Federal Aviation Administration

Fact Sheet – Improvements in Civil Aviation Security Since Pan Am 103

For Immediate Release

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The bombing of Pan Am Flight 103 on Dec. 21, 1988, followed by the destruction of French airline UTA Flight 772 in September 1989, energized worldwide efforts to protect the travelling public against terrorist acts. The Departments of Transportation, State, Justice, Treasury and Defense, Federal Aviation Administration, foreign civil aviation authorities, airlines, airports, law enforcement and intelligence agencies have made every effort to make the system safe and secure. Nevertheless, the threat continues. Government and industry are continuing to build on the strengthened security regime created over the last three decades and bring the best technology to bear on this global problem.

On April 3, 1989, the secretary of transportation announced several aviation security initiatives after an intensive internal review of the U.S. aviation security system and after meeting with the families of the Pan Am 103 victims, the Congress and the president. These initiatives included deploying FAA security specialists overseas, strengthening the FAA security notification process, elevating standards for X-ray and metal detection equipment, creating the Aviation Security Advisory Committee, performing a comprehensive review of U.S. air carrier compliance with security requirements, initiating discussions with foreign governments, and prohibiting double standards for receipt of threat information.

The Aviation Security Improvement Act of 1990, which adopted the recommendations of the President's Commission on Aviation Security and Terrorism, mandated 38 specific FAA actions to improve aviation security, all of which have been implemented. Major changes included:

* Improving the flow of intelligence information into the FAA and enhancing its communication with other agencies;
* Placing federal security managers at 19 of the largest and busiest domestic airports, and civil aviation security liaison officers at 20 locations overseas;
* Implementing new employment and training standards for screeners and other security personnel at U.S. airports;
* Publishing guidelines to help airports build security into new airport construction;
Requiring employment investigations and, in some cases, criminal history records checks; and

Conducting joint FAA/Federal Bureau of Investigation vulnerability assessments at major U.S. airports.

Events in the Asia-Pacific region in 1995, where Ramzi Yousef and his followers planned to place bombs on as many as 12 U.S. airliners, reinforced the view that aviation security is a worldwide problem requiring international solutions. At home, increased security measures were implemented in the spring of 1995 and have since been made more effective and efficient. Security measures overseas have also been increased and adjusted a number of times over that same period. Even in the face of increased threats at home, the threat overseas remains greater.

In the wake of the tragic destruction of TWA Flight 800 on July 17, 1996, the president asked Vice President Gore to chair a White House Commission on Aviation Safety and Security. The commission was established by Executive Order 13015 on Aug. 22, 1996, with a charter to study matters involving aviation safety and security, including air traffic control, and to develop a strategy to improve aviation safety and security both domestically and internationally. The vice president submitted an initial report to the president on Sept. 9, 1996, containing 20 recommendations for steps that could be taken immediately to enhance the security of travelers right away.

The commission's final report, which was submitted to the president on Feb. 12, 1997, contained an additional 37 recommendations for improving aviation safety, security, air traffic control efficiency, and response to aviation disasters. Many of these recommendations have either already been implemented or are in the process of being implemented. The FAA has instituted a structured approach to tracking the status of the commission's recommendations, and the secretary of transportation prepares an annual report on their implementation (available on the World Wide Web at http://www.dot.gov/affairs/whcoasas.htm. Over the last two years, the FAA has been working closely with a number of other federal departments and agencies to implement the commission's recommendations. In the area of aviation security, rulemaking has included the revision of basic airport and air carrier security regulations, certification of screening companies and background check regulations for screeners, and security of checked baggage on flights within the United States. The FAA has encouraged the creation of airport security consortia, and has intensified work with the FBI on airport risk assessments.

Perhaps the most significant effort has been FAA's work with the airlines on an extensive deployment of security equipment. The agency to date has purchased 96 certified explosives detection systems and 327 trace explosives detection devices, nearly all of which will be installed in the nation's airports by the end of 1998. Congress recently appropriated an additional $100 million in FY 1999 to purchase more of this equipment, and additional purchases are planned for the following years. The FAA last month certified a second vendor for explosives detection systems, furthering competition in this emerging market. While the government continues to fund the development, purchase and
installation of these new security devices, the airlines, under FAA oversight, are responsible for their operation and maintenance.

With the FAA's support, airlines have implemented Computer-Assisted Passenger Screening (CAPS) systems, which permit the focusing of expensive and time-consuming security measures, reducing passenger inconvenience and protecting the civil liberties of all who fly.

Other advances over the past 10 years include the deployment of FAA security personnel overseas and at the nation's major airports, the hiring of hundreds of aviation security specialists, operational testing of U.S. air carriers overseas, a robust research and development program in explosives-detection technologies and aircraft "hardening" against blast effects, increased numbers of K-9 explosives detection teams at airports, expanded passenger bag matching, and computer-based training and performance monitoring for airline personnel performing pre-board screening.

This past October, the Department of Transportation final rule to improve passenger manifests went into effect. The rule requires U.S. and foreign airlines on flights to and from the United States to collect the full name of each U.S. citizen and to solicit a contact name and number. This rule should improve the notification process to families in the event of a disaster. The department is working with the airlines to ensure proper compliance with the rule and to determine whether it should be extended to domestic flights. In addition, FAA Administrator Jane Garvey recently met with groups representing families of airline crash victims and will continue to meet with them regularly in order to understand and address their concerns.

The evolving and increasingly sophisticated threat of terrorism continues to make this an uncertain world, but these and many other initiatives in security research and development, personnel and procedures over the years have led to a regime that reduces vulnerabilities to acts of terror and appropriately addresses the current threat. The FAA is committed to working with airports, airlines, family and labor groups, law enforcement, and other agencies and governments to continue improving aviation security.


1988

December 1988: On December 29, FAA announced a series of security actions designed to prevent an attack like the December 21 bombing of Pan Am Flight 103. These included requirements for U.S. airlines in Western Europe and the Middle East to X-ray or physically search all checked bags, conduct additional random checks of passenger bags, and achieve a positive match of passengers and bags to keep unaccompanied bags off airplanes.
January 1989: FAA published a rule in the Federal Register requiring airports to install computer controlled access systems, or similar systems, to limit unauthorized entry into secure areas.

February 1989: The secretary of transportation led an U.S. delegation to a special International Civil Aviation Organization (ICAO) session in Montreal on aviation security. The meeting was called at the request of the United States and the United Kingdom to discuss more stringent international security measures for passengers, baggage, and cargo. These consultations resulted in a number of improvements to aviation security standards and recommended practices contained in Annex 17 to the Convention on International Civil Aviation (Chicago Convention) administered by ICAO.

March 1989: FAA announced proposed fines totaling $1 million against 26 airlines for failing to detect test objects during FAA checks of airport screening checkpoints. FAA announced a final rule requiring foreign airlines serving the United States to submit security plans to the agency for review and acceptance. FAA participated in the establishment of the ICAO ad hoc group of specialists on the detection of explosives.

April 1989: On April 3, the secretary of transportation detailed a series of immediate and future FAA actions designed to further enhance aviation security. These included improvements in the FAA security notification process, rulemaking to require explosives detection equipment as part of U.S. airline security programs, and an expansion of FAA's security inspection force. The secretary of transportation met with transportation officials in a half dozen European countries to discuss enhancing international security.

June 1989: FAA began deploying additional security specialists on a temporary basis at overseas locations as the first step in a program to increase permanently FAA's security presence in Europe and the Middle East. FAA announced that it had amended U.S. airline security programs to require more stringent screening of portable electronic devices—including radios, cassette players, and laptop computers—on flights operating from Europe and the Middle East to the United States.

July 1989: FAA published a proposed rule that would require U.S. airlines to install automated explosives detection systems to screen checked bags on international flights at home and abroad. FAA strengthened its system for providing security information to airlines by issuing a final rule requiring mandatory compliance with prescribed countermeasures and making disclosure of information in security alerts a violation subject to penalty.

August 1989: On August 4, Executive Order 12686 established the President's Commission on Aviation Security and Terrorism to "review and evaluate policy options in connection with aviation security, with particular reference to the destruction on December 21, 1988, of Pan American World Airways Flight 103." The first of six FAA-funded Thermal Neutron Analysis explosives detection systems was delivered to the TWA
International Terminal at New York's JFK Airport to begin operational testing. The other five were scheduled for delivery by the end of the year to such locations as Miami and London's Gatwick Airport.

September 1989: FAA published a final rule requiring U.S. airlines to install explosives detection systems to screen checked baggage on international flights. The U.S. delegation was successful in achieving agreement on a number of aviation security issues at the Triennial ICSO Assembly in Montreal. FAA proposed civil penalties totaling $630,000 against Pan Am for alleged security violations at Heathrow and Frankfurt airports. The alleged violations were discovered during an FAA inspection after the crash of Pan Am Flight 103. FAA installed the first operational TNA explosives detection system at JFK airport in New York to screen interline transfer baggage for TWA.

October 1989: The first meeting of the FAA-chartered Aviation Security Advisory Committee (ASAC) was held at FAA headquarters.

December 1989: Assembly and installation of the TNA explosives detection system began at the Pan Am baggage makeup area at Miami International Airport.

1990

January 1990: The U.K. secretary of state for transportation visited the secretary of transportation to discuss the status of investigations into the bombing of Pan Am Flight 103 and other security matters. FAA participated in an effort by ICAO to develop a draft treaty on taggants that could be added to explosives to make them detectable by gas analysis techniques. Two FAA aviation security specialists assigned to ICAO under a memorandum of cooperation for enhanced aviation security and training assistance to member states reported to Montreal Jan. 29. The second expert reported on March 26. FAA completed negotiations with an independent testing laboratory to conduct tests and develop testing protocols for new aviation security equipment.

February 1990: The FAA administrator completed a series of informal meetings with air carriers, passenger interest groups, and employee union representatives to discuss the issue of public disclosure of threats against civil aviation. FAA held a meeting in Washington with selected air carrier security directors to discuss proposed explosives detection system requirements. FAA met in London with directors of security for U.S. air carriers serving Europe and the Middle East to discuss explosives detection systems deployment and other security initiatives.

March 1990: The first permanent FAA civil aviation security liaison officer to be formally assigned to an American Embassy overseas was stationed in London. The Air Transport Association presented the FAA with a proposal to improve the selection and training of security screening employees. FAA welcomed the proposal and intended to require all airlines to adopt the new standards. As a follow-up to his April 1989 trip, the secretary of transportation went to Europe to discuss
international aviation security issues with senior transportation officials. The ICAO Legal Committee with 67 member states considered a draft treaty on taggants. The committee agreed on the provisions of a final convention for ratification by an ICAO Diplomatic Conference in early 1991. FAA and the British Airports Authority signed an agreement to permit the installation of a TNA device at London's Gatwick Airport for use by U.S. carriers.

April 1990: A lone gunman in Port-au-Prince, Haiti seized an American Airlines aircraft. An FAA security team headed by the director of civil aviation security visited Haiti to assess the ability of the government to maintain and administer appropriate security standards. Meetings with the president of Haiti resulted in changes in management and control of aviation security measures. FAA increased its security intelligence analysis capability. The first assignment of FAA intelligence liaison officers to the CIA and Department of State were accomplished. FAA and the U.S. Postal Service began a security survey of military mail facilities and gateways in Frankfurt, Rome, Madrid and London. The first assignments of FAA intelligence liaison officers to the Central Intelligence Agency and the Department of State were completed.

May 1990: The President's Commission on Aviation Security and Terrorism released its final report. FAA issued a proposed change to the air carrier standard security program to increase standards for metal detectors.

June 1990: In response to a recommendation by the President's Commission on Aviation Security and Terrorism, the secretary of transportation created the departmental office of intelligence and security. In a parallel move, the FAA administrator created the positions of assistant administrator for civil aviation security and director for security research and development. FAA amended the air carrier standard security program to require the air carriers to report certain threat information so the agency could make sure the air carriers use resources appropriate to the particular threat. FAA issued a proposed rule that would require the replacement of X-ray machines manufactured before July 22, 1985, with more up-to-date models. It would also require foreign airlines that land and take off in the United States to use X-ray machines that meet accepted standards for screening carry-on luggage. FAA convened a group of explosives experts from government and industry to discuss aircraft hardening techniques. Extraordinary security procedures were implemented in seven additional countries in Eastern Europe and Africa.

July 1990: The U.K. Department of Transport and the British Airports Authority held a press conference in London to announce operation of Gatwick Airport's TNA System. The FAA convened a public meeting of the ASAC to consider specific commission recommendations on cargo and mail security procedures, bomb threat response procedures, airport design standards, and security responsibilities of air carriers, airport operators and federal security managers. The third of six TNA systems became operational at Gatwick Airport.

August 1990: FAA issued a final amendment to the air carrier standard security program establishing new standards for the testing and calibration of metal detectors. FAA issued a proposed change to the air
carrier standard security program to incorporate selection and training standards for screening personnel based on the model resisted by the Air Transport Association. The agency completed arrangements to send 27 security specialists to Europe and the Middle East to monitor U.S. airline compliance with FAA security requirements. Meanwhile, it worked on arrangements to send another 27 to the Far East and Latin America.

September 1990: FAA issued a proposed change to the air carrier standard security program to incorporate ICAO Standard 4.3.1 (passenger/baggage matching) and require the X-ray inspection of international checked baggage at designated U.S. airports.

October 1990: The FAA intelligence division was reorganized into the office of intelligence with three divisions and 32 authorized personnel. FAA issued a proposed change to the air carrier standard security program to require a passenger/baggage match for selected passengers on domestic flights and to introduce new X-ray inspection procedures for checked baggage. FAA proposed a revision of the foreign air carrier model security program to include a requirement to detect test objects, standards for X-ray systems and metal detectors, selection and training standards for screening personnel, a requirement to provide checkpoint security supervisors, and a requirement to implement ICAO Standard 4.3.1 (passenger/baggage matching). FAA issued a final amendment to the air carrier standard security program incorporating ICAO Standard 4.3.1 (passenger/baggage matching) and requiring the X-ray inspection of international baggage at designated U.S. airports effective Dec. 8. Installation of a TNA at Dulles Airport in Virginia was completed.

November 1990: FAA issued a broad announcement soliciting input from industry on new technologies and new applications for existing technologies in civil aviation security. FAA issued a proposed change to the air carrier standard security program to introduce new training standards for persons performing enhanced or extraordinary security procedures at high-risk foreign airports. On Nov. 16, the president signed the Aviation Security Improvement Act of 1990. The act strengthened the federal government's role in civil aviation security through a number of actions recommended by the President's Commission on Aviation Security and Terrorism.

December 1990: FAA issued a final amendment to the air carrier standard security program requiring a passenger/baggage match for selected passengers on domestic flights and implementing new X-ray inspection procedures for checked baggage effective Jan. 10. FAA and FBI held a conference to improve communications and the coordination of information relating to domestic threats to civil aviation. The secretary of transportation issued a DOT Order requiring public notification that Jorge Chavez International Airport in Lima, Peru, did not maintain and administer effective security measures and procedures. U.S. air carriers serving Jorge Chavez International Airport were required to appropriately notify passengers. Improvements were made and the notification requirement lifted in February 1991.
January 1991: After a one-year data collection effort, the FAA removed the TNA explosives detection demonstration system from Miami International Airport for refurbishment by the manufacturer and redeployment to another site. FAA issued a final amendment to the air carrier standard security program that established new training standards for persons performing enhanced or extraordinary security procedures at high-risk foreign airports. The FAA intelligence watch was activated to provide 24-hour intelligence support during the Persian Gulf crisis. The agency, in response to the outbreak of hostilities in the Persian Gulf area, raised the level of airport and airline security to the highest point ever. Additional precautions included increasing the number of law enforcement officers at airports, allowing only ticketed passengers past the screening checkpoint, prohibiting curbside checking of luggage, and prohibiting unattended vehicles from parking within 100 feet of an airport terminal.

February 1991: FAA published a Notice of Proposed Rulemaking to require foreign air carriers to provide passengers a similar level of protection as that afforded by U.S. air carriers serving the same airport. FAA published a Notice of Proposed Rulemaking to require air carriers to notify crewmembers of specific and credible threats against their flights. A team of FAA and FBI personnel completed an airport assessment at a test site (Boston Logan Airport) to develop procedures for eventual use by FAA/FBI field personnel in conducting domestic airport vulnerability assessments.

March 1991: ICAO convened a diplomatic conference that approved a convention to require the introduction of a readily detectable volatile-marking agent ("taggant") in plastic explosives worldwide. FAA initiated a memorandum of agreement with INTERPOL and the largest U.S. airports for the dissemination of threat information through Airport Law Enforcement Agencies Network communications channels. FAA adjusted some specific domestic security measures to decrease the inconvenience to passengers and costs to airports without any decrease in the overall security level.

April 1991: FAA published a Notice of Proposed Rulemaking to establish minimum standards for hiring, continued employment, and contracting for airport and air carrier employees engaged in security-related activities. FAA issued a revised Model Security Program for foreign air carriers that included a requirement to detect FAA test objects, standards for X-ray systems and metal detectors, selection and training standards for screening personnel, a requirement to provide a checkpoint security supervisor, and a requirement to implement ICAO Standard 4.3.1 on passenger/baggage matching.

May 1991: Selections were made for federal security managers at John F. Kennedy, Honolulu, Los Angeles, Chicago, San Francisco, Dallas Fort Worth, and Miami International airports for the first phase of stationing federal security managers at all of the largest airports. Foreign airport assessment activity was expanded to include eight Soviet airports, including two in the Soviet Far East. FAA inspectors visited those locations in anticipation of U.S. air carrier service and
increased Aeroflot service to the United States. FAA provided training to aviation security personnel in Barcelona, Spain, for the 1992 Summer Olympics. FAA authorized implementation of modified security contingency procedures at domestic locations with no change in requirements at overseas locations. The FAA administrator reviewed and approved the "Review of Threats to Civil Aviation."

June 1991: The FAA issued a final rule requiring airlines to notify aircrew members when there is a specific and credible security threat to their flight. Selections were made for Federal Security Managers at Atlanta, Baltimore Washington International, Boston, Denver, Detroit, Houston, San Juan, Seattle, St. Louis, Washington National, and Dulles International to complete the stationing of federal security managers at the largest airports. The Scientific Advisory Panel for Aviation Security was established.

July 1991: FAA issued a final rule to require foreign air carriers to provide passengers a similar level of protection as that afforded by U.S. air carriers serving the same airport. FAA transmitted to Congress the implementation plan for federal security managers and foreign security liaison officers required by the Aviation Security Improvement Act of 1990.

August 1991: The FAA issued a final rule imposing stiffer hiring, training, and performance standards for airline and airport security personnel. The rule included educational requirements and allowed FAA to establish standards for the ability to read, write, and speak English; visual and aural acuity, color perception, and physical dexterity. This rule also established training requirements for the use of airport identification media, including the requirement for training of those who are authorized to access certain security areas of airports. FAA amended its regulations (14 CFR 107.25, Airport Identification Media) to require controlling access to and movement within airports. Areas covered in this section included training of persons authorized to access any area identified in the airport security program, display of airport-approved identification medium, and records of training of airport personnel. FAA issued a final rule requiring each airport operator to designate an airport security coordinator. The coordinator serves as the airport operator's primary contact for security-related activities and communications with FAA.

September 1991: The FAA issued a rule eliminating a "grandfather clause" which had permitted approximately 116 older X-ray screening systems to operate at airport checkpoints without meeting current standards for clarity of image detail.

October 1991: Federal security managers reported to duty at the 18 largest airports to coordinate security measures. The FAA also had 11 security liaison officers on duty overseas.

November 1991: The FAA completed a comprehensive review of its foreign airport assessment program. The agency also reviewed foreign air carrier security programs for the "similar level of protection" criteria mandated in the Aviation Security Act. The secretary of transportation...
issued a DOT Order requiring public notification that Ezeiza International Airport in Buenos Aires, Argentina did not maintain effective security measures and procedures. U.S. air carriers serving Ezeiza International Airport were required to appropriately notify passengers. Improvements were made and the notification requirement was lifted in June 1992.

December 1991: FAA established standardized foreign air carrier inspection documentation based on the performance standards in the Model Security Program. Joint FAA/FBI airport vulnerability assessments were completed at the largest airports. Federal security managers worked closely with airport operators and air carriers at these airports to identify and strengthen potentially vulnerable areas, including those not regulated by the FAA. This program was extended to 10 additional airports.

1992

January 1992: FAA implemented an improved training program for its inspectors conducting foreign airport assessments and foreign air carrier security inspections.

February 1992: FAA proposed a rule to require criminal history records checks on persons who have unescorted access to security-sensitive areas of an airport, as mandated by the Aviation Security Improvement Act of 1990. The proposed rule would deny persons convicted of certain crimes unescorted access to security areas. The FAA issued a policy statement on requirements for recurrent security training for air carrier ground security coordinators and crewmembers. The secretary of transportation issued an order requiring public notification that Ezeiza International Airport in Buenos Aires, Argentina did not maintain effective security measures and procedures. U.S. air carriers serving Ezeiza International Airport were required to notify passengers. FAA issued a policy statement that said airport operators should focus security resources on critical areas of an airport involving air carrier passenger operations.

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