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# AVIATION SECURITY

## Training Standards Needed for Extra Security Measures at Foreign Airports





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

Resources, Community, and  
Economic Development Division

B-226652

December 15, 1989

The Honorable Samuel K. Skinner  
The Secretary of Transportation

Dear Mr. Secretary:

This report provides information on our analysis of changes the Federal Aviation Administration (FAA) made to the Air Carrier Standard Security Program following the loss of Pan Am Flight 103 over Lockerbie, Scotland, on December 21, 1988 (see app. I). We testified on this issue on September 27, 1989, during an executive session of hearings held before the Government Activities and Transportation Subcommittee, House Committee on Government Operations. We conducted our analysis at the Subcommittee's request.

## Results in Brief

Despite additional security measures imposed following the loss of Pan Am Flight 103, FAA cannot be assured that currently required procedures are being properly carried out by airlines at designated high-risk foreign airports. FAA's investigation of Pan Am Flight 103 and subsequent FAA airline security inspections found deficiencies in the way airline security personnel were carrying out extra security measures. We believe these deficiencies occurred largely because FAA has not established in its security program minimum training requirements and standards for extra security measures required at high-risk overseas airports. These standards are necessary to ensure that airline personnel at these airports are sufficiently trained to carry out required security measures. Training standards need to include minimum instruction times and cover topics such as profile application and questioning techniques, and detection of plastic explosives and other sophisticated bombs.

Moreover, FAA did not routinely evaluate formal airline security training at these airports. However, in concurrence with recommendations we made in an earlier report, FAA has begun examining the training and testing of host government security personnel who screen passengers and baggage at high-risk airports. We believe FAA needs to do the same for U.S. airline security personnel charged with carrying out extra security procedures at these airports. Greater FAA scrutiny of training can help ensure that airline security personnel at high-risk overseas airports are adequately trained to carry out the required procedures.

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## Recommendations

Therefore, consistent with the conclusions we reached, we recommend that you direct the Administrator, FAA, to

- develop and include in the security program a comprehensive set of training requirements and standards tailored to the extra screening U.S. carriers are required to conduct at high-risk foreign airports, and
- require that FAA airline security inspections include procedures for evaluations of formal U.S. airline training of security personnel at high-risk airports.

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Because portions of material we presented in our earlier testimony were considered sensitive by FAA, we requested FAA's Office of Civil Aviation Security to review those segments and suggest appropriate changes for public disclosure. We have incorporated these changes into material contained in appendix I. Our analysis was based on a review of the Air Carrier Standard Security Program in effect before and after the Pan Am Flight 103 incident, interviews with FAA program officials on changes made to the program, and examination of recent FAA security inspections at selected airports in Western Europe.

As you know, the head of a federal agency is required by 31 U.S.C. 720 to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Governmental Operations not later than 60 days after the date of this letter and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of this letter.

If you have further questions or would like to discuss these matters in more detail, please contact Kenneth M. Mead, Director, Transportation Issues, at (202) 275-1000.

Major contributors to this report are listed in appendix II.

Sincerely yours,



J. Dexter Peach  
Assistant Comptroller General



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Major Contributors to This Report		

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## Abbreviations

FAA Federal Aviation Administration



# Changes to Airline Security Practices After Pan Am Flight 103

Following the tragic loss of Pan Am Flight 103 over Lockerbie, Scotland, on December 21, 1988, the Federal Aviation Administration (FAA) made changes to airline security practices. It instituted additional security measures at certain high-risk airports in Western Europe and the Middle East. These new measures required airlines to undertake additional procedures in screening and controlling checked and carry-on baggage, cargo, and battery-operated or electronic devices.

We analyzed the changes made to the Air Carrier Standard Security Program, a program approved by FAA and adopted by U.S. airlines. This program delineates aviation security measures to be followed by the airlines at domestic and international airports. Our observations are based on a review of the security program in effect before and after the Pan Am Flight 103 incident, discussions with FAA program officials on changes made to the program, and recent FAA security inspections at selected airports in Western Europe.

Overall, we found that, despite additional security measures imposed following the loss of Pan Am Flight 103, FAA cannot be assured that currently required procedures are being properly carried out by airlines at designated high-risk foreign airports. The results of FAA's recently completed investigation of Pan Am Flight 103 found clear deficiencies in carrying out security procedures, which, in our opinion, may be the result of breakdowns in the training of airline security personnel who screen passengers and baggage. Other FAA airline security inspections show that similar security deficiencies in screening continue. We believe these deficiencies occurred largely because FAA has not established minimum training requirements and standards for extra security measures required at high-risk overseas airports. These standards are necessary to ensure that airline security personnel at these airports are sufficiently trained to carry out required security measures. Additionally, FAA has not evaluated the adequacy of training that airlines do provide to security personnel.

## Background

The Air Carrier Standard Security Program identifies requirements for airline security at all domestic U.S. airports, and stipulates additional security procedures that U.S. airlines must follow at high-risk foreign airports. Responsibility for security at these high-risk airports is shared between the host government and the airlines. Because the host government is responsible for overall security at these airports, it typically conducts initial screening of passengers and baggage for all carriers. However, to bolster the overall security for U.S. airline passengers, FAA

augments host country security at high-risk airports by requiring U.S. airlines to provide additional screening of persons and carry-on luggage. In carrying out its responsibilities, FAA conducts periodic security inspections of the host government's and airline's security at high-risk foreign airports.

In December 1988, following the loss of Pan Am Flight 103, FAA mandated that airlines apply new security measures at high-risk foreign airports. Specifically:

- Airlines must now x-ray or physically search all checked baggage.
- Passengers may not have access to checked baggage following security searches.
- Airlines must take additional measures to preclude unauthorized access to baggage from check-in to loading on board the aircraft.
- Passengers who meet certain FAA criteria must undergo additional screening, and their checked baggage must be physically searched.
- Small packages and parcels that are shipped through passenger ticket counters must be x-rayed or physically examined prior to shipment.

In July 1989, FAA ordered the airlines to take additional security measures to screen battery-operated or electronic devices of passengers. FAA required these measures to counter the threat of terrorists' use of battery-operated or electronic articles as explosives. Such an explosive device hidden in a radio-cassette player was used in the bombing of Pan Am Flight 103.

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## Better Training Requirements and Standards Needed for Overseas Airports

While the new security measures FAA has imposed are a step in the right direction, their effective implementation depends on adequate guidance and training. FAA stipulates training guidance and standards for airline screening at domestic airports but has not developed training requirements for extra security measures required at high-risk foreign airports. The results of FAA's recently completed Pan Am Flight 103 investigation and other recent FAA airline inspections disclosed security deficiencies we believe to be attributable to inadequate training standards and programs.



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## FAA Has Not Established Security Training Standards for Overseas Airports

For domestic airports, the security program identifies core requirements and guidelines for the initial, recurrent, and on-the-job training of airline screening personnel. Basic program curricula include (1) providing formal training on basic screening techniques, and (2) testing screening personnel on their ability to detect a series of FAA test objects.

However, FAA has not identified similar training requirements and standards for the extra security measures required at high-risk foreign airports. FAA believes that such training requirements and standards are unnecessary for two reasons. First, initial screening is normally conducted by the host government. Second, FAA believes the current security program sufficiently identifies guidance for additional screening procedures.

With respect to the host government's initial screening, we found, in our 1988 work on FAA's assessments of foreign airport security,<sup>1</sup> that it is difficult for FAA to assess host government screening. This is because FAA inspectors do not test the operational effectiveness of the host government's security systems nor observe and evaluate the security tests made by host country officials. FAA agreed with our findings and, subject to host government approval, will examine host governments' procedures for testing equipment and personnel, review the records of past tests, and observe the training of security personnel. According to the Manager of FAA's Civil Aviation Security Division, revisions are being made to the format of FAA's assessment report to allow inspectors to report their observations of host governments' screening training on the 1990 assessments.

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## FAA Does Little Evaluation of Airline Security Training

In the absence of specific training requirements and standards, the airlines have developed their own training programs for screening at designated high-risk foreign airports. FAA, however, does not routinely evaluate formal airline security training at these airports.

FAA's Pan Am Flight 103 investigation suggests that security deficiencies found could be related to airline training problems. For example, the investigation found that Pan Am security personnel failed to screen 31 passengers at Heathrow Airport in London to determine whether they should have received additional screening. At Frankfurt Airport in West Germany, five passengers were identified for additional screening but were not referred to security personnel for additional screening.

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<sup>1</sup>Aviation Security: FAA's Assessments of Foreign Airports (GAO/RCED-89-45, Dec. 7, 1988).

Our review of other FAA reports on airline security inspections found similar security deficiencies related to training problems. For example, in a January 1989 inspection of an airline at a major foreign airport, airline security personnel failed to

- apply the FAA-approved criteria to over 30 passengers on 1 flight,
- ensure that 57 passengers identified for additional screening and their checked bags were properly searched, and
- search the carry-on bags of 1 passenger who was selected for additional screening.

In a January 1989 inspection of another airline at the same airport, an airline security employee did not properly conduct physical searches of suspect checked bags. One of the suspect bags contained an electronic device with wires attached and was seen on the x-ray monitor. Instead of performing a physical search of the bag, the screener merely relied on the passenger's assertion as to the contents of the bag.

In a May 1989 inspection (the latest inspection made available to us) of an airline at this airport, the inspector noted that for some flights airline security personnel were not applying the FAA approved criteria, as required, for additional screening. In fact, on some flights, no passengers were selected for additional screening.

We believe these security deficiencies demonstrate breakdowns in security training that point to the need for FAA to establish minimum training standards for high-risk foreign airports. Our review of the security program found that it does not provide guidance on questioning techniques for use in identifying passengers requiring additional screening. In addition, the program does not include procedures for detecting plastic explosives in carry-on luggage. Training standards are needed to ensure that screening personnel are sufficiently indoctrinated in these critical areas.

FAA has recognized the need to evaluate host countries' security training, as indicated in its concurrence with recommendations made in our prior report. We believe FAA should do the same for U.S. airline security personnel charged with carrying out additional security procedures. Without such evaluations, FAA cannot be assured that airline security personnel are adequately trained to carry out required procedures.

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**Appendix I**  
**Changes to Airline Security Practices After**  
**Pan Am Flight 103**

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In summary, FAA has changed its security program as a result of the loss of Pan Am Flight 103, but the program lacks important training requirements and standards for extra security measures required at high-risk overseas airports. Moreover, we believe FAA should routinely evaluate the quality of formal airline training as part of its periodic assessment of airline security procedures. These components are necessary to ensure that new security measures imposed after the Pan Am Flight 103 incident are being properly carried out.

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