

2

DTIC FILE COPY



US Department of Transportation
Federal Aviation Administration

Semiannual Report to Congress on the Effectiveness of The Civil Aviation Security Program

January 1, 1987-June 30, 1987

AD-A188 421

DTIC
ELECTE
JAN 25 1988
S & D

DISTRIBUTION STATEMENT A
Approved for public release
Distribution Unlimited

Washington, D.C. 20591

November 1987

Report of the Administrator of the Federal Aviation Administration to the United States Congress pursuant to Section 315(a) of the Federal Aviation Act of 1958

88 1 25 072

PUBLISHED SEMIANNUALLY BY THE OFFICE OF CIVIL AVIATION SECURITY
FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION.
ADDITIONAL COPIES MAY BE OBTAINED FROM THE
NATIONAL TECHNICAL INFORMATION SERVICE, U.S. DEPARTMENT OF COMMERCE,
5285 PORT ROYAL ROAD, SPRINGFIELD, VIRGINIA, USA 22161.
WRITE OR CALL NTIS FOR PRICE QUOTATION: 703-487-4650.

1. Report No. DOT/FAA-ACS-87-1(26)		2. Government Accession No. AD-A188421		3. Recipient's Catalog No.	
4. Title and Subtitle Semiannual Report to Congress on the Effectiveness of the Civil Aviation Security Program				5. Report Date November 17, 1987	
				6. Performing Organization Code	
7. Author(s) Program Analysis Officer, ACS-3				8. Performing Organization Report No.	
9. Performing Organization Name and Address DOT/Federal Aviation Administration Office of Civil Aviation Security 800 Independence Avenue, S.W. Washington, D.C. 20591				10. Work Unit No. (TRAI)	
				11. Contract or Grant No.	
12. Sponsoring Agency Name and Address DOT/ Federal Aviation Administration Office of Civil Aviation Security 800 Independence Avenue, S.W. Washington, D.C. 20591				13. Type of Report and Period Covered Recurring Report January 1 - June 30, 1987	
				14. Sponsoring Agency Code	
15. Supplementary Notes This report is required by Section 325(a) of the Federal Aviation Act of 1958.					
16. Abstract The report includes an analysis of the current threat against civil aviation along with information regarding hijacking attempts, security incidents, bomb threats, and passanger screening activity. It also summarizes ongoing activities to assure adequate protection of civil air commerce against hijacking/sabotage and related crimes, and other aspects of the Civil Aviation Security Program.					
17. Key Words			18. Distribution Statement		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 29	22. Price



U.S. Department
of Transportation

Federal Aviation
Administration

NOV 17 1987

Office of the Administrator

400 Independence Ave. S.W.
Washington, D.C. 20591

The Honorable George Bush
President of the Senate
Washington, DC 20510

Dear Mr. President:

I am forwarding the Federal Aviation Administration's (FAA) Semiannual Report to Congress on the Effectiveness of the Civil Aviation Security Program. It covers the period January 1, 1987, through June 30, 1987, and is submitted in accordance with section 315(a) of the Federal Aviation Act of 1958, as amended.

During this reporting period, there were four hijackings of U.S. air carriers. However, none of these resulted in diversion of the flights outside of U.S. airspace, and all ended with no loss of life and with the arrest of the perpetrators. In addition, there were four hijackings of foreign aircraft. One of these occurred on a Cubana Aviacion flight from Cuba to the United States on which the hijacker was killed by a Cuban law enforcement officer on board.

We continued to assign Federal Air Marshal teams to U.S. air carriers on selected flights operating in especially sensitive or threatened areas throughout the world. During this reporting period, 150 assessments of foreign airports, conducted pursuant to the International Security and Development Cooperation Act of 1985, (Public Law 99-83) were completed. Additionally, as a result of the arrest in Frankfurt, Germany, of a terrorist involved in the TWA Flight 847 hijacking in 1985, and as a result of the trial of another accused terrorist in Paris, France, U.S. air carrier security procedures at eight foreign airports were the subject of an intense, detailed on-site surveillance in February and March 1987. Further, as a result of former Secretary of Transportation Dole's Aviation Safety Review Task Force activities, the FAA implemented numerous actions to strengthen domestic aviation security policies and practices.

While the civil aviation security procedures presently in effect worldwide have been highly successful, the FAA will continue to strengthen those measures necessary to protect U.S. citizens against the menace of air piracy and terrorist acts.

This report has also been sent to the Speaker of the House.

Sincerely,

T. Allan McArtor
Administrator

Enclosure

CONTENTS

PAGE

I. EXECUTIVE HIGHLIGHTS..... 1

II. INTRODUCTION..... 2

III. AIRCRAFT HIJACKING INCIDENTS..... 3

IV. BASIC POLICIES 5

V. PASSENGER SCREENING — SCOPE AND EFFECTIVENESS..... 6

VI. COMPLIANCE AND ENFORCEMENT..... 8

VII. ASSESSMENT OF SECURITY MEASURES MAINTAINED AT FOREIGN AIRPORTS..... 10

VIII. FEDERAL AIR MARSHAL PROGRAM ACTIVITIES..... 12

IX. CIVIL AVIATION SECURITY INITIATIVES..... 13

X. RESEARCH AND DEVELOPMENT..... 15

XI. OUTLOOK..... 16

EXHIBITS

1. U.S. and Foreign Air Carrier Aircraft Hijackings.
2. U.S. and Foreign Air Carriers Aircraft Hijacking Summaries.
3. U.S. General Aviation Aircraft Hijackings.
4. Actual Hijackings and Prevented Hijackings of U.S. Air Carrier Aircraft.
5. Civil Aviation Security Basic Policies.
6. Civil Aviation Security Scope and Effectiveness Summary.
7. Civil Aviation Security Airline Passenger Screening Results.
8. Civil Aviation Security Compliance and Enforcement Actions.

I. EXECUTIVE HIGHLIGHTS

1. THIS REPORT COVERS THE PERIOD JANUARY 1, 1987 - JUNE 30, 1987.
2. OVER 548 MILLION PERSONS WERE PROCESSED THROUGH U.S. PASSENGER CHECKPOINTS. THERE WERE 1,645 FIREARMS DETECTED WITH 734 RELATED ARRESTS.
3. WORLDWIDE, 8 HIJACKINGS OCCURRED AGAINST SCHEDULED AIR CARRIERS. FOUR OF THESE WERE INCIDENTS AGAINST U.S. AIRLINES.
4. THERE WAS 1 U.S. GENERAL AVIATION AIRCRAFT HIJACKING INCIDENT.
5. INVESTIGATIONS COMPLETED OF ALLEGED SECURITY VIOLATIONS BY AIR CARRIERS, AIRPORTS, AND INDIVIDUALS TOTALED 1,531.
6. OF THE 1,531 COMPLETED INVESTIGATIONS, 287 RESULTED IN CIVIL PENALTIES TOTALING \$228,777.
7. THERE WERE 150 ASSESSMENTS COMPLETED OF THE EFFECTIVENESS OF SECURITY MEASURES IMPLEMENTED AT 125 FOREIGN AIRPORTS.
8. DOMESTIC AND INTERNATIONAL SECURITY MEASURES WERE FURTHER REVISED AND INCREASED TO PREVENT OR DETER TERRORIST AND OTHER CRIMINAL ACTS AGAINST CIVIL AVIATION.
9. FEDERAL AIR MARSHAL TEAMS CONTINUED TO BE ASSIGNED TO CERTAIN FLIGHTS OPERATING IN ESPECIALLY SENSITIVE AREAS OF THE WORLD.

II. INTRODUCTION

This 26th Semiannual Report to Congress on the Effectiveness of the Civil Aviation Security Program is submitted pursuant to section 315(a) of the Federal Aviation Act of 1958, as amended. This section requires that a semiannual report be submitted to the Congress concerning the effectiveness of air carrier passenger screening procedures. This report covers the period January 1, 1987 - June 30, 1987.

The report presents a concise picture of the nationwide effectiveness of the procedures used to screen passengers and their carry-on items prior to boarding scheduled and public charter flights, as well as visitors desiring access to air terminal passenger boarding areas. This report also provides data on the initiatives being implemented as a result of the review of domestic airport security by the Safety Review Task Force, established by the former Secretary of Transportation Dole.

A summary is included of the assessments conducted by the Federal Aviation Administration's (FAA) Office of Civil Aviation Security to determine the effectiveness of the security measures at foreign airports served by U.S. air carriers, foreign airports from which foreign air carriers serve the United States, foreign airports which pose a high risk of introducing danger to international air travel, and such other foreign airports as the Secretary of Transportation may deem appropriate. These assessments were conducted pursuant to the International Security and Development Cooperation Act of 1985 (Public Law 99-83) which amended section 1115 of the Federal Aviation Act of 1958, as amended.

In addition, this report includes a summary of the activities of the Federal Air Marshals (FAM) program and the changes in security measures which were instituted during this reporting period to prevent or deter terrorist and other criminal acts against civil aviation. Intensive basic and recurrent inservice training of these special agents in FAM duties by the Federal Law Enforcement Training Center continues to assure their maintenance of skills critical to performance of their highly specialized duties.

III. AIRCRAFT HIJACKING INCIDENTS

A U.S. citizen (or corporation) engaged in public charter and/or scheduled passenger air operations must hold an operating certificate issued by the FAA. Technically, that person (or corporation) is a "certificate holder." In this report, such certificate holders are referred to as air carriers in order to differentiate them and their aircraft from general aviation operators and aircraft.

During this reporting period, there were four hijackings of U.S. scheduled air carrier aircraft. All four hijackings were thwarted before the hijackers were able to gain their desired destinations or objectives. There were no casualties resulting from any of the incidents.

In the first incident, a Syrian national displaying a .38 caliber handgun seized a 10-year-old boy as a hostage at the ticket counter at Dallas-Ft. Worth International Airport and fired a shot in the air. The hijacker proceeded through the security screening point with the hostage to a boarding gate in the Delta concourse where he threatened to kill the hostage unless he was provided with an aircraft and flown to Egypt. An alert airline employee removed the jetway from the aircraft and secured the door, thus preventing access to the aircraft. After approximately 8 hours of negotiations, the hijacker released the hostage unharmed and surrendered to local authorities.

The second incident involved a lone male hijacker who was later determined to be mentally incompetent. While en route from Newark, New Jersey, to Washington, D.C. aboard New York Air Flight 681, a DC-9 aircraft, the hijacker handed the flight attendant a note that read "hijack, have chemical tape, will burn this plane." The aircraft landed as scheduled. However, negotiations with the hijacker lasted approximately 3 hours. The incident ended when the hijacker surrendered peacefully to authorities in exchange for a cup of coffee and a pack of cigarettes. A search of the hijacker, his personal effects, and the cabin of the aircraft revealed that no weapon was involved. However, a two-liter plastic bottle filled with gasoline was discovered among the items he had in his checked luggage.

The third incident involved the attempted hijacking of Alaska Air Flight 93, a B-727, en route from Seattle, Washington, to Anchorage, Alaska. Approximately 2 hours into the flight, the hijacker passed a note to a flight attendant indicating that he wanted to go to Cuba. The unarmed hijacker was subdued by flight crewmembers when he tried to gain access to the cockpit. The hijacker was restrained in the first class section and the flight continued to its scheduled destination.

The fourth and final U.S. air carrier aircraft hijacking occurred aboard a Virgin Island Seaplane Shuttle flight from St. Croix, U.S. Virgin Islands, to San Juan, Puerto Rico. This aircraft had a flightcrew of 2 and seating capacity of 17 passengers and they were not required to be screened. The hijacker demanded to be flown to Cuba. Just prior to the aircraft arriving at its scheduled destination, the hijacker informed the captain of his demand and threatened to blow up the aircraft with an explosive device if his demand was not met. The pilot convinced the hijacker to allow the aircraft to land for fuel and servicing. After landing, the flightcrew duped the hijacker into allowing all passengers and crew to leave the aircraft. The incident ended approximately 3 hours later when the hijacker walked off the aircraft and surrendered to the authorities. The device, which contained both incendiary and explosive components, was rendered safe by the local bomb disposal unit.

There was one general aviation aircraft hijacking during this reporting period. A prisoner being transported aboard a small aircraft was subdued by armed guards as he attempted to escape from his restraints and take control of the aircraft. The aircraft continued to its final destination without further incident.

The four U.S. air carrier hijackings during this reporting period represent the average since 1985. The two incidents in which the hijackers demanded to go to Cuba were the first of that type since January of 1985. There also were four hijackings of foreign air carrier aircraft and one foreign general aviation hijacking during this same period of time. No U.S. citizens were killed or injured in any of these incidents.

Air carrier and airport security measures required by the FAA have undoubtedly prevented or deterred hijackings or other crimes against civil aviation. It is impossible, however, to determine exactly how many such incidents would have been carried out in the absence of such measures.

Two admittedly imprecise indicators of the potential for such criminal intent are the number of firearms detected at passenger screening points under suspicious circumstances and the number of individuals apprehended at passenger screening points while attempting to gain unauthorized access to aircraft. As noted elsewhere in this report, 1,645 firearms were detected at screening points during this reporting period as compared to 1,716 detected during the last reporting period.

(See Exhibits 1, 2, 3, and 4)

IV. BASIC POLICIES

Operating on the concept of shared responsibilities among airlines, airports, Federal, state, and local governments, and the airline passengers, the U.S. Civil Aviation Security Program has continued to be highly effective in preventing aircraft hijackings and other criminal acts against civil aviation. The spirit of cooperation which characterizes these mutually beneficial working relationships has been very helpful in making the system work well. In furtherance of assuring safe air travel, the Federal Aviation Administration establishes and enforces regulations, policies, and procedures; provides highly trained professional Federal Air Marshals for in-flight security on U.S. airlines operating in sensitive areas of the world; and, in general, provides overall guidance and direction to the program. The airlines, however, are responsible for the safety of passengers, baggage, and cargo in their care, as well as the safeguarding of their aircraft. Similarly, airport operators are responsible for maintaining a secure ground environment and for providing local law enforcement support for airline and airport security measures. Finally, the passengers--the ultimate beneficiaries of the security program--pay for the costs of the program through security charges included in airline ticket price calculations.

(See Exhibit 5)

V. PASSENGER SCREENING - SCOPE AND EFFECTIVENESS

Mandatory security screening procedures, which include inspection of all passengers and their carry-on items, have been in effect since 1973. Since the initiation of these security measures, over 8.5 billion persons have been screened and over 9.5 billion carry-on items have been inspected. This resulted in the detection of over 38,600 firearms and nearly 17,000 related arrests.

During this 14-year span, there have been 108 hijacking incidents involving U.S. air carriers, or an average of 7.4 per year. This compares favorably with the average of 27 hijackings per year recorded in the 5-year period immediately preceding the implementation of the mandatory screening procedures.

Passenger screening is carried out to detect and prevent the carriage aboard air carrier aircraft of firearms, explosives, incendiaries, and other deadly weapons. The FAA's analysis of screening checkpoint activity includes the recording and study of the number of items detected and the false threats received, as well as related information concerning individuals arrested. Results of U.S. screening activities for the first half of 1987 are detailed as follows:

Over 548.7 million passengers were processed through screening checkpoints at 410 airports. A total of 1,645 firearms were detected during this reporting period which is approximately 12 percent higher than the average of 1,465 weapons detected during the preceding 10 reporting periods. Ninety-four percent, or 1,548 of the 1,645 firearms, were discovered through X-ray inspection of carry-on items, 59 (4 percent) were detected by use of the metal detector, and 38 (2 percent) were detected as the result of physical search. In addition, there were 5 incendiary devices during this period. All 5 of these incendiaries were discovered by X-ray inspection.

There were 734 persons arrested at screening points for the unauthorized carriage of firearms/explosive devices. This figure represents an 11 percent increase over the average of 661 arrests for all reporting periods during the preceding 5 years.

(See Exhibits 6 and 7)

For civil aviation security purposes, airports have been categorized based on the number of persons screened per year. Categories I, II, III, and IV are defined as follows:

Category I - 2 million or more individuals screened
Category II - 500,000 to 2 million
Categories III and IV - under 500,000

The 734 arrests for carrying firearms were made at 99 different airports as follows: 596 (81 percent) of the 734 arrests occurred at 54 Category I airports (e.g., Atlanta, Georgia, and Seattle, Washington); 93 (13 percent) occurred at 27 Category II airports (e.g., Tulsa, Oklahoma, and Dayton, Ohio); 45 (6 percent) occurred at 18 Categories III and IV airports (e.g., Harlingen, Texas, and Mobile, Alabama).

In addition to criminal action taken by Federal and local authorities, individuals who, without proper authorization, attempt to carry firearms or explosives/incendiaries through screening checkpoints also may be subject to civil penalties imposed by the FAA. This is described in more detail in section VI.

On July 29, 1986, the House Subcommittee on Government Activities and Transportation, requested a United States General Accounting Office evaluation of the FAA's Civil Aviation Security Program, including the adequacy of policies and procedures governing airport security as well as program implementation and administration. A preliminary report on FAA Preboard Passenger Screening Test Results was published in April 1987. From September through December 1986, FAA tested the passenger screening process 2,419 times, primarily at major airports (those that screen over 2 million persons annually), to determine whether the screening process identified weapons or other dangerous test objects when FAA special agents attempted to pass them through the system. The overall results of the 1986 tests showed that in 1,923 screenings, or 80 percent, the dangerous test items were correctly identified while in 496 screenings, or 20 percent, the dangerous test items went through the screening process undetected. Test results varied significantly among individual regions, ranging from an overall 63 percent detection rate in one region to a 99 percent rate in another.

To improve overall test detection results in all regions, the FAA established a new requirement effective October 1, 1987, that requires air carriers, acting through their employees, contractors or agents who perform screening functions, to detect each FAA-approved test object during each screening system operator test conducted by the FAA. Appropriate enforcement action will be taken for system failures.

VI. COMPLIANCE AND ENFORCEMENT

Federal Aviation Regulations (FAR) require the adoption and effective implementation of security programs by airports and air carriers. These security programs contain security procedures which are designed to prevent or deter aircraft hijacking, sabotage, and related criminal acts. The security procedures are under constant review by the FAA and the aviation industry to ensure the procedures are effective in countering the ever-changing threat to U.S. civil aviation.

There are 136 U.S. scheduled and public charter air carriers of various sizes that are required to adopt FAA-approved security programs. All U.S. air carriers have adopted the Air Carrier Standard Security Program (ACSSP) which was developed by the industry in consultation with the FAA. This standard requires each air carrier to implement the same standard security procedures. The FAA has authority to amend the ACSSP when the safety and the public interest are determined to be at risk.

There are 96 foreign scheduled and public charter air carriers that serve airports within the United States. Although foreign air carriers are also required to implement security programs, U.S. regulations do not currently provide authority for the FAA to approve or amend a foreign air carrier security program. To ensure that foreign air carriers which serve the U.S. implement adequate security measures, regulatory action was initiated requiring FAA acceptance of foreign air carrier security programs. It is expected that a notice of proposed rulemaking will be issued in 1988.

The above 232 domestic and foreign scheduled and public charter air carriers serve 413 airports within the United States. Each of these airports is required to implement a security program which provides a secure operating environment for these air carriers. Airport security programs are designed to meet the threat to the specific airport. Of the 413 airports, 16 have been determined to have an inherently greater threat based on criteria established by the FAA working with industry. Special security requirements for these airports are being established. FAA headquarters maintains and reviews the security programs of each of these 16 to ensure a high level of security continues to be provided.

To improve the development of national guidance and policy concerning implementation of security requirements, annual significant airport activity reports and annual air carrier performance reports are now provided to the Office of Civil Aviation Security by FAA regional security divisions. The information contained in these reports assists in determining if identified problems are specific to a particular airport or air carrier or are generic in nature.

The FAA makes every effort to foster an atmosphere of voluntary compliance to ensure that personnel of the air carriers, airports, and other organizations properly comply with the FAR's and applicable security programs. FAA civil aviation security special agents inspect the aviation industry's security operations on a regularly-scheduled and unscheduled basis. During these inspections, weaknesses and deficiencies are corrected and security violations are identified.

To assure the safety and security of the traveling public, all alleged and apparent violations of security requirements are investigated and appropriate action is taken. These actions may take the form of administrative action (warnings, letters of correction), or civil penalties or result in criminal prosecution.

During the period January 1 through June 30, 1987, 1,531 investigations of alleged security violations by U.S. and foreign air carriers, airports, and individuals were closed. In 287 of the cases, civil penalties totaling \$228,777 were collected. In 979 cases, administrative actions were taken. The alleged violations were not substantiated in 265 cases.

The 1,531 cases closed represented a 12 percent increase from the 1,347 cases closed during the second half of 1986 and a less than 1 percent decrease from the 1,580 cases closed during the first half of 1986. However, the 287 cases in this reporting period that resulted in civil penalties represented an increase of 15 percent over the 244 civil penalty cases of the second half of 1986 and a 26 percent increase over 212 which resulted in civil penalties during the first half of 1986. The \$228,777 in civil penalties collected in the first half of 1987 represented an increase of 42 percent over the \$126,854 collected in the second half of 1986 and an increase of 39 percent over the \$133,206 collected in the first half of 1986.

(See Exhibit 8)

VII. ASSESSMENTS OF SECURITY MEASURES MAINTAINED AT FOREIGN AIRPORTS

Public Law 99-83, the International Security and Development Cooperation Act of 1985, was enacted on August 8, 1985. Title V, Part B of the Act amends section 1115 of the Federal Aviation Act of 1958 and directs the Secretary of Transportation to assess the effectiveness of security measures at those foreign airports being served by U.S. air carriers, those foreign airports from which foreign air carriers serve the United States, those foreign airports which pose a high risk of introducing danger to international travel, and at such other airports as the Secretary may deem appropriate. The Act provides for action to be taken regarding airports which do not maintain and administer effective security measures.

The FAA has been delegated the responsibility for the implementation of certain legislative requirements in Public Law 99-83. These include the assessment of security measures at foreign airports and consultation with the Secretary of State concerning threats to U.S. citizens traveling abroad.

At present, there are 187 foreign airports which meet the assessment requirements of Public Law 99-83. This number fluctuates as changes in service take place at these airports. In 1986, a total of 350 assessments were conducted at 191 airports. During this reporting period, a total of 150 assessments were conducted at 125 foreign airports.

Assessments consist of an indepth analysis of the security measures at the airports visited, using a standard which is based upon, at a minimum, the Standards and appropriate Recommended Practices contained in Annex 17 to the Convention on International Civil Aviation. If FAA develops information indicating that an airport does not maintain and administer effective security measures, these findings are reported to the Secretary of Transportation. Public Law 99-83 provides for notification to the foreign country involved when a determination is made by the Secretary of Transportation that a foreign airport does not maintain and administer effective security measures. Notifications include recommended steps to remedy the problem. The law also specifies when and how the public is to be notified of that determination. Public notice occurs when the foreign government fails to bring security measures up to the standard within 90 days of being notified of the Secretary of Transportation's determination. If the Secretary of Transportation at any time determines, after consultation with the Secretary of State, that a condition exists which threatens the safety or security of passengers, aircraft, or crew traveling to or from a specified airport, the Secretary of Transportation must immediately initiate the public notification procedures and, in addition, apprise the Secretary of State, who must issue a travel advisory. Under these circumstances, the Secretary of Transportation is also required to consider whether the public interest necessitates the immediate suspension of service between the United States and the specified airport.

In addition, deployment of civil aviation security specialists to selected European and Middle East airports in February and March of 1987 was precipitated by the arrest in Frankfurt, Germany, of one of the hijackers of TWA Flight 847 and the trial in Paris, France, of a Lebanese terrorist. During this deployment, a total of 46 specialists were assigned for 2-week intervals to 8 cities in 7 countries. Their primary function was to monitor all U.S. carrier flights and determine whether the extraordinary security measures of the ACSSP were being fully and consistently implemented to ensure maximum security for their flights and passengers. The deployments were terminated on the basis of overall carrier compliance, the failure of possible terrorist actions to materialize, and the lack of intelligence to support the continuation of this security initiative.

VIII. FEDERAL AIR MARSHAL PROGRAM (FAM) ACTIVITIES

The enactment of Public Law 99-83, the International Security and Development Cooperation Act of 1985, established an explicit statutory basis for the FAA's FAM Program. This law provided the Secretary of Transportation with the basis for authorization (with the approval of the Attorney General and the Secretary of State) of persons in connection with the performance of their air transportation duties to carry firearms and to make arrests without warrant for any offense against the United States committed in their presence, or for any felony cognizable under the laws of the United States, if they have reasonable grounds to believe that the person to be arrested has committed or is committing a felony.

FAM's are hired as civil aviation security specialists and, when not on FAM missions, perform the same wide variety of aviation security functions as are performed by other security specialists. However, as FAM's, they receive intensive, highly specialized law enforcement training at the Federal Law Enforcement Training Center, followed by recurrent training every 6 months.

During this reporting period, FAM's continued to provide security coverage of selected flights operating in especially sensitive areas of the world. The missions, all flown with U.S. air carriers, were selected based on analysis of information and intelligence relating to worldwide terrorist activities. Since civil aviation continues to represent an attractive target to terrorists, FAM's will continue this very effective counter-measure to provide in-flight security.

IX. CIVIL AVIATION SECURITY INITIATIVES

As stated in the last Semiannual Report to Congress on the Effectiveness of the Civil Aviation Security Program, the Secretary of Transportation in February of 1986, directed the Safety Review Task Force to conduct a comprehensive review of domestic aviation security policies and practices. The task force reviewed five areas: airport perimeter and air operations areas, air carrier security coordinators and crewmember training, passenger screening procedures, checked baggage and cargo screening, and explosives detection research and development.

Reports on air carrier security coordinators and crewmember training, airport perimeter and air operations areas, and explosives detection research and development were received and the following actions were taken:

- o Air Carrier Standard Security Programs (ACSSP's) have been amended to further limit the number of people authorized to bypass a passenger screening point.
- o Guidance has been developed and provided to FAA regional personnel to work with their individual airports to design contingency plans suitable for those airports.
- o A new airport security classification system (Category X) was developed to identify those airports that have an inherently greater threat based on criteria established by the FAA and industry.
- o The procedures used to ensure separation of screened from unscreened persons have been reviewed at all U.S. airports. Where necessary, more stringent procedures have been implemented.
- o Access controls have been examined at all U.S. airports to assure strict compliance with access control requirements. When necessary, language prescribing access controls in security programs has been tightened.
- o Air carrier ground security coordinators have been required to develop local plans that assure the ground security coordinator functions are accomplished in their absence.
- o The FAA has contracted for new and updated civil aviation security training material for use by FAA and industry in strengthening security programs currently in existence.
- o The FAA has taken an active role in monitoring and participating in air carrier training to ensure proper content and method of presentation.

- o Regional evaluations/inspections now include the process of monitoring compliance with security coordinator requirements. Additionally, a new 2-week training program has been developed for civil aviation security special agents. This course provides uniform FAA policy and guidance concerning all assigned functions in the field, including security coordinator requirements.
- o New requirements have been developed for an airport identification system which limits access authorizations to those areas where individuals have an operational need for access.
- o Assured that major U.S. airports have established formal security committees with participation by all airport tenants.
- o The FAA has ensured that all air carrier "exclusive areas" are properly identified, documented, and controlled.
- o Surveys have been conducted at each major airport to ensure that all fencing and gates are so constructed and maintained that access by unauthorized vehicles and pedestrians is prevented, to the extent possible.
- o The FAA has initiated rulemaking action concerning foreign air carriers' submission of security programs to the FAA for acceptance.
- o The FAA has instituted security program procedures for those airports determined to have an inherently greater security threat.

X. RESEARCH AND DEVELOPMENT

The security system in place at airports today is appropriate for today's threat. In anticipation of the development of handguns constructed of plastics and ceramics, a research and development effort has been initiated. Technologies have been identified and research funded for the concept demonstration phase. Preliminary results with infrared imaging are optimistic; however, alternative concepts are also being explored to identify a system which can be used to screen people for these hijack weapons of the future. The FAA is closely following developments in the private sector on X-ray systems designed specifically to detect nonmetallic weapons and explosives.

The FAA has an aggressive research and development program in the detection of explosives which a terrorist may place in checked or carry-on baggage or carry on concealed on themselves. Significant progress, culminating in ongoing airport tests, has been made with the thermal neutron activation system to inspect checked baggage for explosives. The system uses probing thermal neutrons from a radioactive source to detect the presence of explosives. The operator is provided an alarm should the bag contain threat quantities of explosives. Airport testing of the system began in June 1987 and is continuing at a second location. The FAA has requested \$9 million in the FY 1988 F&E budget to procure a limited number of the thermal neutron activation systems if the airport testing meets FAA performance requirements.

Technology to detect explosives by their evolved vapor is progressing on schedule. Airport testing of a walk-through booth system to search passengers for explosives is scheduled for the summer of 1988.

New technologies that are less mature but have the potential of higher processing speed or lower cost are also being explored. A number of contracts with Government laboratories, private industry, and academia are in different stages of concept feasibility demonstration and development. Some of these new technologies have the promise of higher sensitivity and performance than those systems currently scheduled for airport testing.

XI. OUTLOOK

The worldwide terrorist threat to civil aviation persists in the form of threats to Americans. American interests also continue to be threatened by terrorist organizations and those countries supporting international terrorist activities. Civil aviation will continue to represent a very tempting target to criminals and terrorists because of its high visibility. As evidence of a continuing threat to this industry, similar to the world economy, most governments recognize that increased security efforts must be taken to provide a safer and more secure air transportation system. The recurring assessments of security measures implemented at foreign airports assist foreign airport authorities in improving and maintaining the overall security posture of their international airports.

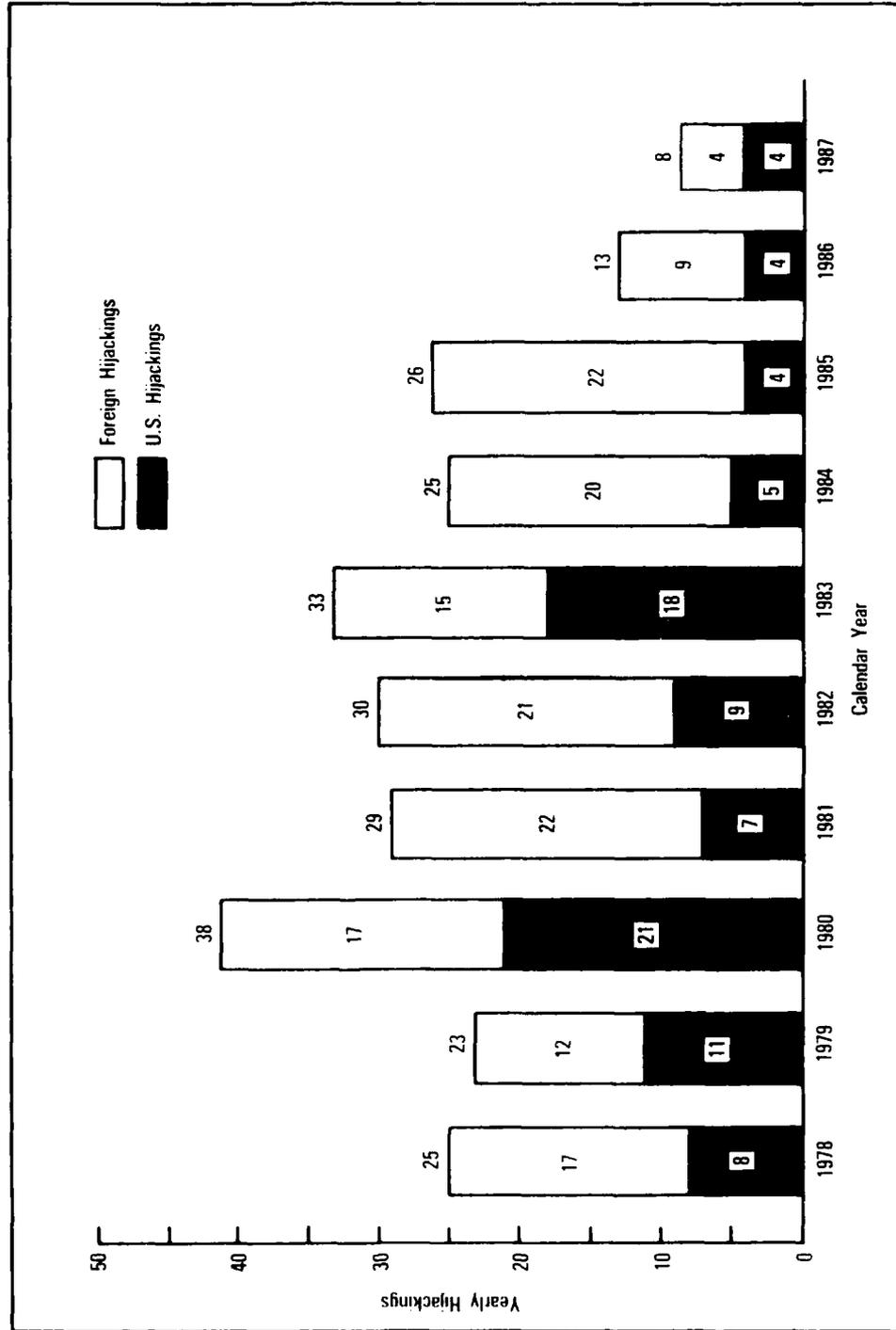
In the United States, joint initiatives will be undertaken with the aviation industry and airport operators to implement the recommendations of the Secretary's Safety Review Task Force with special emphasis on improved monitoring of security procedures at major U.S. airports. Efforts will continue in the review, testing, and evaluation of airport contingency plans through hijack exercises throughout the United States and in the research and development efforts to improve technical equipment utilized in passenger/baggage screening. The FAA will continue its efforts to support the efficient, reliable, safe, and secure flow of people and property through the system.



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

U.S. and Foreign Air Carrier Aircraft Hijackings

(Detailing the Period January 1, 1978-June 30, 1987)

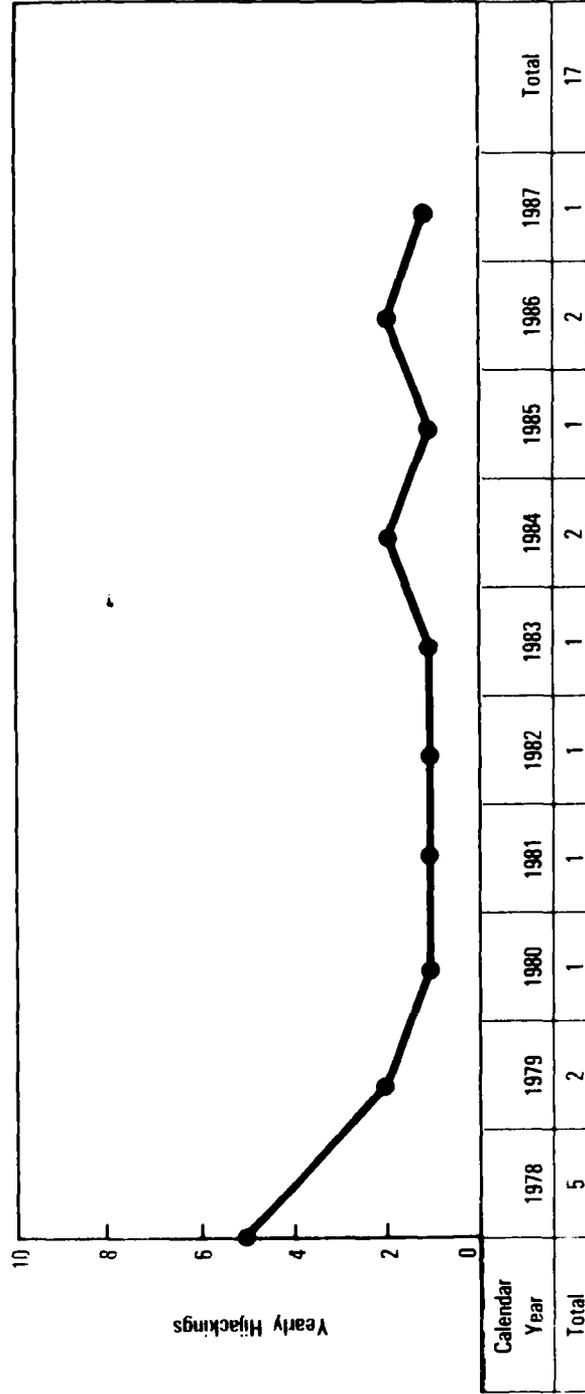




U.S. Department
of Transportation
**Federal Aviation
Administration**

U.S. General Aviation Aircraft Hijackings

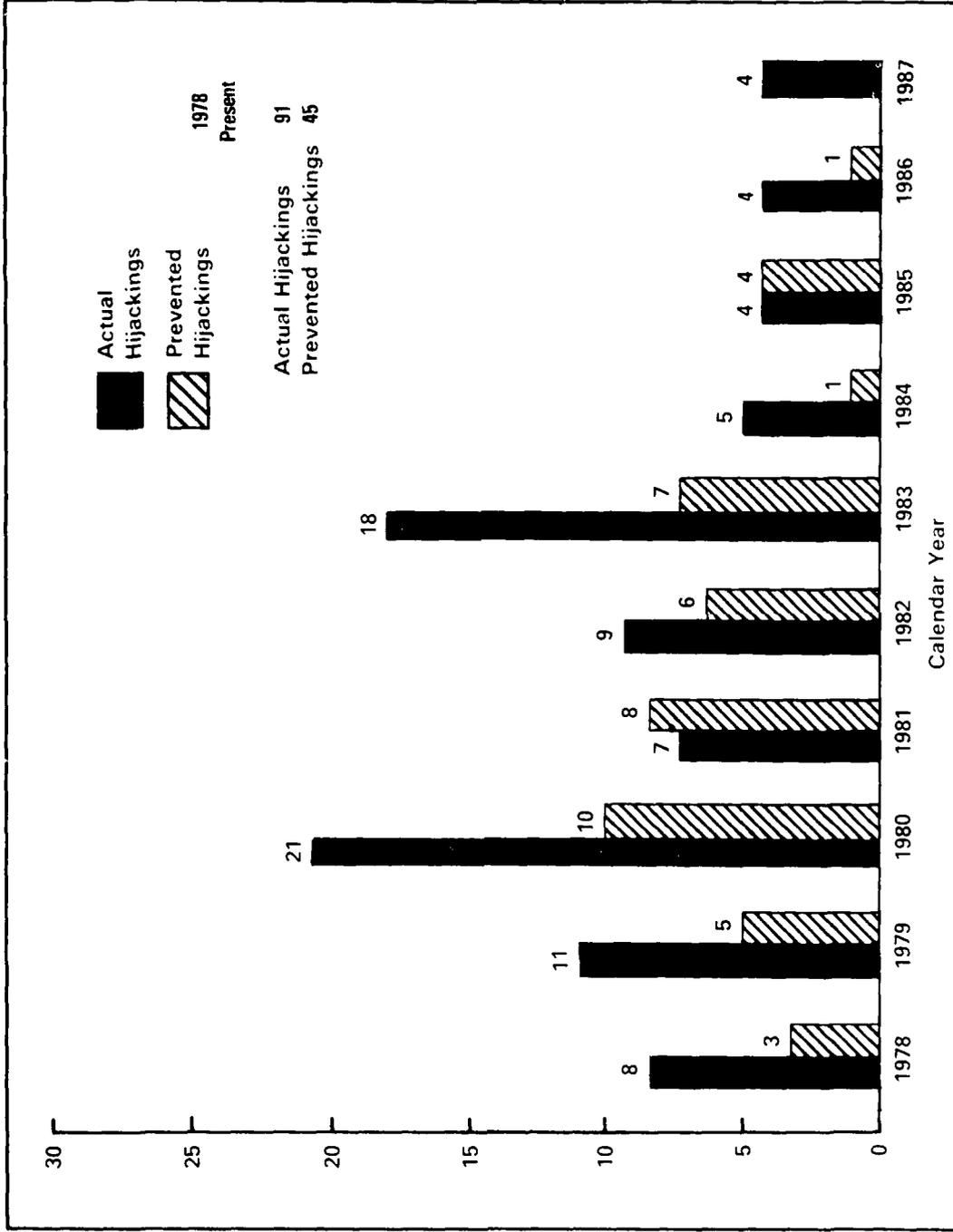
(Detailing the Period January 1, 1978-June 30, 1987)



Date	Airline Aircraft	Numbers Aboard	Hijacker Boarding Point	Destination/ Objective	Remarks
3-10-87	Sheriff's Dept. A/C Ft. Myers, FL	4	Knoxville, TN	Escape	Prisoner Being Transported Subdued by Guards On-Board

Actual Hijackings & Prevented Hijackings of U.S. Air Carrier Aircraft

(Detailing the Period January 1, 1978-June 30, 1987)



As of: 6-30-87

PREVENTED HIJACKINGS: Incidents in Which It Appeared the
Individuals Involved Intended to Hijack an Aircraft but
Were Prevented From Doing So by Security Procedures.
No Hijackings Prevented in First Half of 1987



U.S. Department
of Transportation
Federal Aviation
Administration

Civil Aviation Security Basic Policies

<u>Program Element</u>	<u>Responsibility</u>	<u>Actions</u>
Air Carriers	Secure Travel	<ul style="list-style-type: none">• Maintain Responsive Security Programs• Screen Passengers, Carry-on Items• Secure Baggage, Cargo Procedures• Protect Aircraft
Airports	Secure Operating Environment	<ul style="list-style-type: none">• Maintain Responsive Security Programs• Protect Air Operations Area• Provide Law Enforcement Support
FAA	Leadership	<ul style="list-style-type: none">• Identify and Analyze Threat• Prescribe Security Requirements• Coordinate Security Operations• Provide Technical Assistance• Enforce Regulations
Users	Program Costs	<ul style="list-style-type: none">• Security Funded as Operating Cost of System



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

Civil Aviation Security Scope and Effectiveness 1973-1987

- **Over 8.5 Billion Persons Screened**
- **Over 9.5 Billion Pieces of Carry-on Items Inspected**
- **Over 38,600 Firearms Detected**
- **Nearly 17,000 Related Arrests**
- **117 Hijackings or Related Crimes May Have Been Prevented by Airline and Airport Security Measures**

As of: 6-30-87



U.S. Department
of Transportation

**Federal Aviation
Administration**

Civil Aviation Security Airline Passenger Screening Results January 1981 - June 1987

	1981		1982		1983		1984		1985		1986		1987	
	Jan	June	July	Dec	Jan	June	July	Dec	Jan	June	July	Dec	Jan	June
Persons Screened (Millions)	294.4	304.1	319.5	310.7	313.9	395.2	367.4	408.2	481.1	511.8	550.3	505.0	548.7	548.7
Weapons Detected														
Firearms	971	1284	1286	1390	1363	1421	1325	1632	1448	1539	1525	1713	1645	1645
(1) Handguns	915	1209	1243	1316	1303	1331	1265	1501	1385	1438	1415	1566	1519	1519
(2) Long Guns	7	37	16	41	22	45	31	69	38	52	49	97	48	48
(3) Other	49	38	27	33	38	45	29	62	25	49	61	53	78	78
Explosive/Incendiary Devices	8	3	0	1	4	0	4	2	5	7	4	7	5	5
Persons Arrested														
For Carriage of Firearms/Explosives	534	653	651	663	633	649	565	720	602	708	645	770	734	734
For Giving False Information	34	15	21	6	7	27	6	21	17	25	64	25	44	44

Source: Reports of Passenger Screening Activities at U.S. Airports

As of: 6-30-87



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

Civil Aviation Security Compliance and Enforcement Actions

	1973 through 1980	1981	1982	1983	1984	1985	1986	1987	1988
U.S. AIR CARRIERS									
Warnings	1,578	465	164	231	191	426	439	179	369
Letters of Correction	970	52	98	51	104	101	156	51	576
Non Enforcement Actions	503	38	44	52	33	39	79	68	
Civil Penalties (Amount)	388 (\$361,650)	35 (\$72,547)	28 (\$10,508)	37 (\$26,861)	55 (\$62,300)	42 (\$105,296)	83 (\$122,221)	71 (\$134,250)	
Investigations Closed	3,439	590	334	371	384	608	757		
Investigations Pending	301	115	91	163	88	145	362		
FOREIGN AIR CARRIERS									
Warnings	18	3	2	3	5	11	8	3	
Letters of Correction	44	0	2	1	0	3	13	1	
Non Enforcement Actions	28	1	2	2	3	4	6	1	
Civil Penalties (Amount)	0	2 (\$25,000)	0	0	3 (\$6,000)	0	0	1 (\$ 1,000)	
Investigations Closed	90	6	6	6	11	18	27	6	
Investigations Pending	34	2	4	4	1	7	13	19	
AIRPORTS									
Warnings Issued	734	63	59	57	43	53	60	23	
Letters of Correction	521	14	21	9	14	24	27	20	
Non Enforcement Actions	128	19	9	18	16	10	22	19	
Civil Penalties (Amount)	105 (\$ 74,350)	23 (\$21,675)	8 (\$6,300)	8 (\$7,250)	7 (\$6,750)	6 (\$10,900)	15 (\$ 16,950)	5 (\$ 8,000)	
Investigations Closed	1,488	119	97	92	80	93	124	67	
Investigations Pending	189	25	18	14	12	25	58	113	
INDIVIDUALS									
Administrative Corrections	2,283	2,168	2,267	2,474	1,964	2,450	1,430	702	
Non Enforcement Actions	334	209	161	207	173	171	238	177	
Civil Penalties (Amount)	240 (\$ 42,860)	231 (\$49,410)	114 (\$28,095)	270 (\$84,190)	251 (\$79,429)	278 (\$80,705)	391 (\$129,292)	210 (\$ 85,527)	
Investigations Closed	2,837	2,608	2,542	2,951	2,388	2,899	2,059	1,089	
Investigations Pending	926	398	483	550	662	508	813	1,721	

Exhibit 8

As of: 6-30-87

END

DATE

FILMED

MARCH

1988

DTIC