funds directly support FAA personnel who are primarily responsible for NAS equipment installation and implementation. Examples of work specialties include: electronics, civil and mechanical engineers; electronics technicians; quality control specialists; and flight inspection personnel.

In FY 1993 the FAA seeks 300 additional positions in support of the F&E program, 240 for field engineering, installation and testing, and 60 for various program management and oversight functions. The 240 positions are requested to undertake field coordination and engineering, installation, testing and evaluation efforts of NAS procured equipment in support of planned program requirements. The additional 60 positions are required for program management, including acquisition activities, planning integrated logistics support and oversight functions associated with the NAS system.



FACILITIES & EQUIPMENT

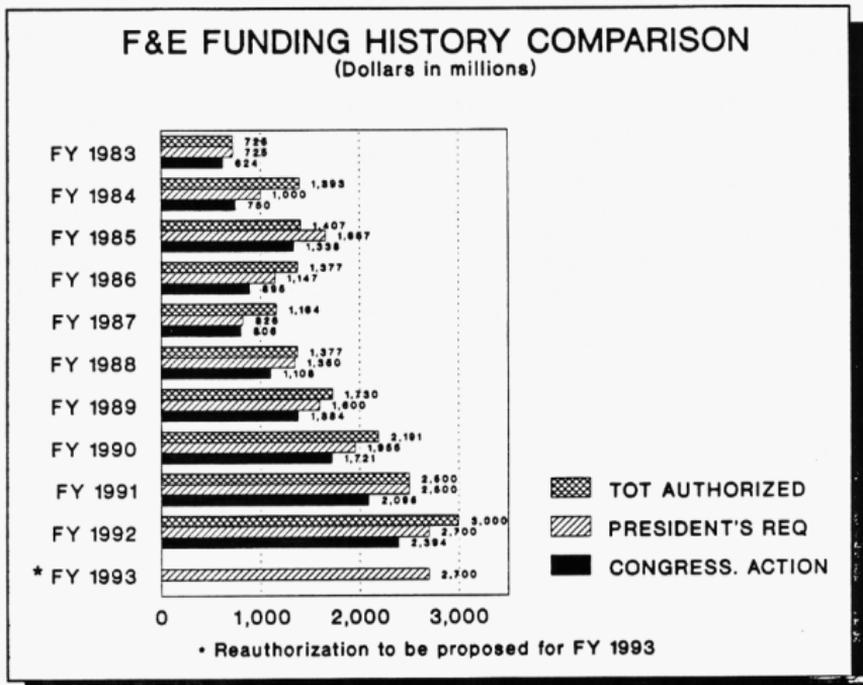


Figure 12



RESEARCH, ENGINEERING AND DEVELOPMENT

For FY 1993, \$230 million, approximately a 5.5 percent increase (\$11.9 million) over the FY 1992 enacted level, is requested to support the Research, Engineering and Development (R,E&D) program. In FY 1993, the program by activity budget structure has changed to correlate directly with the R,E&D Plan which has been recently redefined into major research areas. The R,E&D budget continues to foster new and innovative improvements in meeting the challenges of tomorrow's growing demands on our aviation system, limited capacity, changing work force, security threats and the development of new technologies.

The requested R,E&D budget advances the agency's near-term and long-term research goals which include the following: use of automation to increase capacity and utilization of airport and airspace safely; application of satellites for communication, navigation and surveillance; aircraft safety through research in aging aircraft, fire protection, engine maintenance, and structural crashworthiness through certification; use of regulatory standards to keep pace with technological and operational changes; development of advanced security system technologies to deter risks against civil aviation; the study of human factors in flight crews, controllers, maintenance technicians, and aviation security to alleviate errors caused by lack of training and experience; and the prediction, measurement and abatement of environmental pollution and noise.



RESEARCH, ENGINEERING AND DEVELOPMENT

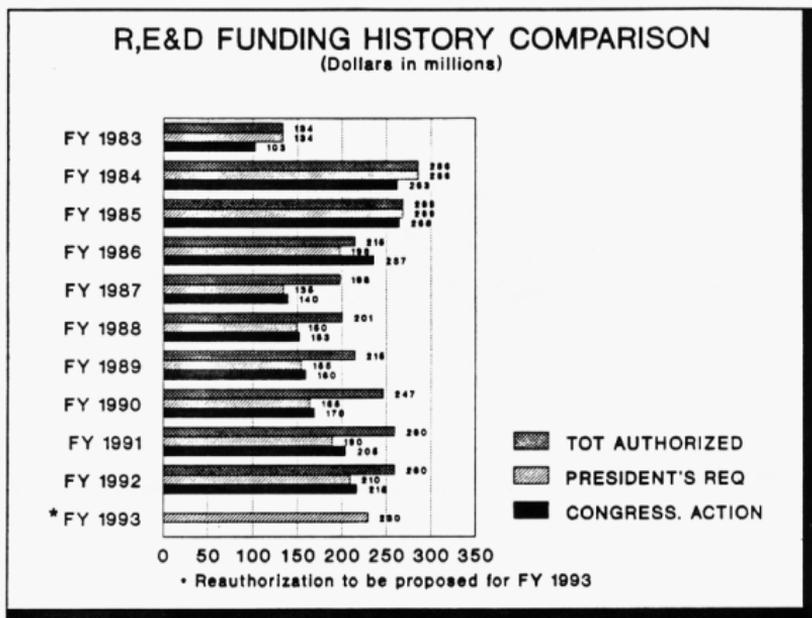


Figure 13



RESEARCH, ENGINEERING AND DEVELOPMENT

R,E&D REQUIREMENTS BY MAJOR ACTIVITY (In percent)

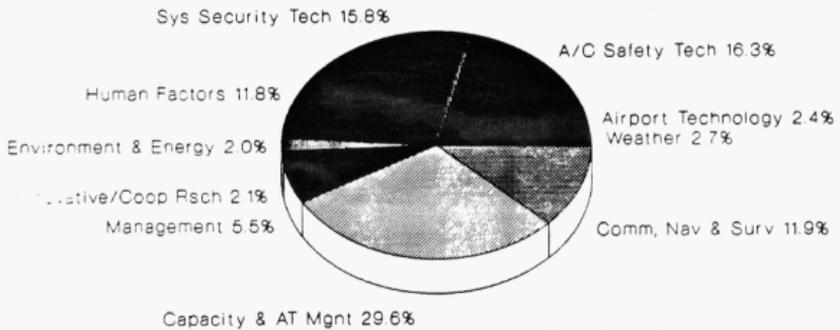


Figure 14



RESEARCH, ENGINEERING AND DEVELOPMENT

Table 5

SUMMARY OF REQUIREMENTS BY ACTIVITY/PROGRAM

<u>Activity</u>	<u>FY 1993 Request</u>
1. Management	\$ 12,683
2. Capacity and Air Traffic Management Technology	67,977
3. Communications, Navigation and Surveillance	27,388
4. Weather	6,116
5. Airport Technology	5,619
6. Aircraft Safety Technology	37,574
7. System Security Technology	36,325
8. Human Factors and Aviation Medicine	27,041
9. Environment and Energy	4,500
10. Innovative/Cooperative Research	<u>4,777</u>
Total, All Activities	\$230,000

The FY 1993 R,E&D budget has been restructured, increasing from seven activities to ten. The FY 1993 request reflects a realignment of projects for a better categorization by subactivity and is consistent with the R,E&D Plan.



AIRPORT AND AIRWAY TRUST FUND

- o The Tax Equity and Fiscal Responsibility Act of 1982 (26 U.S.C. 9502), as amended by the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508), provides for the receipts received in the Treasury from the 10 percent passenger ticket tax and certain other taxes paid by airport and airway users to be transferred from the general fund of the Treasury to the Airport and Airway Trust Fund (AATF). In turn, appropriations are authorized from this fund to meet obligations for airport improvement grants, facilities and equipment, research, and a portion of operations.
- o The revised fee schedule contained in P.L. 101-508 increased by 25 percent in four of the five revenue elements of the AATF effective December 1, 1990.

Domestic passenger tickets: from 8 percent to 10 percent
Freight waybill: from 5 percent to 6.25 percent
Noncommercial gasoline: from \$.12 to \$.15 per gallon
Noncommercial jet fuel: from \$.14 to \$.175 gallon
International departure: remains the same at \$6 per enplanement
- o The current authorization for FAA programs expires September 30, 1992. The FY 1993 funding levels in the proposed reauthorization legislation proposes that 85 percent of the FAA's budget be financed from the Airport and Airway Trust Fund.
- o The AATF uncommitted balance was \$7.7 billion at the end of FY 1991. It is projected to decline to \$7.5 billion at the end of FY 1992 and to \$6.2 billion by the end of FY 1993, consistent with our National Transportation Policy to reduce Trust Fund balances.



AIRPORT AND AIRWAY TRUST FUND

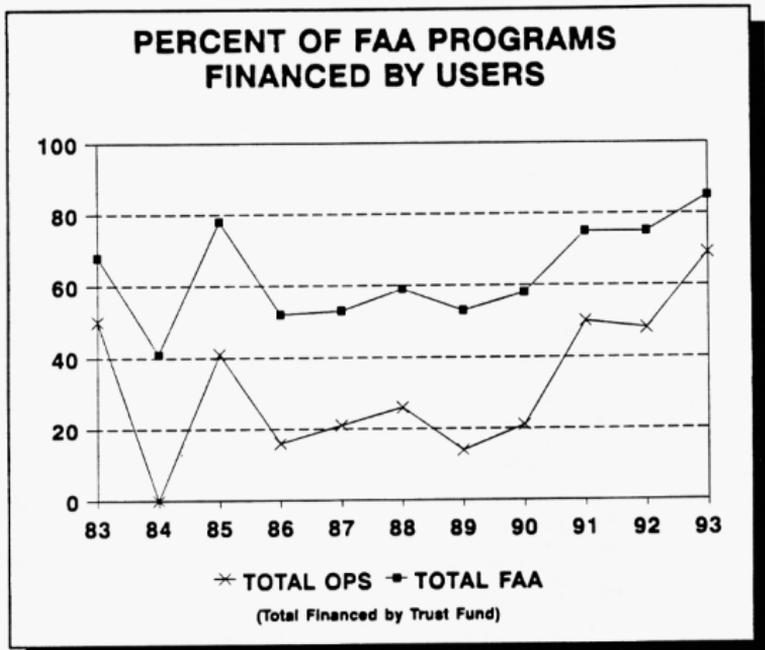


Figure 15



AIRPORT AND AIRWAY TRUST FUND

TRUST FUND SHARE OF FAA COSTS

- o The costs of operating and modernizing the national airway system should be borne by the user.
- o Effective in FY 1991, 75 percent of the FAA's total budget is financed by the Trust Fund including 69 percent of the Operations appropriations.

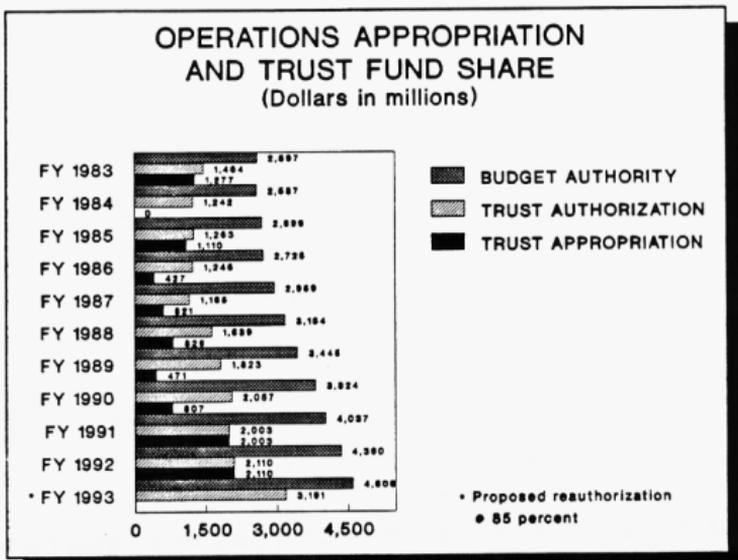


Figure 16



AIRPORT AND AIRWAY TRUST FUND

Table 6 Amounts Available for Appropriation
(Dollars in thousands)

	FY 1991	EST FY 1992	EST FY 1993
Unappropriated balance, start of year	\$10,632,625	\$11,072,820	\$11,235,884
Revenue	<u>6,206,259</u>	<u>6,508,700</u>	<u>6,882,200</u>
Total available for appropriation	16,838,884	17,581,520	18,118,084
Appropriations:			
Facilities and equipment	(2,095,380)	(2,394,000)	(2,700,000)
Research, engineering and development	(204,997)	(218,135)	(230,000)
Grants-in-aid for airports:			
Appropriation to liquidate contract authority	(1,400,000)	(1,520,000)	(1,800,000)
Trust fund share of FAA operations	(2,002,723)	(2,109,625)	(3,190,600)
Essential Air Service		(23,160)	(38,600)
GSA Rent	(28,508)	(29,887)	(44,707)
Department of Commerce: NOAA operations, research, and facilities	<u>(34,521)</u>	<u>(35,389)</u>	<u>(35,596)</u>
Total appropriations	(5,766,129)	(6,345,636)	(8,036,503)
Unobligated balance returned to receipts	(65)	—	—
Adjustments in expired, restored from unappropriated receipts	—	—	—
Unappropriated balance, end of year	\$11,072,820	\$11,235,884	\$10,081,581
Unexpended balance brought forward-start of year:			
U.S. securities (par)	14,311,532	15,193,672	15,975,195
Cash	<u>43,528</u>	<u>68,884</u>	<u>50,000</u>
Balance of fund, start of year	<u>14,355,060</u>	<u>15,262,556</u>	<u>16,025,195</u>
Cash income during the year:			
Government receipts from excise taxes:			
Passenger ticket tax	4,340,667	4,567,400	4,970,600
Waybill tax	221,510	237,100	254,200
Fuel tax	140,009	138,700	172,900
International departure tax	217,112	259,700	280,400
Refund of taxes	(9,666)	(10,000)	(10,000)
Intrabudgetary transaction:			
Interest on investments	<u>1,296,627</u>	<u>1,315,800</u>	<u>1,214,100</u>
Total annual income	6,206,259	6,508,700	6,882,200
Cash outlay during the year:			
Federal Aviation Administration:			
Grants-in-aid for airports	1,540,876	1,556,000	1,759,000
Facilities and equipment	1,511,734	1,762,000	2,030,000
Research, engineering and development	179,005	230,000	238,000
Operations	2,004,127	2,109,625	3,190,600
Department of Commerce: NOAA	34,521	35,389	35,596
Payments to air carriers		23,160	38,600
GSA Rent	28,508	29,887	44,707
Refunds and credit	<u>-7</u>		
Total annual outlay	\$ 5,298,763	\$ 5,746,061	\$ 7,333,503
Unexpended balance carried forward - end of year			
U.S. securities (par)	15,193,672	15,975,195	15,523,892
Treasury balance	<u>68,884</u>	<u>50,000</u>	<u>50,000</u>
Balance of fund, end of year	15,262,556	16,025,195	15,573,892
Commitments against unexpended balances:			
Appropriated but not expended	(4,189,735)	(4,789,311)	(5,492,311)
Commitment to future appropriations to liquidate outstanding obligations (contract authority)	(2,664,041)	(3,044,041)	(3,144,041)
Unobligated balance of contract authority	<u>(722,321)</u>	<u>(722,321)</u>	<u>(722,321)</u>
Uncommitted balance, end of year	\$7,686,459	\$7,469,522	\$6,215,219

**FISCAL YEAR 1992 FUNDING****Table 7****AMOUNTS AVAILABLE IN FY 1992**
(Dollars in thousands)

	FY 1992 President's Budget	FY 1992 Enacted	Difference
Operations	\$4,457.0	\$4,360.0	\$-97.0
General	(2,316.8)	(2,250.4)	(-66.4)
Trust	(2,140.2)	(2,109.6)	(-30.6)
Grants-in-Aid to Airports			
Obligation Limitation	1,900.0	1,900.0	0.0
Facilities and Equipment	2,700.0	2,394.0	-306.0
Research, Engineering and Development	<u>\$210.0</u>	<u>\$218.1</u>	<u>\$8.1</u>
Total Amounts Available	\$9,267.0	\$8,872.1	\$-394.9



OUTLAYS

Table 8

Summary of Outlays

(Dollars in millions)

<u>Appropriation</u>	FY 1991 <u>Actual</u>	FY 1992 <u>Estimate</u>	FY 1993 <u>Estimate</u>
Operations (Trust Fund)	\$4,062,002	\$4,449,020	\$4,629,868
(General)	(2,002,723)	(2,109,625)	(3,190,600)
	(2,059,279)	(2,339,395)	(1,439,268)
Facilities & Equipment	1,511,734	1,762,000	2,030,000
Research, Engineering & Development	179,005	230,000	238,000
<u>Grants-in-aid</u>	<u>1,540,876</u>	<u>1,556,000</u>	<u>1,759,000</u>
TOTAL	\$7,293,617	\$7,997,020	\$8,656,868