

**NEW APPROACHES NEEDED IN  
MANAGING FAA'S HAZARDOUS  
MATERIALS PROGRAM**

*Federal Aviation Administration*

*Report Number: SC-2005-015*

*Date Issued: November 19, 2004*




# Memorandum

U.S. Department of  
Transportation

Office of the Secretary  
of Transportation  
Office of Inspector General

Subject: **ACTION:** Report on New Approaches Needed in  
Managing FAA's Hazardous Materials Program  
Federal Aviation Administration  
SC-2005-015

Date: November 19, 2004

From: Alexis M. Stefani   
Principal Assistant Inspector General  
for Auditing and Evaluation

Reply to  
Attn. of: JA-60

To: Federal Aviation Administrator  
Assistant Secretary for Transportation Policy

This report presents the results of our review of the Federal Aviation Administration's (FAA) Hazardous Materials (HAZMAT) Program. Our objective was to assess whether FAA's execution of its HAZMAT Program was adequate to ensure industry's compliance with HAZMAT regulations. To do this, we focused our audit on FAA's (1) administration of HAZMAT enforcement cases, (2) efforts to ensure that HAZMAT regulations address the unique environment for shipments of HAZMAT by air, and (3) efforts to prevent unauthorized HAZMAT from being carried on board passenger aircraft.

A draft of this report was provided to FAA and the Department of Transportation's Assistant Secretary for Transportation Policy on August 20, 2004. In their comments, FAA and the Assistant Secretary agreed with our recommendations and stated that work is underway to address all outstanding issues identified in the draft report. For five of the six recommendations addressed to FAA, the planned actions are responsive to the recommendations.

For the one recommendation addressed to the Department's Office of Safety, Energy and Environment, the Assistant Secretary for Transportation Policy agreed with our recommendation and stated that a process is being developed for resolving regulatory disagreements between FAA and the Research and Special Program Administration (RSPA) and for any future disagreements between Operating Administrations. Also, RSPA's Deputy Administrator believes that RSPA and FAA are making progress towards building a more cooperative and

collaborative relationship and that regulatory differences are being resolved more effectively and expeditiously.

FAA comments were not fully responsive for one recommendation, and we are requesting additional information. We recommended that FAA institute guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties through the coordinated efforts of the Hazardous Materials Division and Office of the Chief Counsel. In its response, FAA stated that by December 31, 2004 it would implement new timeframe goals for (1) completing HAZMAT violation investigations, and (2) initiating and completing HAZMAT enforcement cases, but FAA stated that it did not believe that guidelines were necessary.

We are requesting that FAA reconsider its position. Existing enforcement policy does not include specific guidelines for when HAZMAT inspectors and attorneys should coordinate during investigations and legal reviews or when issuing penalties. During our review of the HAZMAT enforcement process involving civil penalties, we found that inspectors and attorneys conducted their work independently, without coordination. A clear policy statement and guidance on coordination between inspectors and attorneys at the start of an investigation can save both parties time in developing and processing a case where civil penalties will be recommended.

In the final report, we added a recommendation that FAA develop a covert testing program to evaluate air carriers' compliance with HAZMAT regulations. FAA's procedures for conducting on-site assessments of air carrier compliance with HAZMAT regulations were generally effective. However, in our opinion, a covert testing program is needed to measure the air carriers' level of compliance with acceptance procedures for HAZMAT shipments by air, separate from the inspectors' on-site assessments and done surreptitiously. Such testing goes beyond checking if documentation and training are adequate to verifying that in practice proper acceptance procedures are being followed. Preferably, a joint program would be established in which FAA works with the Department of Homeland Security's Transportation Security Administration so that HAZMAT safety and cargo security testing could be conducted concurrently.

In accordance with Department of Transportation Order 8000.1C, we request that FAA clarify its response and provide specific corrective action dates for the recommendation discussed above. We are also requesting that FAA identify a course of action for conducting covert testing of air carrier compliance with HAZMAT acceptance procedures. We would appreciate receiving your written comments within 30 days. In instances where we are in agreement on the corrective actions and target completion dates provided, the recommendations are considered resolved subject to the follow-up provisions of Order 8000.1C.

We appreciate the courtesies and cooperation of representatives from the Office of Security and Hazardous Materials and the Office of the Chief Counsel during this audit. If you have any questions concerning this report, please call me at (202) 366-1992 or Robin K. Hunt, Deputy Assistant Inspector General for Hazardous Materials, Security and Special Programs, at (415) 744-0420.

Attachment

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cc: Deputy Administrator, Research and Special  
Programs Administration  
Martin Gertel, M-1

# **Executive Summary**

## ***New Approaches Needed In Managing FAA's Hazardous Materials Program Federal Aviation Administration***

**Report No. SC-2005-015**

**November 19, 2004**

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### **OBJECTIVE**

Our objective was to assess whether the Federal Aviation Administration's (FAA) execution of its Hazardous Material (HAZMAT) Program was adequate to ensure industry's compliance with HAZMAT regulations. To do this, we focused our audit on FAA's (1) administration of HAZMAT enforcement cases, (2) efforts to ensure that HAZMAT regulations address the unique environment for shipments of HAZMAT by air, and (3) efforts to prevent unauthorized HAZMAT from being carried on board passenger aircraft.

### **BACKGROUND**

On May 11, 1996, ValuJet flight 592 crashed in the Florida Everglades, killing 110 passengers and crew, as a result of an in-flight fire from improperly packaged hazardous materials (chemical oxygen generators) in the cargo area. This accident called into question the effectiveness of FAA's oversight of HAZMAT shipments on commercial aircraft. At the time of the crash, FAA had about 13 regional inspectors to oversee industry's (mostly air carriers') compliance with HAZMAT requirements.

To strengthen FAA's oversight of HAZMAT shipments by air and enforcement of pertinent regulations, Congress included \$10.5 million in FAA's fiscal year 1997 appropriations, enabling FAA to expand its HAZMAT work force by 130 personnel (e.g., inspectors, support staff, attorneys). FAA used these funds to establish the Dangerous Goods/Cargo Security Program<sup>1</sup> in what was then FAA's Office of Civil Aviation Security Operations.

Since that time, FAA's oversight of HAZMAT has been in flux. Under the Dangerous Goods/Cargo Security Program, FAA inspectors had dual roles: (1) as safety inspectors assessing and enforcing industry's compliance with HAZMAT

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<sup>1</sup> "Dangerous goods" is the international term for hazardous materials transported on aircraft.

regulations, and (2) as security inspectors assessing and enforcing industry's compliance with cargo security requirements. Also, several high-priority aviation security initiatives, such as implementing the recommendations of the White House Commission on Aviation Safety and Security (following the crash of TWA Flight 800 in July 1996), required FAA at times to increase its oversight of aviation security, resulting in a corresponding decrease in oversight of HAZMAT shipments by air.

Immediately following September 11, 2001, FAA's Dangerous Goods/Cargo Security Program was suspended so its inspectors could concentrate on securing the Nation's aviation system. In February 2002, the Dangerous Goods/Cargo Security Program was transferred to the Transportation Security Administration (TSA) but only for a few months. The Department of Transportation (DOT) decided that oversight of HAZMAT shipments would remain within each of its Operating Administrations with HAZMAT responsibilities (e.g., FAA, the Federal Railroad Administration, and the Federal Motor Carrier Administration), so the Dangerous Goods section of the Program was transferred back to FAA and renamed the Hazardous Materials Program in October 2002.<sup>2</sup> The HAZMAT Program was joined with FAA's Internal Security Program and now resides within FAA's Office of the Assistant Administrator for Security and Hazardous Materials.

## **RESULTS IN BRIEF**

The importance of FAA's oversight of industry's compliance with HAZMAT regulations cannot be overstated. Each year, about 50,000 routine shippers of HAZMAT offer each day to 200 U.S. and 200 foreign air carriers HAZMAT packages for shipment by air. However, comprehensive statistics are not collected on the aggregate number of declared and authorized HAZMAT packages or tonnage shipped within the U.S. each day or each year. Adding to the uncertainty is the unknown number of undeclared, unauthorized HAZMAT shipments by air on any given day.

Violations of HAZMAT regulations are prevalent, with more than 11,000 enforcement cases investigated during the period 1999 to 2003 and more than \$35 million collected in civil penalties for the same period. In an enforcement case investigated by our office with assistance from FAA, an all-cargo air carrier pled guilty to 12 felony counts of violating HAZMAT regulations and agreed to pay a criminal penalty of \$6 million.

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<sup>2</sup> During this time, TSA was part of the Department of Transportation, and the Cargo Security section of the Program stayed with TSA. On March 1, 2003, TSA was transferred to the Department of Homeland Security.

Ensuring the safe shipment of HAZMAT by air is inherently a safety matter. However, improperly shipping HAZMAT by air through either negligent or illicit behavior can have the same consequences as a terrorist attack, as demonstrated by the ValuJet Flight 592 crash as a result of an in-flight fire from improperly packaged hazardous materials. This helps underscore the challenge that FAA faces in strengthening the safety of HAZMAT transported by air.

Since the transfer from TSA of the aviation HAZMAT Program in October 2002, FAA has realigned its organizational structure and personnel distribution; hired and trained new members of its workforce; developed and implemented guidance and work plans for conducting inspections, including testing of air carriers' and shippers' compliance with HAZMAT regulations; and created an automated system for collecting and reporting the results of inspection and enforcement activities.

In our opinion, FAA's HAZMAT Program is a better run program today than the program formerly known as the Dangerous Goods/Cargo Security Program in what was then FAA's Office of Civil Aviation Security Operations. Nevertheless, the current situation is far from an "end state" for ensuring the safety of HAZMAT shipments by air, and new approaches are needed in managing the HAZMAT Program. Specifically, FAA needs to:

- **Conduct covert tests to evaluate air carriers' compliance with HAZMAT regulations.** FAA has developed a HAZMAT safety assessment questionnaire used in evaluating air carriers' and shippers' compliance with HAZMAT regulations. FAA HAZMAT inspectors conduct on-site assessments at shippers' and air carriers' facilities that include, among other things, audit tests of HAZMAT *shipping documents* to ensure that the documents are complete and accurate and that only authorized HAZMAT items are being or were shipped by air.

However, we found that HAZMAT inspectors were not conducting covert tests of air carriers' HAZMAT acceptance procedures. FAA's Office of the Chief Counsel has advised HAZMAT Program officials that it cannot conduct covert tests of air carriers' and shippers' hazardous materials acceptance procedures without an exemption to regulatory requirements contained in Title 49 Code of Federal Regulations. It is against regulations to place a hazardous materials label on something that does not contain hazardous material.

In our opinion, a covert testing program is needed to measure the efficacy of the air carriers' acceptance procedures for HAZMAT shipments by air, separate from the inspectors' on-site assessments and done surreptitiously. Such testing would, for example, include covert test scenarios in which FAA "testers" would pose as unknown shippers and offer to the air carriers

shipments that do not conform to HAZMAT regulations, such as packages that do not have the proper markings identifying the type of HAZMAT being shipped. However, test packages should not actually contain any HAZMAT to avoid the risk of a HAZMAT incident. A joint program with TSA could be established so that HAZMAT safety and cargo security testing could be conducted concurrently.

- **Overcome the cumbersome, lengthy, and sometimes ineffectual legal process for administering HAZMAT enforcement cases.** FAA’s cumbersome legal process for administering HAZMAT enforcement cases needs to be changed. Under the current process (1) enforcement actions are taking on average more than a year to complete; (2) final settlements are on average only 41 percent (41 cents on the dollar) of the penalty proposed by inspectors conducting the HAZMAT investigation; (3) 25 percent of the enforcement cases we reviewed in one region were not pursued because of FAA’s inability to meet its self-imposed 2-year rule for filing a Notice of Proposed Civil Penalty; and (4) enforcement caseloads are not distributed equitably, with an average of 166 in-process cases per attorney in one region compared to an average of 16 in-process cases per attorney in another.

FAA needs to institute guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing civil penalties. Also, to change the process for administering HAZMAT enforcement cases, FAA must develop acceptable alternate ways of doing business. One example of an alternate approach is a “ticket” system in which HAZMAT inspectors without attorney involvement would assess a civil penalty against a HAZMAT violator for what FAA considers less-serious offenses.

- **Implement a system-wide approach for “putting on notice” those passengers who have violated HAZMAT regulations.** FAA has a Memorandum of Agreement (Agreement) with TSA addressing collaborative relationships, to include HAZMAT issues. However, some of the provisions in the Agreement have not been fully implemented to prevent passengers from offering unauthorized HAZMAT items in their checked and carry-on baggage.

For example, in the Agreement, FAA and TSA agree to establish procedures for a referral process when TSA finds passengers with any prohibited HAZMAT items in their carry-on baggage. Such items could include fireworks, safety and road flares, tear gas, pepper spray, flammable gas torches, flammable aerosols, household bleach, and hydrogen peroxide. However, system-wide referral procedures have not been developed, and any referral procedures that do exist were developed at the local level.



The amount of HAZMAT discovered in carry-on and checked baggage from the 429 airports where TSA operates is voluminous. For example, during the last 6 weeks of 2003, TSA was responsible for the emergency removal of 8,312 pounds of HAZMAT from 18 airports. Without a standardized, uniform referral approach, FAA has no way of “putting on notice” those passengers who have violated HAZMAT regulations or identifying those passengers who are repeatedly violating the regulations.

FAA should work with TSA to revise the Agreement so it better defines the roles and responsibilities between the two Administrations for preventing unauthorized HAZMAT from being carried on board passenger aircraft. One step towards implementing system-wide referral procedures would be for FAA to initiate a pilot project with TSA and one or more air carriers to determine the effectiveness and cost of an automated operating system to record and process violations of HAZMAT regulations discovered during the screening of passengers’ carry-on and checked baggage.

- **Resolve long-standing differences between FAA and the Research and Special Programs Administration on when HAZMAT is safe for shipment by air.** The Research and Special Programs Administration (RSPA) is responsible for HAZMAT rulemaking for all modes of transportation. It is not uncommon for FAA and RSPA to disagree on how the HAZMAT rules should be worded, as the rules are often based on the requirements for shipments by surface transportation with adjustments sometimes, but not always, made for shipments by air.

FAA has raised concerns to RSPA regarding longstanding air-specific package failures. For example, FAA has concerns that RSPA’s standards for testing and packaging lithium batteries are not sufficient for their safe shipment by air. Specific concerns include that the packaging is not sufficient to protect the lithium batteries from damage and short-circuiting or from self-ignition if exposed to the heat from a cargo fire.

Several incidents have occurred involving the shipment of lithium batteries in air cargo. Most recently, on August 7, 2004, a shipment of lithium batteries was involved in a fire at the airport hub of a major all-cargo carrier. The carrier’s ramp personnel detected smoke coming out of a cargo container in the aft section of the aircraft. After the container had been removed from the aircraft and placed on the ramp, the container burst into flames. The fire was traced to a package containing lithium batteries.

Discussions between FAA and RSPA on the lithium batteries issue and other issues on specific rules governing shipments of HAZMAT by air have been ongoing for 5 years without any effective resolution. The Department needs a

process for resolving disputes of this nature to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

## **Conducting Covert Tests To Evaluate Air Carriers' Compliance With HAZMAT Regulations**

FAA has developed a HAZMAT safety assessment questionnaire used in evaluating air carriers' and shippers' compliance with HAZMAT regulations. FAA HAZMAT inspectors conduct on-site assessments at shippers' and air carriers' facilities that include, among other things, audit tests of HAZMAT *shipping documents* to ensure that the documents are complete and accurate and that only authorized HAZMAT items are being or were shipped by air. During the assessments, HAZMAT inspectors can also observe the air carriers procedures for HAZMAT acceptance, storage, handling, and loading on board aircraft.

However, we found that HAZMAT inspectors were not conducting covert tests of air carriers' HAZMAT acceptance procedures. FAA's Office of the Chief Counsel has advised HAZMAT Program officials that they cannot conduct covert tests of air carriers' and shippers' hazardous materials acceptance procedures without an exemption to regulatory requirements contained in Title 49 Code of Federal Regulations. It is against regulations to place a hazardous materials label on a package that does not contain hazardous material.

Also, TSA requires that air carriers accept cargo only from shippers in the Known Shipper Program. In other words, TSA prohibits air carriers from accepting cargo from unknown shippers. Under the Known Shipper Program, air carriers are required to verify their shippers' legitimacy.

In our opinion, a covert testing program is needed to measure the efficacy of the air carriers' acceptance procedures for HAZMAT shipments by air, separate from the inspectors' on-site assessments and done surreptitiously. Such testing would for example, include covert test scenarios whereby FAA "testers" would pose as an unknown shipper and offer to the air carriers' shipments that do not conform to HAZMAT regulations, such as packages that do not have the proper markings identifying the type of HAZMAT being shipped. However, test packages should not actually contain any HAZMAT to avoid the risk of a HAZMAT incident. A joint program with TSA could be established so that HAZMAT safety and cargo security testing could be conducted concurrently.

## **Overcoming the Cumbersome, Lengthy, and Sometimes Ineffectual Legal Process for Administering Enforcement Cases**

FAA's cumbersome legal process for administering HAZMAT enforcement cases needs to be changed. Civil penalty enforcement cases are taking years to process, proposed penalties are often greatly reduced at settlement, and some enforcement cases are not pursued due to administrative time constraints. In many cases, the settlement penalties had little, if any, deterrent value against the violators' noncompliance with HAZMAT regulations because *the penalties were often assessed too long after the incident and in reduced amounts no longer commensurate with the severity of the infraction.*

In our review of FAA's process for administering HAZMAT enforcement cases in three FAA regions, we found that:

- The time required for completing a HAZMAT enforcement case, from date of incident to assessment of the penalty, ranged from an average of 348 days in the Southwest Region to 873 days in the Southern Region. Contributing to the untimeliness was that inspectors and attorneys conducted their work independently and with little, if any, coordination. We found that seldom did inspectors developing HAZMAT violation cases communicate with attorneys who would process the cases. As a matter of practice, inspectors did not contact attorneys during the course of their investigations.
- The final settlements were, on average, only 41 percent (41 cents on the dollar) of the penalty proposed by the FAA inspector conducting the investigation. In 469 enforcement cases we reviewed for the period October 1, 1999, through August 7, 2003, the total amount of civil penalties proposed by the HAZMAT inspectors was \$19,549,725, compared to civil penalty settlements gotten by the attorneys of \$8,025,995.<sup>3</sup>
- Enforcement cases were not pursued because of the inability to meet FAA's self-imposed 2-year rule for filing a Notice of Proposed Civil Penalty. Our analysis of 104 HAZMAT cases disclosed 26 cases (25 percent) that had not been processed within FAA's time constraints or had not been reviewed by attorneys with sufficient time remaining to allow for proper processing of the cases within 2 years of the incident. All 26 cases, with initial proposed penalties totaling \$910,750, were closed without the alleged violators paying a fine.

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<sup>3</sup> FAA is required to conduct a statutorily mandated evaluation of the HAZMAT violator's ability to pay. According to FAA, the violator's ability to pay often resulted in a reduction of the recommended penalty.

- The average number of enforcement cases in-process handled by each attorney was 16 in the Southwest Region, 110 in the Southern Region, and 166 in the Western-Pacific Region. This was due primarily to the changes in the number of inspectors and attorneys over the last 6 years. In the past 6 years, the ratio of inspectors to attorneys working HAZMAT cases has increased 41 percent. While an average case load of 16 cases per attorney is certainly manageable, an average case load of 110 or 166 cases can significantly contribute to some cases never being processed and a possible willingness to reduce penalties to get a quick settlement.

### ***Alternative Approaches to Processing Enforcement Cases***

To change the process for administering HAZMAT enforcement cases, FAA must develop acceptable alternate ways of doing business. One example of an alternate approach is a procedure used by RSPA. RSPA's HAZMAT inspectors use a streamlined "*ticket*" system for what RSPA considers less-serious offenses. Based on their work during inspections, RSPA inspectors can propose assessing a civil penalty against a HAZMAT violator.

Violations under the "ticket" process are written up by inspectors and then reviewed, approved, and issued by the inspector's supervisor, without attorney involvement. Also, RSPA's system offers the violator a discount on the fine if the assessed penalty is paid within 45 days. Violators can contest the "ticket," which returns the case to RSPA's standard violation procedure. This process greatly reduces the time spent by attorneys on resolving minor offenses. FAA Office of Hazardous Materials, in coordination with the Office of the Chief Counsel, needs to consider such a process that would expedite the civil penalty process.

Another example in expediting the process for administering HAZMAT enforcement cases and, at the same time, reducing the enforcement case workload would be to implement a *voluntary disclosure reporting program* for reporting unsafe practices.<sup>4</sup> Currently, air carriers are required to report HAZMAT incidents (e.g., spills and leaks) to FAA. FAA's investigation of incidents may result in civil penalties against the reporting air carrier for violations of HAZMAT regulations. This process has resulted in sometimes strained relationships between the air carriers and FAA.

By implementing a self-disclosure program, FAA will have the opportunity to reduce its caseload of enforcement actions. A self-disclosure program would not absolve air carriers from civil penalties for egregious practices, but FAA would be

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<sup>4</sup> FAA's Hazardous Materials Division has drafted a voluntary disclosure reporting program and received industry's written comments on it in June 2004. The voluntary disclosure reporting program is currently being circulated within FAA for final coordination.

able to (1) collect better data and study the systemic causes of HAZMAT incidents, (2) foster investigative cooperation with air carriers, and (3) focus its attention on those shippers with a pattern of not complying with HAZMAT regulations.

## **Implement a System-Wide Approach for “Putting on Notice” Passengers Who Violate HAZMAT Regulations**

Inspecting HAZMAT shipments and enforcing HAZMAT regulations are inherently safety matters. Prior to September 11, 2001, air carriers were responsible for the screening of passengers and their checked and carry-on baggage, including screening for explosive, incendiary, and deadly or dangerous weapons. The screening of passengers and their checked and carry-on baggage was conducted almost entirely by third-party screening companies under contract with the air carriers. FAA was responsible for overseeing the air carriers’ compliance with checked and carry-on baggage screening requirements. While all carry-on baggage was required to be screened, a very small percentage of passengers’ checked baggage required screening.

After September 11<sup>th</sup>, the responsibility for screening passengers and their checked and carry-on baggage transferred from the air carriers to TSA. FAA no longer has jurisdiction for overseeing the screening of passengers and their checked and carry-on baggage. Today, for FAA to effectively oversee the shipment of all HAZMAT by air, FAA must work directly with TSA at the Nation’s airports.

FAA has an Agreement with TSA addressing collaborative relationships, including HAZMAT issues. While the Agreement does not address all HAZMAT scenarios, it does clarify basic responsibilities between the two Administrations for screening passengers’ carry-on and checked baggage for prohibited items, including HAZMAT.

However, some of the provisions in the Agreement have not been fully implemented to prevent passengers from “offering for air transportation” unauthorized HAZMAT items in their checked and carry-on baggage. For example, FAA and TSA agree to establish procedures for a referral process when TSA finds passengers with any prohibited HAZMAT items in their carry-on baggage. Such items could include fireworks, safety and road flares, tear gas, pepper spray, flammable gas torches, flammable aerosols, household bleach, and hydrogen peroxide.

However, system-wide referral procedures have not been developed, and any referral procedures that do exist were developed at the local level. For example, our visit to Atlanta’s Hartsfield-Jackson International Airport found that TSA was

not keeping a record<sup>5</sup> of violations of HAZMAT regulations when HAZMAT items were found during the screening of passengers' carry-on baggage at the TSA passenger security screening checkpoints. TSA was also not notifying FAA of these violations. Without a standardized, uniform referral approach, FAA has no way of "putting on notice" those passengers who have violated HAZMAT regulations or identifying those passengers who are repeatedly violating the regulations.

For checked baggage, TSA and FAA agreed that when TSA discovered HAZMAT during the security search of checked baggage, TSA would notify the air carrier that tagged and accepted the baggage. In turn, air carriers are required by HAZMAT regulations to notify FAA of the HAZMAT incident. However, our observations with HAZMAT inspectors of TSA's and air carriers' procedures disclosed that some air carriers were not aware that they were required to report the HAZMAT incidents to FAA. For example, a major air carrier representative at Las Vegas' McCarran International Airport was signing for and accepting HAZMAT items from TSA unaware of the requirement to report HAZMAT incidents to FAA.

HAZMAT regulations also require that all incidents, no matter how small, pertaining to the improper transport of HAZMAT via aircraft be investigated. This includes the discovery of HAZMAT by TSA in passengers' carry-on and checked baggage. The amount of HAZMAT discovered in carry-on and checked baggage from the 429 airports where TSA operates is voluminous. For example, during the last 6 weeks of 2003, TSA was responsible for the emergency removal of 8,312 pounds of HAZMAT from 18 airports. TSA hired a contractor to manage the disposal of abandoned prohibited items (e.g., knives) and HAZMAT at airport checkpoints. Processing the large volume of incidents without the development of efficient and expedient means of investigating and processing the reported incidents will hinder the effectiveness of FAA's HAZMAT mission.

To further strengthen its oversight of unauthorized HAZMAT carried in passengers' carry-on and checked baggage, FAA developed an operating system for use by TSA and the air carriers to record and process violations of HAZMAT regulations discovered during security screening. The system would be used to track recurring violations by type of violation and number of violations committed by individual passengers, regardless of where the violations took place or which air carrier was involved. The system has not been implemented because TSA decided to develop its own system, and the air carriers are reluctant to use the system due to passenger privacy concerns.

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<sup>5</sup> Records should include information such as date of violation, passenger name, air carrier and flight number, and type of HAZMAT item abandoned by the passenger.

FAA should work with TSA to revise the Agreement so it better defines the roles and responsibilities between the two Administrations for preventing unauthorized HAZMAT from being carried on board passenger aircraft. This cannot be overstated, as the quantity of HAZMAT items found in passengers' carry-on and checked baggage has been vast since TSA began screening it.

## **Resolving Long-Standing Differences Between FAA and RSPA On When HAZMAT Is Safe for Shipment by Air**

FAA is responsible for overseeing and enforcing regulations pertaining to the shipment of HAZMAT by air, but RSPA is responsible for rulemaking governing the safety of HAZMAT for all modes of transportation. It is not uncommon for FAA and RSPA to disagree on how the rules should be worded, as the rules are often based on the requirements for shipments by surface transportation with adjustments sometimes, but not always, made for shipments by air.

During the course of our audit, FAA identified the five significant areas of hazardous materials safety that it deemed detrimental to the safe passage of HAZMAT shipments by air and that needed to be immediately addressed through the coordinated efforts of FAA and RSPA. The exhibit lists FAA's air-specific HAZMAT strategic plan priorities for fiscal year 2004 and RSPA's corresponding priorities.

For example, in 1999, FAA raised concerns about the shipment of bulk-packed, nonrechargeable lithium batteries after a pallet of lithium batteries caught fire while being handled between flights at Los Angeles International Airport. In September 2000, RSPA issued a safety advisory and FAA issued a Dangerous Goods Advisory Bulletin to air carriers concerning the shipment of lithium batteries by air.

Since that time, several other incidents have occurred involving the shipment of lithium batteries in air cargo. Most recently, on August 7, 2004, a shipment of lithium batteries was involved in a fire at the airport hub of a major all-cargo carrier. The carrier's ramp personnel detected smoke coming out of a cargo container in the aft section of the aircraft. After the container had been removed from the aircraft and placed on the ramp, the container burst into flames. The fire was traced to a package containing lithium batteries. The incident is currently under investigation by the National Transportation Safety Board.

Discussions between FAA and RSPA on the lithium batteries issue and other issues on specific rules governing shipments of HAZMAT by air have been ongoing for 5 years without any effective resolution. Not until recently has there been any serious effort to resolve the lithium batteries issue and only as a direct

result of (1) the August 7<sup>th</sup> incident; (2) FAA's technical report (issued June 2004) concluding that lithium batteries pose a unique threat in the cargo compartment of an aircraft because lithium fires cannot be extinguished by Halon 1301, the only FAA-certified fire suppressant system that is permitted for use in cargo compartments of passenger-carrying aircraft; and (3) the attention at the highest levels in the Department's management, including the Secretary and Deputy Secretary. The Department is in the process of issuing an interim final rule on the shipment of lithium batteries by air. However, the Department needs a process for resolving disputes of this nature to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

## **RECOMMENDATIONS**

To enhance FAA's Hazardous Materials Program, we recommend that FAA:

1. Institute guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties through the coordinated efforts of the Hazardous Materials Division and Office of the Chief Counsel.
2. Implement a nationwide plan to distribute equitably the number of HAZMAT enforcement cases per attorney.
3. Develop and implement alternate means of administering HAZMAT enforcement cases, such as the ticketing system used by RSPA.
4. Finalize and implement the FAA voluntary disclosure reporting program. FAA needs to take a systematic approach in effectively managing the program, to include disseminating all useful information to the air carriers, HAZMAT shippers, and the Department's Operating Administrations that have HAZMAT oversight and enforcement responsibilities.
5. Implement a pilot project with TSA and one or more air carriers to determine the effectiveness and cost of having an automated operating system to record and process violations of HAZMAT regulations discovered during the screening of passengers' carry-on and checked baggage. In the interim, collaborate with TSA to implement system-wide procedures for notifying FAA of HAZMAT incidents associated with passengers' carry-on baggage.
6. Issue an advisory circular notifying all air carriers that they must report to FAA all unauthorized HAZMAT found in passengers' checked baggage and take enforcement actions against those air carriers not complying with the reporting requirements.



To enhance the Department's internal HAZMAT regulatory coordination, we recommend the Department's Office of Safety, Energy and Environment:

7. Establish and implement a process for resolving HAZMAT regulatory disputes between FAA and RSPA to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

**New Recommendation Added to the Final Report:** To strengthen its assessments of air carriers' compliance with HAZMAT regulations, we recommend FAA:

8. Develop and implement a covert testing program to evaluate air carriers' compliance with the required acceptance procedures for HAZMAT shipments by air. Preferably, a joint program would be established in which FAA works with TSA.

## **MANAGEMENT COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE**

A draft of this report was provided to FAA and the Department's Assistant Secretary for Transportation Policy on August 20, 2004. In their comments, FAA and the Assistant Secretary agreed in general with our recommendations and stated that work is underway to address all outstanding issues identified in the draft report. For five of the six recommendations addressed to FAA, FAA planned actions are responsive to the recommendations. Specifically, to enhance its HAZMAT Program, FAA would:

- Implement a plan to more evenly distribute the HAZMAT enforcement cases among the FAA legal offices by December 31, 2004. (**Recommendation 2**)
- Develop a streamlined enforcement process for certain HAZMAT violation cases involving unauthorized HAZMAT in passengers' checked and carry-on baggage where the HAZMAT division manager, not the attorney, would issue notices of violations. FAA would also consider the applicability of such an approach for other types of HAZMAT violations that are factually straightforward and involve relatively low-dollar penalties. This will require rulemaking, and FAA expects to have a Notice of Proposed Rulemaking in agency coordination by September 30, 2005. (**Recommendation 3**)
- Finalize and publish its advisory circular on the HAZMAT voluntary disclosure reporting program by December 31, 2004. Under the voluntary disclosure reporting program, air carriers would be allowed to self-report to FAA instances of noncompliance with HAZMAT regulations. FAA will issue

a letter of correction, instead of a civil penalty, for instances of noncompliance that are voluntarily disclosed. **(Recommendation 4)**

- Address the possibility of a pilot project to gain access to TSA's database that identifies passengers who have abandoned the most dangerous HAZMAT at screening checkpoints. However, before it can do so, FAA needs to revise its existing Agreement with TSA. FAA expects to complete discussions with TSA concerning access to its database by December 31, 2004. **(Recommendation 5)**
- Issue an advisory circular clarifying the air carriers' HAZMAT reporting requirements by May 31, 2006.

FAA stated that it was not necessary, at this time, to issue an advisory circular notifying air carriers of their HAZMAT reporting requirements. According to FAA, over 3,000 HAZMAT assessments of air carrier airport stations are conducted annually, and there have been only a few isolated cases where unauthorized HAZMAT was found in passengers' checked baggage that the air carrier did not report to FAA, as required. This is compared to over 1,000 reports of unauthorized HAZMAT in checked baggage from air carriers each month.

According to FAA, individual air carriers and the Air Transport Association have reported that they cannot provide the address of passengers because of privacy concerns. To address the privacy concern, FAA is coordinating with RSPA to amend the Hazardous Materials Regulations to require disclosure of the addresses of passengers who violate the Regulations. FAA anticipates that RSPA will issue its Final Rule in February 2006. After the rule is published, FAA will issue an advisory circular clarifying the air carriers' HAZMAT report requirements by May 31, 2006. **(Recommendation 6)**

However, for one recommendation, FAA comments were not fully responsive, and we are requesting some additional information. We recommended that FAA institute guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties through the coordinated efforts of the Hazardous Materials Division and Office of the Chief Counsel. **(Recommendation 1)**

In its response, FAA stated that it would implement new timeframe goals for (1) completing HAZMAT violation investigations, and (2) initiating and completing HAZMAT enforcement cases by December 31, 2004. However, FAA did not believe that guidelines were necessary for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties because guidelines already exist under current FAA enforcement policy.

We believe that guidelines are necessary and should remain as part of the recommendation because existing enforcement policy does not include specific guidelines for when HAZMAT inspectors and attorneys would coordinate during investigations, legal reviews, and penalty issuance.

During our review of the HAZMAT enforcement process involving civil penalties, we found that inspectors and attorneys conducted their work independently and without any coordination. We also found that enforcement cases take an average of more than 1 year to process, which raises questions about the effectiveness and efficiency of the investigation and legal review process. In many cases, the settlement penalties had little, if any, deterrent value against the violators' noncompliance with HAZMAT regulations because the penalties assessed were too far removed, in both time and dollar amount, from the incident that initiated the enforcement action.

We concluded that to better coordinate HAZMAT operating objectives, FAA's HAZMAT Division and Office of the Chief Counsel must develop and implement effective guidelines and timeframes for coordinating their resources in conducting investigations, conducting legal reviews, and issuing penalties. A clear policy statement and guidance on coordination between inspectors and attorneys at the start of an investigation can save both parties time in developing and processing a case where civil penalties will be recommended.

In its other comments to the draft report, FAA requested that the finding regarding the reduction in civil penalties by the attorneys from the amount recommended by the inspectors be placed in context. FAA stated that there are circumstances that warrant mitigation of the penalty, such as the violator taking corrective action. FAA also stated that statutes mandate it conduct an evaluation of the HAZMAT violator's ability to pay. According to FAA, the violator's ability to pay frequently results in a reduction of the recommended penalty. We have revised the final report to reflect this context.

The Assistant Secretary for Transportation Policy agreed with our recommendation to implement a process for resolving HAZMAT regulatory disputes between FAA and RSPA. The Assistant Secretary stated that a process is being developed for resolving regulatory disagreements between FAA and RSPA and for any future disagreements between Operating Administrations. The Assistant Secretary anticipated having a formalized process in place by February 2005. **(Recommendation 7)** Also, RSPA's Deputy Administrator believes that RSPA and FAA are making progress towards building a more cooperative and collaborative relationship and that regulatory differences are being resolved more effectively and expeditiously.

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# INTRODUCTION

## *Background*

Hazardous material (HAZMAT) is defined by the Department of Transportation (DOT) as a substance or material that is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Items that are determined to be hazardous are listed in the Hazardous Materials Table.<sup>1</sup> There are 3,084 separate items listed in the table; 936 of the items are forbidden on passenger aircraft, and 615 are forbidden on all-cargo aircraft.

On May 11, 1996, ValuJet Flight 592 crashed in the Florida Everglades, killing 110 passengers and crew, as a result of an in-flight fire from improperly packaged hazardous materials (chemical oxygen generators) carried in the cargo area. This accident called into question the effectiveness of the Federal Aviation Administration's (FAA) oversight of HAZMAT shipments on commercial aircraft. At the time of the crash, FAA had about 13 regional inspectors to oversee industry's, mostly air carriers', compliance with HAZMAT requirements.

To strengthen FAA's oversight of HAZMAT shipments by air and enforcement of pertinent regulations, Congress included \$10.5 million in FAA's fiscal year 1997 appropriations, enabling FAA to expand its HAZMAT workforce by 130 personnel (e.g., inspectors, support staff, attorneys). FAA used these funds to establish the Dangerous Goods/Cargo Security Program<sup>2</sup> in what was then FAA's Office of Civil Aviation Security Operations.

Since that time, FAA's oversight of HAZMAT has been in flux. Under the Dangerous Goods/Cargo Security Program, FAA inspectors had dual roles: (1) as safety inspectors assessing and enforcing industry's compliance with HAZMAT regulations, and (2) as security inspectors assessing and enforcing industry's compliance with cargo security requirements. Also, several high-priority aviation security initiatives, such as those recommended by the White House Commission on Aviation Safety and Security (following the crash of TWA Flight 800 in 1996), required FAA to at times increase its oversight of aviation security. This resulted in a corresponding decrease in oversight of HAZMAT shipments by air.

Immediately following September 11, 2001, FAA's Dangerous Goods/Cargo Security Program was suspended so that its inspectors could concentrate on

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<sup>1</sup> The Hazardous Materials Table is found in Title 49, Code of Federal Regulations, Section 172.101.

<sup>2</sup> "Dangerous goods" is the international term for hazardous materials transported on aircraft.

securing the Nation's aviation system. In February 2002, the Dangerous Goods/Cargo Security Program was transferred to the Transportation Security Administration (TSA) but only for a few months. DOT decided that oversight of HAZMAT shipments would remain within each of its Operating Administrations with HAZMAT responsibilities, (e.g., FAA, the Federal Railroad Administration, and the Federal Motor Carrier Administration), so the Dangerous Goods section of the Program was transferred back to FAA and renamed the Hazardous Materials Program in October 2002.<sup>3</sup> The HAZMAT Program was then joined with FAA's Internal Security Program and now resides within FAA's Office of the Assistant Administrator for Security and Hazardous Materials.

## ***Objective, Scope, and Methodology***

The audit objective was to evaluate FAA's oversight of industry's compliance with HAZMAT regulations. Specifically, we assessed whether FAA's execution of its Hazardous Materials Program was adequate to ensure industry's compliance with HAZMAT regulations. To do this, we focused our audit on FAA's (1) administration of HAZMAT enforcement cases, (2) efforts to ensure that HAZMAT regulations address the unique environment for shipments of HAZMAT by air, and (3) efforts to prevent unauthorized HAZMAT from being carried on board passenger aircraft.

The audit was conducted from June 2003 to May 2004 and covered FAA's HAZMAT Program activities during the period October 1999 to March 2004. We conducted our review in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States.

To evaluate FAA's oversight of industry's compliance with HAZMAT regulations, we interviewed key FAA officials and staff responsible for developing and implementing the Hazardous Materials Program. We reviewed and analyzed FAA requirements, directives, and guidance for executing the Program. We accompanied HAZMAT inspectors as they conducted their assessments of air carriers' and shippers' HAZMAT operations. Due to legal constraints, we did not conduct covert tests of the procedures for shipping HAZMAT.

We analyzed performance goals, budget documents, HAZMAT assessment reports, incident reports, incident investigation reports, and other documents we considered germane to our audit objectives.

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<sup>3</sup> During this time, TSA was part of DOT and the Cargo Security section of the Program stayed with TSA. On March 1, 2003, TSA was transferred to the Department of Homeland Security.

We analyzed closed and in-process HAZMAT enforcement cases to determine how cases had been and were being processed. This work was accomplished by visiting with attorneys from FAA's Office of the Chief Counsel, both at FAA Headquarters and at selected regions.

We performed work at FAA Headquarters and three FAA regions: the Western-Pacific Region in Lawndale, California; the Southwest Region in Fort Worth, Texas; and the Southern Region in Atlanta, Georgia. We visited selected field offices in each region (seven field offices in total). We visited air carrier and shipper cargo handling facilities located at or near major airports nationwide. We also met with HAZMAT program officials from DOT's Office of Intermodal Hazardous Materials Program, the Research and Special Programs Administration's (RSPA) Office of Hazardous Materials Safety, congressional staff members, and industry representatives to better understand HAZMAT safety issues.

## ***Prior Audit Coverage***

The Office of Inspector General had not conducted an audit of FAA's Hazardous Materials Program. In 1998, the Office of Inspector General conducted an audit of FAA's Dangerous Goods/Cargo Security program. In that report,<sup>4</sup> we focused primarily on FAA's inspection and enforcement of industry's compliance with cargo security requirements. We found a substantial rate of air carrier and indirect air carrier<sup>5</sup> noncompliance with cargo security regulations. In 2001, we conducted a follow-up audit<sup>6</sup> and found the same or similar levels of air carrier and indirect air carrier noncompliance with cargo security regulations.

The Department initiated an evaluation of its HAZMAT programs, and the Office of Inspector General participated in it with the DOT's Operating Administrations. The purpose of the evaluation was to assess the effectiveness of DOT's overall HAZMAT programs as they affect each step in the HAZMAT transportation process, from packaging through delivery to end user. In its March 2000 report,<sup>7</sup> DOT reported that the HAZMAT programs lacked the Department-wide strategic planning and direction necessary to ensure effective deployment of resources and that there were not reliable and sufficient data with which to make informed program decisions.

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<sup>4</sup> OIG Report Number AV-1998-178, "Dangerous Goods/Cargo Security Program," July 23, 1998. OIG reports can be accessed on our website at [www.oig.dot.gov](http://www.oig.dot.gov).

<sup>5</sup> An indirect air carrier is an entity that accepts cargo from a shipper and delivers it to commercial airlines for transport. An airfreight forwarder is considered an indirect air carrier.

<sup>6</sup> OIG Report Number SC-2002-113, "Audit of the Air Cargo Security Program," September 19, 2002.

<sup>7</sup> Department of Transportation, "Departmentwide Program Evaluation of the Hazardous Materials Transportation Programs," March 2000.

In response to a congressional request, the General Accounting Office<sup>8</sup> issued a report, “Undeclared Air Shipments of Dangerous Goods and DOT’s Enforcement Approach,” in January 2003. It reported that DOT, the Postal Service, and major air carriers know that undeclared air shipments of hazardous materials occur and can have serious consequences but that there are no statistically valid data to reliably estimate the nature and frequency of such shipments.

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<sup>8</sup> As of July 2004, this organization changed its name to the Government Accountability Office.



## **FINDINGS AND RECOMMENDATIONS**

FAA's importance in overseeing industry's compliance with HAZMAT regulations cannot be overstated. Each year, about 50,000 routine shippers of HAZMAT offer each day to 200 U.S. and 200 foreign air carriers HAZMAT packages for shipment by air. However, comprehensive statistics are not collected on the aggregate number of declared and authorized HAZMAT packages or tonnage shipped within the U.S. each day or each year. Adding to the uncertainty is the unknown number of undeclared, unauthorized HAZMAT shipments by air on any given day.

Also, violations of HAZMAT regulations are prevalent, with more than 11,000 enforcement cases investigated during the period 1999 to 2003 and more than \$35 million collected in civil penalties for the same period. In an enforcement case investigated by our office with assistance from FAA, an all-cargo air carrier pled guilty to 12 felony counts of violating HAZMAT regulations and agreed to pay a criminal penalty of \$6 million.

Ensuring the safe shipment of HAZMAT by air is inherently a safety matter. Improperly shipping HAZMAT by air through either negligent or illicit behavior can have the same consequences as a terrorist attack, as demonstrated by the ValuJet Flight 592 crash as a result of an in-flight fire from improperly packaged hazardous materials. This helps underscore the challenge that FAA faces in strengthening the safety of HAZMAT transported by air.

Since the transfer from TSA to FAA of the aviation HAZMAT Program, FAA has made considerable progress in reestablishing it as a bona fide program for overseeing and enforcing industry's compliance with HAZMAT regulations. Since October 2002, FAA has realigned the Program's organizational structure and personnel distribution, hired and trained new members of its workforce, developed and implemented guidance and work plans for conducting inspections and investigations, and created an automated system for collecting and reporting the results of inspection and enforcement activities.

In our opinion, FAA's HAZMAT Program is a better run program today than when it was part of the Dangerous Goods/Cargo Security Program in what was then FAA's Office of Civil Aviation Security Operations. Nevertheless, the current situation is far from an "end state" for ensuring the safety of HAZMAT shipments by air, and new approaches are needed in managing the HAZMAT Program.

Specifically, FAA needs to:

- **Resolve long-standing differences between FAA and RSPA on when HAZMAT is safe for shipment by air.** RSPA is responsible for rulemaking governing the safety of HAZMAT for all modes of transportation. It is not uncommon for FAA and RSPA to disagree on how the rules should be worded, as the rules are often based on the requirements for shipments by surface transportation with adjustments sometimes, but not always, made for shipments by air.

FAA has raised concerns to RSPA regarding long-standing air-specific package failures. For example, FAA has concerns that RSPA's standards for testing and packaging lithium batteries are not sufficient for their safe shipment by air. Specific concerns include that the packaging is not sufficient to protect the lithium batteries from damage and short-circuiting or from self-ignition if exposed to the heat from a cargo fire.

Several incidents have occurred involving the shipment of lithium batteries in air cargo. Most recently, on August 7, 2004, a shipment of lithium batteries was involved in a fire at the airport hub of a major all-cargo carrier. The carrier's ramp personnel detected smoke coming out of a cargo container in the aft section of the aircraft. After the container had been removed from the aircraft and placed on the ramp, the container burst into flames. The fire was traced to a package containing lithium batteries.

Discussions between FAA and RSPA on the lithium batteries issue and other issues on specific rules governing shipments of HAZMAT by air have been ongoing for 5 years without any effective resolution. The Department is in the process of issuing an interim final rule on the shipment of lithium batteries by air. However, the Department needs a process for resolving disputes of this nature to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

- **Conduct covert tests to evaluate air carriers' compliance with HAZMAT regulations.** FAA has developed a HAZMAT safety assessment questionnaire used in evaluating air carriers' and shippers' compliance with HAZMAT regulations. FAA HAZMAT inspectors conduct on-site assessments at shippers' and air carriers' facilities that include, among other things, audit tests of HAZMAT *shipping documents* to ensure that the documents are complete and accurate and that only authorized HAZMAT items are being or were shipped by air.

However, we found that HAZMAT inspectors were not conducting covert tests of air carriers' HAZMAT acceptance procedures. FAA's Office of the Chief

Counsel has advised HAZMAT Program officials that it cannot conduct covert tests of air carriers' and shippers' hazardous materials acceptance procedures without an exemption to regulatory requirements contained in Title 49 Code of Federal Regulations. It is against regulations to place a hazardous materials label on a package that does not contain hazardous material.

In our opinion, a covert testing program is needed to measure the efficacy of the air carriers' acceptance procedures for HAZMAT shipments by air, separate from the inspectors' on-site assessments and done surreptitiously. Such testing would, for example, include covert test scenarios in which FAA "testers" would pose as unknown shippers and offer to the air carriers shipments that do not conform to HAZMAT regulations, such as packages that do not have the proper markings identifying the type of HAZMAT being shipped. However, test packages should not actually contain any HAZMAT to avoid the risk of a HAZMAT incident. A joint program with TSA could be established so that HAZMAT safety and cargo security testing could be conducted concurrently.

- **Overcome the cumbersome, lengthy, and sometimes ineffectual legal process for administering HAZMAT enforcement cases.** FAA's cumbersome legal process for administering HAZMAT enforcement cases needs to be changed. Under the current process (1) enforcement actions are taking on average more than a year to complete; (2) final settlements are on average only 41 percent (41 cents on the dollar) of the penalty proposed by inspectors conducting the HAZMAT investigation; (3) 25 percent of the enforcement cases we reviewed in one region were not pursued because of FAA's inability to meet its self-imposed 2-year rule for filing a Notice of Proposed Civil Penalty; and (4) enforcement caseloads are not distributed equitably, with an average of 166 in-process cases per attorney in one region and an average of 16 in-process cases per attorney in another.

FAA needs to institute acceptable guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing civil penalties. Also, to change the process for administering HAZMAT enforcement cases, FAA must develop acceptable alternate ways of doing business. One example of an alternate approach is a "ticket" system in which HAZMAT inspectors without attorney involvement assess a civil penalty against a HAZMAT violator for what FAA considers less-serious offenses.

- **Implement a system-wide approach for "putting on notice" those passengers who have violated HAZMAT regulations.** FAA has a Memorandum of Agreement (Agreement) with TSA addressing collaborative relationships, to include HAZMAT issues. However, some of the provisions in

the Agreement have not been fully implemented to prevent passengers from offering unauthorized HAZMAT items in their checked and carry-on baggage.

For example, in the Agreement, FAA and TSA agree to establish procedures for a referral process when TSA finds passengers with any prohibited HAZMAT items in their carry-on baggage. Such items could include fireworks, safety and road flares, tear gas, pepper spray, flammable gas torches, flammable aerosols, household bleach, and hydrogen peroxide. However, system-wide referral procedures have not been developed, and any referral procedures that do exist were developed at the local level.

The amount of HAZMAT discovered in carry-on and checked baggage from the 429 airports where TSA operates is voluminous. For example, during the last 6 weeks of 2003, TSA was responsible for the emergency removal of 8,312 pounds of HAZMAT from 18 airports. Without a standardized, uniform referral approach, FAA has no way of “putting on notice” those passengers who have violated HAZMAT regulations or identifying those passengers who are repeatedly violating the regulations.

FAA should work with TSA to revise the Agreement so it better defines the roles and responsibilities between the two Administrations for preventing unauthorized HAZMAT from being carried on board passenger aircraft. Also, one step toward implementing system-wide referral procedures would be for FAA to initiate a pilot project with TSA and one or more air carriers to determine the effectiveness and cost of an automated operating system to record and process violations of HAZMAT regulations discovered during the screening of passengers’ carry-on and checked baggage.

During the course of our review, we also identified minor deficiencies in areas where FAA could improve the efficiency of the Program’s operations, such as verifying the completeness and accuracy of inspectors’ labor distribution reports and clarifying the guidance used for conducting HAZMAT assessments of air carriers and shippers. These and other findings, along with actions needed to improve efficiencies in the Program’s operations, were presented in a briefing before the Assistant Administrator and the staff of the Office of Security and Hazardous Materials on June 9, 2004. At that briefing, FAA officials agreed actions were needed to improve the efficiencies of its HAZMAT operations and stated that work is underway to address these deficiencies.

## ***Resolving Long-Standing Differences Between FAA and RSPA on When HAZMAT Is Safe for Shipment by Air***

FAA is responsible for overseeing and enforcing regulations pertaining to the shipment of HAZMAT by air. However, the Secretary of Transportation has delegated to RSPA the responsibility for rulemaking governing the safety of HAZMAT for all modes of transportation. RSPA requests and receives input from FAA as to how proposed rulemakings would affect the safe transportation of HAZMAT by air, but FAA does not have approval authority over RSPA's final rules. It is not uncommon for FAA and RSPA to disagree on how the rules should be worded, as the rules are often based on the requirements for shipments by surface transportation with adjustments sometimes, but not always, made for shipments by air.

During the course of our audit, FAA identified the following five significant areas of hazardous materials safety that it deemed detrimental to the safe passage of HAZMAT shipments by air and that needed to be immediately addressed through the coordinated efforts of FAA and RSPA. The exhibit lists FAA's air-specific HAZMAT strategic plan priorities for fiscal year 2004 and RSPA's corresponding priorities.

- **Non-spillable electric storage batteries.** Laptop computers, electric lawn mowers, electric hand trucks and uninterruptible power sources have caused fire and smoke incidents during air transportation.
- **Lithium batteries.** FAA has concerns that industries' "on-time delivery" expectations will continue to fuel air shipments of lithium batteries from the battery manufacturer in one location to the device assembly point in another. Several lithium battery fires have occurred in air cargo over the last 5 years.
- **Air-specific HAZMAT packaging standards.** FAA needs to work with RSPA in examining existing air-mode packaging standards and to consider the need to establish a testing protocol for air-specific packaging.
- **Flammable aerosols in luggage and the apparent effects of static electricity.** There are reports of unexplained suitcase "explosions" on airport conveyor belts, where a common factor has been flammable vapor build-up within the suitcase. The effects of static electricity are suspected as a contributing factor in these cases.
- **Diagnostic Specimens.** This is an ongoing area of discussion between FAA and RSPA. FAA is requesting that the captain-in-command be notified of all

infectious substances and diagnostic specimens carried on board passenger and all-cargo aircraft.

FAA has been attempting to resolve these significant hazardous materials safety issues with RSPA for over 5 years. For example, in 1999, FAA raised concerns about the shipment of bulk-packed, nonrechargeable lithium batteries after a pallet of lithium batteries caught fire while being handled between flights at Los Angeles International Airport. In September 2000, RSPA issued a safety advisory and FAA issued a Dangerous Goods Advisory Bulletin to air carriers concerning the shipment of lithium batteries by air.

Since that time, several other incidents have occurred involving the shipment of lithium batteries in air cargo. Most recently, on August 7, 2004, a shipment of lithium batteries was involved in a fire at the airport hub of a major all-cargo carrier. The carrier's ramp personnel detected smoke coming out of a cargo container in the aft section of the aircraft. After the container, seen in Figure 1, was removed from the aircraft and placed on the ramp, the container burst into flames. The fire was traced to a package containing lithium batteries, as seen in Figure 2. The incident is currently under investigation by the National Transportation Safety Board.

***Figure 1. Damage to Cargo Container Caused by a Fire Involving Lithium Batteries***



**Figure 2. Scorched Lithium Batteries**



Not until recently has there been any serious effort to resolve the lithium batteries issue and only as a direct result of (1) the August 7<sup>th</sup> incident; (2) FAA's technical report issued in June 2004 concluding that lithium batteries pose a unique threat in the cargo compartment of an aircraft because lithium fires cannot be extinguished by Halon 1301, the only FAA-certified fire suppressant system that is permitted for use in cargo

compartments of passenger-carrying aircraft; and (3) the attention at the highest levels in the Department's management, including the Secretary and Deputy Secretary.

Also, in its September 29, 2004 letter to RSPA's Associate Administrator for Hazardous Materials Safety, the Air Line Pilots Association, International petitioned RSPA to prohibit bulk shipments of lithium batteries from both passenger and cargo-only aircraft until adequate packaging standards are in place.

In another example, again in 1999, FAA raised concerns that certain packaging standards (e.g., cap seal closure of plastic containers for liquid products) developed by RSPA as acceptable for HAZMAT shipments are not acceptable for shipment by air. This type of packaging is certified by RSPA to carry liquids that are flammable, corrosive, or both, such as gasoline and aviation fuel. FAA contends that when exposed to high altitudes and pressurization during air travel, the containers are no longer viable for transporting flammables and corrosives.

FAA's concerns are based on actual incidents when the containers leaked during flights. In 1999, FAA conducted an analysis of 1998 and 1999 HAZMAT incidents reports and found that airlines reported to FAA 831 incidents of packaging having leaked during flight. In one incident in March 1999, an all-cargo carrier reported that 240 milliliters of isobutyric acid<sup>9</sup> was discovered leaking from a package at one of the air carriers' sorting facilities. The package had already flown from Newark to the sorting facility. According to the HAZMAT incident report, a cap seal had apparently failed. No deaths, injuries, or physical damage to an aircraft or ground facility were reported, but considering the volatility of this liquid, the potential existed for serious consequences to have occurred.

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<sup>9</sup> Isobutyric acid is a flammable/combustible material that can be ignited by heat, sparks, or flames. When ignited, it will produce irritating, corrosive, or toxic gas.



In another incident in March 1999, an all-cargo carrier reported that 30 milliliters of a corrosive liquid, sodium metasilicate,<sup>10</sup> was discovered leaking from a package after it had been off-loaded from an aircraft in Anchorage, Alaska. The HAZMAT incident report stated that the lid seal on a plastic drum had failed, allowing release of the material.

During this time, FAA brought its concerns to the attention of RSPA and requested that RSPA participate in FAA-funded studies that have shown this particular container as being not airworthy for shipping HAZMAT. RSPA does not agree with the type of studies FAA conducted. RSPA, however, in late 2003 joined the testing consortium used by FAA in evaluating HAZMAT containers and packaging.<sup>11</sup>

The Air Line Pilots Association has the FAA-funded study on the seal closure of plastic containers for liquid products and plans to present the study to its member pilots. Also, several member air carriers of the Air Transport Association have seen the study and are interested in knowing what actions FAA will be taking on this issue.

RSPA officials say that incidents of leaking containers are infrequent and statistically negligible and that the cost of preventing a single leak may far outweigh the benefits derived. Also, many factors need to be taken into consideration before changing U.S. HAZMAT policies because of the impact such a change can have on how HAZMAT is handled and processed for transport worldwide.

Although FAA can issue advisory circulars to shippers and air carriers on this matter, without RSPA specifically changing its HAZMAT regulations, the packaging can still be used for shipments of HAZMAT by air. Discussion between FAA and RSPA on this packaging issue and other issues on specific rules governing shipments of HAZMAT by air have been ongoing for 5 years without any effective resolution. The Department is in the process of issuing an interim final rule on the shipment of lithium batteries by air. However, the Department needs a process for resolving disputes of this nature to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

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<sup>10</sup> Contact with sodium metasilicate can result in severe skin irritation; inhalation of sodium metasilicate dusts can irritate the upper respiratory tract.

<sup>11</sup> During the course of our audit, FAA and RSPA agreed to find consensus on issues concerning the transportation of HAZMAT via air by forming working groups.



## ***Conducting Covert Tests To Evaluate Air Carriers' Compliance With HAZMAT Regulations***

FAA has developed a HAZMAT safety assessment program used in evaluating air carriers' and shippers' compliance with HAZMAT regulations. FAA HAZMAT inspectors conduct on-site assessments at shippers' and air carriers' facilities that include, among other things, audit tests of HAZMAT *shipping documents* to ensure that the documents are complete and accurate and that only authorized HAZMAT items are being or were shipped by air. During the assessments, HAZMAT inspectors can also observe the air carriers procedures for HAZMAT acceptance, storage, handling, and loading on board aircraft.

Overall, we found that the inspectors' HAZMAT assessments were generally effective in evaluating the air carriers' compliance with HAZMAT regulations. However, we found that HAZMAT inspectors were not conducting covert tests of air carriers' HAZMAT acceptance procedures. FAA's Office of the Chief Counsel has advised HAZMAT Program officials that it cannot conduct covert tests of air carriers' and shippers' hazardous materials acceptance procedures without an exemption to regulatory requirements contained in Title 49 Code of Federal Regulations. It is against regulations to place a hazardous materials label on a package that does not contain hazardous material.

Also, TSA requires that air carriers accept cargo only from shippers under the Known Shipper Program. In other words, TSA prohibits air carriers from accepting cargo from an unknown shipper. Under the Known Shipper Program, air carriers are required to verify shippers' legitimacy.

In our opinion, a covert testing program is needed to measure the efficacy of the air carriers' acceptance procedures for HAZMAT shipments by air, separate from the inspectors' on-site assessments and done surreptitiously. Such testing goes beyond checking if documentation and training are adequate to verifying that in practice proper acceptance procedures are being followed. Such testing would for example, include covert test scenarios whereby FAA "testers" would pose as an unknown shipper and offer to the air carriers shipments that do not conform to HAZMAT regulations, such as packages that do not have the proper markings identifying the type of HAZMAT being shipped. However, test packages should not actually contain any HAZMAT to avoid the risk of a HAZMAT incident. A joint program with TSA could be established so that HAZMAT safety and cargo security testing could be conducted concurrently.

Before it could begin covert testing of the air carriers' HAZMAT acceptance procedures, FAA would have to request from RSPA an exemption to the section of the HAZMAT regulation that prohibits placement of a hazardous materials label

on a package that does not contain hazardous material. Also, a joint program established with TSA would allow for concurrent covert testing of HAZMAT safety regulations and the Known Shipper Program requirements.

## ***Overcoming the Cumbersome, Lengthy, and Sometimes Ineffectual Legal Process for Administering Enforcement Cases***

FAA's cumbersome legal process for administering HAZMAT enforcement cases needs to be changed. Civil penalty enforcement cases are taking years to process, proposed penalties are often greatly reduced at settlement, and some enforcement cases are not pursued due to enforcement time constraints. We analyzed completed cases where an Order Assessing Civil Penalty had been rendered at three FAA regional offices and found that:

- The time required to complete a HAZMAT enforcement case, from date of incident to assessment of the penalty, ranged on average from 348 days in the Southwest Region to 873 days in the Southern Region.
- Final settlements were, on average, only 41 percent (41 cents on the dollar) of the penalty proposed by inspectors conducting the HAZMAT investigation.
- Twenty-five percent of the enforcement cases we reviewed in one region were not pursued because of FAA's inability to meet its self-imposed 2-year rule for filing a Notice of Proposed Civil Penalty.
- Enforcement caseloads are not distributed equitably, with an average of 166 and 110 in-process cases per attorney in two regions and an average of 16 in-process cases per attorney in another region.

If FAA is to reduce the number of HAZMAT violations and the risk of a HAZMAT-related accident, its enforcement program must react to HAZMAT violations in a more expeditious manner. FAA's Office of Security and Hazardous Materials and Office of the Chief Counsel must develop and implement effective guidelines and timeframes for coordinating their resources in conducting investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalty.

## HOW MUCH TIME IS TOO MUCH TIME ?

Our review of 798 HAZMAT enforcement cases at three FAA regional offices for the period October 1, 1999, through August 7, 2003, found that on average it took between 348 and 873 days to process a HAZMAT enforcement case from the date the HAZMAT incident occurred to the date the civil penalty was rendered (as seen in Table 1). Processing HAZMAT enforcement cases involves conducting investigations, conducting legal reviews, and issuing civil penalties. Generally, FAA expects that investigations will be completed and the case initiated by counsel within 180 days.

**Table 1. Average Number of Days Elapsed in Processing HAZMAT Enforcement Cases**

Region	Cases Initiated <sup>a</sup>	Cases Completed <sup>a</sup>	Average Number of Days from:			
			Date of Incident to Receipt by Legal <sup>b</sup>	Receipt by Legal to NOPCP <sup>c</sup>	NOPCP to OACP <sup>d</sup>	Incident to OACP <sup>e</sup>
Southwest	99	85	128	95	136	348
Western Pacific	141	117	186	159	151	477
Southern	558	267	244	413	216	873
<b>Total</b>	<b>798</b>	<b>469</b>				

NOPCP: Notice of Proposed Civil Penalty, OACP: Order Assessing Civil Penalty

- Total number of cases FAA initiated as of 10/01/99 and cases completed by 08/07/03. Cases were considered completed if an Order Assessing Civil Penalty had been issued.
- Average number of days from the date of the incident to the date the Office of Hazardous Materials provided its case for proposed civil penalty to the Office of the Chief Counsel.
- Average number of days from the date the Office of the Chief Counsel received the case from the Office of Hazardous Materials to the date the Office of the Chief Counsel issued a Notice of Proposed Civil Penalty.
- Average number of days from the Office of the Chief Counsel's Notice of Proposed Civil Penalty to the date the Order Assessing Civil Penalty was rendered.
- Average days from the date of the incident to the date of the penalty being assessed.

Our review of the HAZMAT enforcement process involving civil penalties disclosed that inspectors and attorneys conducted their work independently and without any coordination. Seldom was there any communication between inspectors developing HAZMAT violation cases and attorneys who would process the cases. As a matter of practice, inspectors did not contact attorneys during the course of their investigations.

Once investigations were completed, including all reviews and approvals within each region's Hazardous Materials Division, the cases were forwarded to each region's Office of the Chief Counsel for legal review. Attorneys started their reviews of the HAZMAT cases by reading, for the first time, the inspector's report and summary conclusions. If an attorney felt an investigation lacked sufficient data or details or the attorney just needed more information, the attorney would then contact the investigating inspector. This might not take place until more than a year after the incident had taken place.

Simple coordination between inspectors and attorneys at the start of an investigation can save both parties time in developing and processing a case where civil penalties will be recommended. Inspectors should state their reasons for developing a case, and attorneys should provide advice about the projected strength of a case and what the inspectors need to provide to help ensure a strong case is presented. Without up-front communication between inspectors and attorneys, neither group can benefit from the other's knowledge and skills.

Enforcement cases that take an average of more than 1 year to process raise questions about the effectiveness and efficiency of the investigation and legal review process. In many cases, the settlement penalties had little, if any, deterrent value against the violators' noncompliance with HAZMAT regulations because *the penalties were often assessed too long after the incident and in reduced amounts no longer commensurate with the severity of the infraction.*

FAA's Office of Security and Hazardous Materials and Office of the Chief Counsel must re-evaluate the amount of time expended on cases. To better coordinate HAZMAT operating objectives, they must develop and implement effective guidelines and timeframes for coordinating their resources in conducting investigations, conducting legal reviews, and issuing penalties. In doing so, FAA should look at the enforcement processes at other DOT Operating Administrations with HAZMAT programs for ways to improve the efficiency of its own process.

For example, the Federal Railroad Administration's policy is for its HAZMAT inspectors to prepare violation reports indicating the seriousness of a violation and for one of its attorneys to determine the civil penalty. The inspector's report will be reviewed by a regional HAZMAT specialist and forwarded to Federal Railroad Administration Headquarters within 30 days of the inspection report. An assigned attorney at the Headquarters will review the case and any special circumstances discussed by the inspector and determine the appropriate civil penalty. Attorney processing is expected to be completed within 90 days of the report's arrival at the Headquarters.

## SIGNIFICANT REDUCTIONS IN CIVIL PENALTIES

FAA HAZMAT inspectors and attorneys conduct their investigations and enforcement activities in a conscientious manner. However, the monetary penalties rendered from their efforts are often significantly reduced. We analyzed the results of 469 enforcement cases where an Order Assessing Civil Penalty against a violator had been issued and found that the final settlements on average were only 41 percent of the civil penalty proposed by the HAZMAT inspectors (as seen in Table 2).

**Table 2. Final Settlement as a Percentage of Civil Penalties Proposed by the HAZMAT Inspectors**

FAA Region	No. of Cases <sup>a</sup>	Civil Penalties Proposed by HAZMAT Inspectors	Final Settlement	Final Settlement as a Percentage of Civil Penalties Proposed by HAZMAT Inspectors
Southwest	85	\$3,442,875	\$1,400,950	41%
Western Pacific	117	2,910,025	1,128,042	39%
Southern	267	13,196,825	5,497,003	42%
<b>Total/Percentage</b>	<b>469</b>	<b>\$19,549,725</b>	<b>\$8,025,995</b>	<b>41%</b>

<sup>a</sup>Initiated on or after October 1, 1999, with an Order Assessing Civil Penalty issued as of August 7, 2003.

Attorneys have the prerogative to change an inspector's proposed penalty and often do. For example, FAA is required by statute to conduct an evaluation of the HAZMAT violator's ability to pay. According to FAA, this evaluation often results in a reduction in the civil penalties proposed by HAZMAT inspectors.

For the 469 cases analyzed, the attorneys reduced the proposed penalty in 147 cases (31 percent) and increased the proposed penalty in 35 (7 percent). However, the final settlements were, on average, only 51 percent of what the attorneys themselves had recommended (as seen in Table 3).

**Table 3. Final Settlement as a Percentage of Civil Penalties Proposed by the HAZMAT Attorneys**

FAA Region	No. of Cases	Civil Penalties Proposed by HAZMAT Attorneys	Final Settlement	Final Settlement as a Percentage of Civil Penalties Proposed by HAZMAT Attorneys
Southwest	85	\$2,650,375	\$1,400,950	53%
Western Pacific	117	1,839,900	1,128,042	61%
Southern	267	11,384,975	5,497,003	48%
<b>Total/Percentage</b>	<b>469</b>	<b>\$15,875,250</b>	<b>\$8,025,995</b>	<b>51%</b>

In the 469 cases analyzed, the HAZMAT inspector had proposed a civil penalty of \$5,000 or less for 86 cases (as seen in Table 4), but 175 cases ended up being assessed a penalty of \$5,000 or less (Table 5), more than double the number proposed. The results for the smallest cases, those for which the proposed penalty was \$1,000 or less, was even more striking. Six cases had penalties proposed at that level, but 74 cases were closed for \$1,000 or less—an 11-fold increase.

**Table 4. Summary of Civil Penalties Proposed at \$5,000 and Less**

FAA Region	Number of Civil Penalties Proposed by HAZMAT Inspectors					
	\$1,000 or less	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	Total
Southwest	0	5	7	1	3	16
Western Pacific	3	12	13	3	10	41
Southern	3	5	3	11	7	29
<b>Total</b>	<b>6</b>	<b>22</b>	<b>23</b>	<b>15</b>	<b>20</b>	<b>86</b>
<b>Percentage</b>	<b>7%</b>	<b>26%</b>	<b>27%</b>	<b>17%</b>	<b>23%</b>	<b>100%</b>

**Table 5. Summary of Final Settlements at \$5,000 and Less**

FAA Region	Number of Civil Penalties Settled by HAZMAT Attorneys					
	\$1,000 or less	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	Total
Southwest	18	3	10	3	4	38
Western Pacific	22	13	17	5	6	63
Southern	34	8	10	8	14	74
<b>Total</b>	<b>74</b>	<b>24</b>	<b>37</b>	<b>16</b>	<b>24</b>	<b>175</b>
<b>Percentage</b>	<b>42%</b>	<b>14%</b>	<b>21%</b>	<b>9%</b>	<b>14%</b>	<b>100%</b>

Assessments averaging only 41 percent of the penalty proposed by the HAZMAT inspectors or 51 percent of the penalty proposed by the attorneys and an 11-fold increase in final settlements versus proposed penalties of \$1,000 or less raise questions about whether certain cases should go through the current civil penalty process. FAA's Office of Security and Hazardous Materials and Office of the Chief Counsel need to revise the policy for processing civil penalties to include guidance on which cases could go through the civil penalty process without an attorney's involvement.

## **CIVIL PENALTY CASES NEVER PURSUED**

The Federal Government has 5 years from the date of a HAZMAT incident to state whether it will prosecute a HAZMAT violator.<sup>12</sup> FAA has self-imposed a 2-year rule from the date of an incident to provide a violator with a Notice of Proposed Civil Penalty. In the Southern Region, we analyzed various types of information from 104 of 558 cases initiated and found 26 cases (25 percent) that had not been processed within FAA's time constraints or had not been reviewed by attorneys in time to allow for proper processing of the cases within 2 years of the incident. All 26 cases, with initial proposed penalties totaling \$910,750, were closed without the alleged violators paying a fine. Of the 26 cases:

- Eleven cases were closed because Notices of Proposed Civil Penalty had not been issued within 2 years. These 11 cases contained proposed civil penalties totaling \$326,875 and ranged from \$1,000 to \$84,000.
- Six cases were not pursued because the attorneys determined the investigation lacked sufficient evidence. However, FAA's final action of determining the sufficiency of evidence was not accomplished until the 2-year period had lapsed. These six cases had initial proposed penalties totaling \$291,500 and ranged from \$30,000 to \$110,000. We question that cases with such large fines would be lacking in sufficient evidence. It would appear that the cases had reached their 2-year limit, and the attorneys were forced to close the cases.
- Nine cases where a Notice of Proposed Civil Penalty had been issued to alleged HAZMAT violators but were not processed until less than a month before the 2-year window closed. All nine cases had to be closed by the Office of the Chief Counsel without further processing. The violators could no longer be located, had closed businesses, or the notices had to be delivered to violators located outside the United States. Since the notices were not received by the violators within 2 years of the violations, the cases were closed without

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<sup>12</sup> Title 28 United States Code Section 2462.

further action. The nine cases had initial proposed penalties totaling \$292,375, ranging from \$9,000 to \$52,500.

This situation of civil penalty cases not pursued to finality because of a self-imposed 2-year rule raises questions about whether the 2-year period needs to be extended, HAZMAT inspectors and attorneys need to coordinate case workload earlier in the investigation and civil penalty process, or both. FAA's Office of Security and Hazardous Materials and Office of the Chief Counsel need to establish guidance for how enforcement cases should be evaluated before time constraints become the deciding factor on whether cases should go through the civil penalty process.

## **INSPECTOR STAFFING VERSUS ATTORNEY STAFFING**

The FAA's Office of Security and Hazardous Materials is now fully staffed, but the number of attorneys available to process HAZMAT cases has been reduced. In 1997, there were 109 inspectors available to inspect, investigate, and prepare enforcement cases (in addition to their cargo security work). At the same time, the Office of the Chief Counsel had about 16 attorneys (12 full-time and 4 part-time attorneys) processing HAZMAT enforcement cases. This resulted in a ratio of about eight inspectors for every attorney processing cases. As of October 1, 2003, there were 135 inspectors dedicated full-time to FAA HAZMAT operations. The Office of the Chief Counsel had about 14 attorneys (7 full-time and 7 part-time attorneys) processing enforcement cases. This has resulted in a ratio of about 13 inspectors for every attorney processing cases.

Over the last 6 years, the ratio of inspectors to attorneys working HAZMAT cases has increased 41 percent. The increase in inspectors over attorneys is magnified beyond basic percentage increases because today's inspectors are dedicated full-time to HAZMAT work, while 6 years ago the inspectors also had cargo security duties.

The increased ratio of inspectors to attorneys can only have a negative affect on the timeliness of processing civil penalty enforcement cases. In the three regions we visited, the average number of enforcement cases in-process handled by each attorney ranged from 16 in the Southwest Region to 166 in the Western-Pacific Region (as seen in Table 6).



**Table 6. Enforcement Caseload for Attorneys  
in Three FAA Regions**

<b>FAA Region</b>	<b>Attorneys Dedicated to HAZMAT Cases</b>	<b>HAZMAT Cases In-Process as of 08/07/03</b>	<b>Average Number of HAZMAT Cases Per Attorney</b>
Southwest	2	31	16
Western Pacific	1	166	166
Southern	4	441	110

An average case load of 16 cases per attorney is certainly manageable, but an average case load of 110 to 166 cases may contribute to some cases never being processed and a possible willingness to reduce penalties to get a quick settlement.

Also, it appears that the number of attorneys dedicated to HAZMAT cases in the three regions under review is disproportionate to the attorney enforcement caseload. The Southwest region has 2 attorneys dedicated to HAZMAT cases and an average of 16 cases per attorney versus the Western Pacific region with 1 attorney and an average of 166 cases. FAA needs to implement a nationwide plan that better distributes the number of HAZMAT cases per attorney.

## **DEVELOPING ALTERNATIVE MEANS OF ADMINISTERING ENFORCEMENT CASES**

Enforcement actions are taking at least a year to complete on average. Time and effort from inspectors and attorneys are resulting in only a 41 percent settlement on initially proposed penalties. There are more inspectors in 2003 than there were in 1997, but there are fewer attorneys dedicated to HAZMAT cases in 2003 than there were in 1997. Driven by the lack of resources to effectively manage the case workload and the questionable effectiveness of the penalty process, the Office of Hazardous Materials and the Office of the Chief Counsel must develop acceptable alternate ways of doing business.

### **Alternative Approaches to Expediting the Process**

One example of an alternate approach to expedite the process is a procedure used by RSPA. Its HAZMAT inspectors use a streamlined “*ticket*” system for what RSPA considers less-serious offenses. Based on their own work during inspections, RSPA’s inspectors can propose assessing a civil penalty against a HAZMAT violator. Violations under the ticket process are prepared by inspectors and then reviewed, approved, and issued by the inspector’s supervisor without

attorney involvement. Also, RSPA's system offers the violator a discount on the fine if the assessed penalty is paid within 45 days. Violators can always contest the tickets and go through RSPA's standard violation process.

This process greatly reduces the time spent by attorneys in the resolution process for minor offenses. FAA's Office of Hazardous Materials, in coordination with FAA's Office of the Chief Counsel, needs to consider such a process and other processes that could expedite the civil penalty process.

### **Implementing a Voluntary Disclosure Reporting Program**

Reducing the enforcement case workload could also expedite the administration of HAZMAT enforcement cases. This could be accomplished by developing self-disclosure policy and procedures for reporting unsafe practices. FAA's Flight Standards Service employs a self-disclosure program for aircraft maintenance and flight operations. Flight Standards Service considers the programs very productive in encouraging airline personnel to advise FAA in ways to discuss, approve, and implement safety practices. The self-disclosure program helps FAA and the air carriers work together to promote and ensure safe operating procedures. This program has been in use for over a decade and has worked well in identifying safety improvements in aircraft maintenance and flight operations that FAA ordinarily would not have discovered during its routine inspections.

At the initiation of our audit, there was no comparable program for transporting HAZMAT by air. However, in April 2004, FAA's HAZMAT Division drafted an advisory circular establishing a voluntary disclosure reporting program for shipments of HAZMAT by air and submitted it to industry for comment. FAA received industry's comments in June 2004, and the draft advisory circular is currently being circulated within FAA for final coordination.

Currently, air carriers are required to report HAZMAT incidents (e.g., spills and leaks) to FAA. FAA's investigation of incidents may result in civil penalties against the reporting air carrier for violations of HAZMAT regulations. This process has resulted in sometimes strained relationships between the air carriers and FAA. For example, a major all-cargo air carrier has stated that it is extremely frustrated in trying to work with FAA in resolving HAZMAT issues and that the lack of a self-disclosure program implies that FAA's emphasis is on assessing fines rather than resolving systemic causes of HAZMAT incidents.

By implementing a self-disclosure program, FAA will have the opportunity to reduce its caseload of enforcement actions. A self-disclosure program would not absolve air carriers from civil penalties for egregious practices. However, FAA will be able to (1) collect better data and study the systemic causes of HAZMAT incidents, (2) foster investigative cooperation with air carriers, and (3) focus its

attention on those shippers with a pattern of not complying with HAZMAT regulations.

FAA needs to finalize and implement its voluntary disclosure reporting program for shipment of HAZMAT by air. After implementing the program, FAA needs to take a systematic approach in effectively managing it, to include disseminating all useful information to the air carriers, HAZMAT shippers, and DOT's Operating Administrations with HAZMAT oversight and enforcement responsibilities.

### ***Implementing a System-Wide Approach for “Putting on Notice” Those Passengers Who Violate HAZMAT Regulations***

Inspecting HAZMAT shipments and enforcing HAZMAT regulations are inherently safety matters. Prior to September 11, 2001, air carriers were responsible for the screening of passengers and their checked and carry-on baggage, including screening for explosive, incendiary, and deadly or dangerous weapons. The screening of passengers and their checked and carry-on baggage was conducted almost entirely by third-party screening companies under contract with the air carriers. FAA was responsible for overseeing the air carriers compliance with checked and carry-on baggage screening requirements. While all carry-on baggage was required to be screened, only a very small percentage of checked baggage required screening.

After September 11<sup>th</sup>, the responsibility for screening passengers and their checked and carry-on baggage transferred from the air carriers to TSA. With this transfer, FAA no longer has jurisdiction for overseeing the screening of passengers and their checked and carry-on baggage. Today, for FAA to effectively oversee the shipment of all HAZMAT by air, FAA must work directly with TSA at the Nation's airports.

### **AGREED UPON ROLES AND RESPONSIBILITIES BETWEEN FAA AND TSA NEED BETTER DEFINITION**

FAA has an Agreement with TSA addressing HAZMAT, among other issues. The Agreement delineates basic responsibilities between the two agencies for screening passengers' carry-on and checked baggage for prohibited items, including HAZMAT. However, some of the provisions in the Agreement have not been fully implemented to prevent passengers from “offering for air

transportation” unauthorized HAZMAT items in their checked and carry-on baggage.

- **HAZMAT at passenger security checkpoints.** The Agreement states that TSA and FAA agree to establish procedures for a referral process when TSA finds passengers with any prohibited HAZMAT items in their carry-on baggage. Such items could include fireworks, safety and road flares, tear gas, pepper spray, flammable gas torches, flammable aerosols, household bleach, and hydrogen peroxide. However, system-wide referral procedures have not been developed, and any referral procedures that do exist were developed at the local level. Without a standardized, uniform referral approach, FAA has no way of “putting on notice” those passengers who have violated HAZMAT regulations or identifying those passengers that are repeatedly violating the regulations.

For example, our visit to Atlanta’s Hartsfield-Jackson International Airport found that TSA was not keeping a record of violations of HAZMAT regulations when HAZMAT items were found during the screening of passengers’ carry-on baggage at the TSA passenger security screening checkpoints. Records should include information such as date of violation, passenger name, flight number and air carrier, and type of HAZMAT item abandoned by the passenger. TSA was also not notifying FAA of any violations of HAZMAT regulations found during the screening of passengers’ carry-on baggage.

- **HAZMAT discovered in checked baggage.** The Agreement between TSA and FAA states that when TSA discovers HAZMAT during the security search of passengers’ checked baggage, TSA will notify the air carrier that had tagged and accepted the baggage. In turn, air carriers are required by HAZMAT regulations to notify FAA of the HAZMAT discrepancy. TSA established a procedure: its screeners would record in a logbook the type of HAZMAT discovered, passengers’ names, baggage tag information, and the airline responsible for handling the baggage. The HAZMAT items are to be recovered and secured by the air carriers. The air carriers are required to sign the logbook indicating that they had accepted the HAZMAT items.

However, our observations with FAA inspectors of TSA and air carrier procedures disclosed that some air carrier personnel were not aware that they were required to report the HAZMAT incidents to FAA. For example, a representative of a major air carrier at Las Vegas’ McCarran International Airport was signing for and accepting HAZMAT items from TSA. The air carrier representative was not aware of the requirement to report HAZMAT incidents to FAA. The FAA inspector told the air carrier of the reporting

requirement and the procedures to report to FAA the HAZMAT incidents involving passengers' checked baggage.

## **PUBLIC AWARENESS CAMPAIGNS ARE NOT ENOUGH TO PREVENT HAZMAT FROM BEING CARRIED ON BOARD AIRCRAFT**

In addition to the Agreement with TSA, FAA has implemented other activities to increase the traveling public's awareness of hazardous materials that are prohibited for transport by air. These efforts include:

- Kiosks at airports nationwide that display examples of HAZMAT items prohibited in carry-on and checked baggage.
- Signs at the airline ticket check-in counters and boarding gates notifying passengers about the HAZMAT items prohibited on board aircraft.
- Brochures and other literature that are available at a variety of locations, such as airports and travel agencies, listing those items prohibited for shipment by air. FAA's HAZMAT internet site<sup>13</sup> provides an abundance of information about HAZMAT safety during air travel. This includes information about laws prohibiting passengers from carrying HAZMAT in carry-on and checked baggage and about enforcement actions available to FAA.
- Other education and outreach programs with industry and the general public.

Despite these efforts and without system-wide procedures for notifying passengers that they had unauthorized HAZMAT in their carry-on or checked baggage, there continues to be a significant amount of prohibited HAZMAT in passengers' carry-on and checked baggage at airports nationwide. For example, during the last 6 weeks of 2003, TSA was responsible for the emergency removal of 8,312 pounds of HAZMAT from 18 airports. TSA hired a contractor to manage the disposal of abandoned prohibited items (e.g., knives) and HAZMAT at airport checkpoints.<sup>14</sup>

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<sup>13</sup> <http://ash.faa.gov>

<sup>14</sup> On October 8, 2003, TSA announced that they had awarded a nationwide contract to manage the disposal of abandoned property and hazardous materials at airport checkpoints. Hazardous materials are to be disposed of in a manner compliant with environmental regulations.

## **DEVELOPING AN EXPEDIENT MEANS FOR INVESTIGATING AND PROCESSING VIOLATIONS OF HAZMAT REGULATIONS INVOLVING PASSENGERS' CHECKED AND CARRY-ON BAGGAGE**

HAZMAT regulations require that all incidents, no matter how small, involving the improper transport of HAZMAT via aircraft be investigated. This includes the discovery of HAZMAT by TSA in passengers' carry-on and checked baggage. Processing these incidents will hinder the effectiveness of FAA's HAZMAT mission without the development of efficient and expedient means of investigating and processing the reported incidents. To its credit, FAA developed a computer-based system whereby TSA could transmit a report of HAZMAT discrepancies at checkpoints. TSA decided to develop its own system. As a result, no procedure is in place for notifying FAA of HAZMAT discrepancies that occur at passenger checkpoints. FAA is working with TSA to define an electronic interface between the system TSA is developing and FAA's system.

To further strengthen its oversight of unauthorized HAZMAT carried in passengers' carry-on and checked baggage, FAA developed an operating system for use by TSA and the air carriers to record and process violations of HAZMAT regulations discovered during security screening. The system would be used to track recurring violations by type of violation and number of violations committed by individual passengers, regardless of where the violations took place or which air carrier was involved. The system has not been implemented because TSA decided to develop its own system, and the air carriers are reluctant to use the system due to passenger privacy concerns.

FAA should work with TSA to revise the Agreement to better define the roles and responsibilities between the two Administrations for preventing unauthorized HAZMAT from being carried on board passenger aircraft. This includes TSA notifying FAA of HAZMAT incidents associated with passengers' carry-on baggage. This cannot be overstated as the quantity of HAZMAT items found in passengers' carry-on and checked baggage has been vast since TSA began screening all passengers' carry-on and checked baggage.

## **RECOMMENDATIONS**

To enhance FAA's Hazardous Materials Program, we recommend that FAA:

1. Institute guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties

through the coordinated efforts of the Hazardous Materials Division and Office of the Chief Counsel.

2. Implement a nationwide plan to distribute equitably the number of HAZMAT enforcement cases per attorney.
3. Develop and implement alternate means of administering HAZMAT enforcement cases, such as the ticketing system used by RSPA.
4. Finalize and implement the FAA voluntary disclosure reporting program. FAA needs to take a systematic approach in effectively managing the program, to include disseminating all useful information to the air carriers, HAZMAT shippers, and DOT's Operating Administrations with HAZMAT oversight and enforcement responsibilities.
5. Implement a pilot project with TSA and one or more air carriers to determine the effectiveness and cost of an automated operating system to record and process violations of HAZMAT regulations discovered during the screening of passengers' carry-on and checked baggage. In the interim, collaborate with TSA to implement system-wide procedures for notifying FAA of HAZMAT incidents associated with passengers' carry-on baggage.
6. Issue an advisory circular notifying all air carriers that they must report to FAA all unauthorized HAZMAT found in passengers' checked baggage and take enforcement actions against those air carriers not complying with the reporting requirements.

To enhance DOT's internal HAZMAT regulatory coordination, we recommend DOT's Office of Safety, Energy and Environment:

7. Establish and implement a process for resolving HAZMAT regulatory disputes between FAA and RSPA to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

**New Recommendation Added to Final Report:** To strengthen its assessment of air carriers' compliance with HAZMAT regulations, we recommend FAA:

8. Develop and implement a covert testing program to evaluate air carriers' compliance with the required acceptance procedures for HAZMAT shipments by air. Preferably, a joint program would be established in which FAA works with TSA.

## MANAGEMENT COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

In responding to a draft of this report, FAA and the Assistant Secretary for Transportation Policy agreed in general with our recommendations and stated that work is underway to address all outstanding issues identified in the draft report.

FAA and the Assistant Secretary provided specific comments on the recommendations, detailing the corrective actions planned to close out them out. For Recommendations 2 through 6, we consider FAA planned actions responsive to the recommendations. However, for Recommendation 1, FAA comments were not fully responsive, and we are requesting some additional information. For Recommendation 7, we consider the Assistant Secretary's comments to be positive and constructive, and the actions planned for the recommendation are reasonable.

FAA's and the Assistant Secretary's comments to Recommendations 2 through 7 are summarized below.

- **Recommendation 2. Concur.** FAA's Office of the Chief Counsel agreed to implement a plan to more evenly distribute the HAZMAT enforcement cases among the FAA legal offices by December 31, 2004. Also, to more evenly distribute the HAZMAT enforcement case load in FAA's regional offices, FAA's Office of Security and Hazardous Materials agreed to initiate a policy by December 31, 2004, to distribute certain legal enforcement cases from the region where they are reported and initially investigated to the region where the shipper is located.
- **Recommendation 3. Partially Concur.** FAA agreed to develop a streamlined enforcement process for certain HAZMAT violation cases involving unauthorized HAZMAT in passengers' checked and carry-on baggage. The HAZMAT division manager, not the attorney, would issue notices of violations, providing the violator with the option of having the penalty reduced by 50 percent if paid within 30 days. FAA would also consider the applicability of such an approach for other types of HAZMAT violations that are factually straightforward and involve relatively low-dollar penalties. This will require rulemaking, and FAA expects to have a Notice of Proposed Rulemaking in agency coordination by September 30, 2005. We consider FAA's alternative course of action responsive to the recommendation.
- **Recommendation 4. Concur.** FAA agreed to finalize and publish its advisory circular on the HAZMAT voluntary disclosure reporting program by December 31, 2004. Under the voluntary disclosure reporting program, air



carriers would be allowed to self-report to FAA instances of noncompliance with HAZMAT regulations. FAA will issue a letter of correction, instead of a civil penalty, for instances of noncompliance that are voluntarily disclosed.

**Recommendation 5. Concur.** Under the existing Agreement, FAA and TSA would establish procedures for a referral process when TSA finds a passenger with prohibited HAZMAT in his or her carry-on baggage. According to FAA, TSA *has not* agreed to procedures to make such referrals routinely. As part of an Agency-wide initiative to revise the existing Agreement with TSA, FAA is seeking direct access to the HAZMAT information contained in TSA's Dangerous Goods module of its Performance and Reports Information System. The module identifies passengers who have abandoned the most observable and dangerous HAZMAT at screening checkpoints. FAA will raise the possibility of a pilot project to gain access to the relevant data from the Performance and Reports Information System as part of the initiative to revise the Agreement. FAA expects to complete discussions with TSA concerning access to its Dangerous Goods module by December 31, 2004.

- **Recommendation 6. Concur.** FAA will issue an advisory circular clarifying the air carriers' HAZMAT reporting requirements by May 31, 2006.

FAA stated that it was not necessary, at this time, to issue an advisory circular notifying air carriers of their HAZMAT reporting requirements. According to FAA, over 3,000 HAZMAT assessments of air carrier airport stations are conducted annually, with only a few isolated cases of unauthorized HAZMAT found in passengers' checked baggage and the air carrier not reporting it to FAA, as required. These cases are still under investigation. This is compared to over 1,000 reports of unauthorized HAZMAT in checked baggage that FAA receives from air carriers each month.

In their HAZMAT reports to FAA, air carriers advise that they do not have, or cannot provide, the passengers' addresses, which limits FAA's investigation efforts. According to FAA, individual air carriers and the Air Transport Association say they cannot provide the address of passengers because of privacy concerns.

To address the privacy concerns, FAA is coordinating with RSPA to amend the Hazardous Materials Regulations to require disclosure of the addresses of passengers who violate the Regulations. FAA anticipates that RPSA will issue its Final Rule in February 2006. Upon completion of the rulemaking, FAA will issue an advisory circular clarifying the air carriers' HAZMAT report requirements by May 31, 2006.

- **Recommendation 7. Concur.** The Assistant Secretary for Transportation Policy agreed to develop a process for resolving regulatory disagreements between FAA and RSPA and for any future disagreements between Operating Administrations, with a formalized process in place by February 2005.

Also, RSPA's Deputy Administrator reviewed the draft report and told us that he believes that RSPA and FAA are making progress towards building a more cooperative and collaborative relationship and that regulatory differences are being resolved more effectively and expeditiously.

FAA's comments and the Office of Inspector General responses to **Recommendation 1** are summarized below.

**Recommendation 1. Concur.** FAA agreed to implement by December 31, 2004 new timeframe goals for (1) completing HAZMAT violation investigations, and (2) initiating and completing HAZMAT enforcement cases. However, FAA did not believe that guidelines were necessary for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties because guidelines already exist under current FAA enforcement policy.

We believe that guidelines are necessary and should remain as part of Recommendation 1 because existing enforcement policy does not include specific guidelines for when HAZMAT inspectors and attorneys would coordinate or collaborate during investigations and legal reviews and when issuing penalties.

During our review of the HAZMAT enforcement process involving civil penalties, we found that that inspectors and attorneys conducted their work independently and without any coordination. We also found that attorneys started their reviews of the HAZMAT cases by reading, for the first time, the inspector's report and summary conclusions. If an attorney felt an investigation lacked sufficient data or the attorney just needed more information, the attorney would then contact the investigating inspector. This might not take place until more than a year after the incident had taken place.

We also found that enforcement cases that take an average of more than 1 year to process raise questions about the effectiveness and efficiency of the investigation and legal review process. In many cases, the settlement penalties had little, if any, deterrent value against the violators' noncompliance with HAZMAT regulations because the penalties assessed were too far removed, in both time and dollar amount, from the incident that initiated the enforcement action.

We concluded that simple coordination between inspectors and attorneys at the start of an investigation can save both parties time in developing and processing a case where civil penalties will be recommended. Inspectors should state their reasons for developing a case, and attorneys should provide advice about the projected strength of a case and what the inspectors need to provide to help ensure a strong case is presented. Without up-front communication between inspectors and attorneys, neither group can benefit from the other's knowledge and skills.

Therefore, to better coordinate HAZMAT operating objectives, FAA's HAZMAT Division and Office of the Chief Counsel must develop and implement effective guidelines and timeframes for coordinating their resources when conducting investigations, conducting legal reviews, and issuing penalties. A clear policy statement and guidance on coordination between inspectors and attorneys at the start of an investigation can save both parties time in developing and processing a case where civil penalties will be recommended.

In its other comments to the draft report, FAA requested that the finding regarding the reduction in civil penalties by the attorneys from the amount recommended by the inspectors be placed in context. FAA stated that there are circumstances that may warrant mitigation of the penalty, such as the violator taking corrective action. FAA also stated that it is required by statute to conduct an evaluation of the HAZMAT violator's ability to pay. According to FAA, this evaluation frequently results in a reduction of the recommended penalty. We have revised the final report to reflect this.

We are also requesting comments from FAA on the need for covert testing of air carriers' compliance with regulations for the acceptance of HAZMAT shipments by air. FAA's Office of the Chief Counsel has advised HAZMAT Program officials that they cannot conduct covert tests of air carriers' HAZMAT acceptance procedures without an exemption to regulatory requirements contained in Title 49 Code of Federal Regulations. According to FAA's Office of the Chief Counsel, it is against regulations to place a hazardous materials label on a package that does not contain hazardous material. In addition, TSA requires that air carriers accept packages only from shippers registered in its Known Shipper Program. In our opinion, FAA needs to have a covert testing program, preferably a joint program in which FAA works with TSA.

## **EXHIBIT. FAA'S AND RSPA'S AIR-SPECIFIC HAZMAT PRIORITIES FOR FISCAL YEAR 2004**

In November 2003, FAA's Assistant Administrator, Office of Security and Hazardous Materials, presented FAA's Air-Specific HAZMAT Strategic Plan Priorities for fiscal year 2004 to RSPA's Associate Administrator, Office of Hazardous Materials Safety. The five issues identified by FAA are listed below, followed by RSPA's four major areas of concern.

### **FAA'S KEY ISSUES**

- Non-spillable electric storage batteries. This is FAA's first priority. FAA and RSPA need to reexamine labeling and hazardous communication requirements. Laptop computers, electric lawn mowers, electric hand trucks, and uninterruptible power sources have caused fire and smoke incidents during air transportation.
- Lithium batteries. FAA has concerns that industry's "on-time delivery" expectations will continue to fuel the shipment of lithium batteries from the battery manufacturer in one location to the device assembly point in another. The batteries are packed in bulk corrugated cardboard containers, stacked on pallets, and shipped in cargo holds of passenger and all-cargo aircraft. Several lithium battery fires have occurred in air cargo over the last 5 years.
- Air-specific HAZMAT packaging standards. FAA needs to work with RSPA in examining existing air-mode packaging standards and to consider establishing a testing protocol for air-specific packaging.
- Flammable aerosols in luggage and the apparent effects of static electricity. There are reports of unexplained suitcase "explosions" on airport conveyor belts, where a common factor has been flammable vapor build-up within the suitcase. Static electricity is suspected as a contributing factor in these cases. Analysis of available data is to be performed by a leading university. Consideration must be given to exempting some consumer products that are the source materials in the "explosions."
- Diagnostic Specimens. This is an ongoing area of discussion between FAA and RSPA. FAA is requesting that infectious substances and

diagnostic specimens be included in the fiscal year 2004 air-specific HAZMAT strategic plan.

## **RSPA'S KEY ISSUES**

- Revision of the requirements for carriage by aircraft. RSPA has a proposal that would result in the rewrite of Part 175 (Aircraft Operator Responsibilities) to Title 49, Code of Federal Regulations. This has been under discussion since 1996 and needs to be completed.
- Increasing accessibility of air travel for individuals dependent on medical oxygen. The Secretary of Transportation in September 2003 asked that RSPA and FAA give prompt consideration to the accessibility of air travel for individuals dependent on medical oxygen.
- Harmonization of the HAZMAT regulations with those of the international community. RSPA plans a Notice of Proposed Rule Making and final rule that would harmonize domestic regulations with those of the international community. RSPA needs FAA's assistance on this.
- Oxygen cylinders and oxygen generators aboard aircraft. A proposed rulemaking would require that oxygen cylinders and oxygen generators be in ruggidized overpacks when transported aboard aircraft. RSPA will need FAA's assistance in processing comments from the aviation industry and disabled community.

# APPENDIX. MANAGEMENT COMMENTS



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

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# Memorandum

Subject: **INFORMATION:** New Approaches Needed in  
Managing FAA's Hazardous Materials  
Program, Federal Aviation Administration

Date: SEP 30 2004

From: Assistant Administrator for Financial Services  
and Chief Financial Officer

Reply to  
Attn. of:

To: Principal Assistant Inspector General for  
Auditing and Evaluation

Thank you for your August 20 Memorandum and the attached draft audit report of the Federal Aviation Administration's Hazardous Materials Program. I appreciate the additional time you have allowed for us to provide written comments concerning the report and the recommendations.

The draft report has been reviewed by the Chief Counsel and the Assistant Administrator for Security and Hazardous Materials. A copy of our comments is attached. We have also provided an electronic word version of the comments for inclusion in the final report as you requested.

Should you have any questions or need additional information, please contact Anthony Williams on 267-9000.

A handwritten signature in black ink, appearing to read "R. Punwani".

Ramesh K. Punwani

Attachment

**Federal Aviation Administration's (FAA) Response to the Office of Inspector General's Draft Report on New Approaches Needed in Managing FAA's Hazardous Materials (HAZMAT) Program**

**OIG Recommendation 1:** Institute guidelines and timeframes for conducting HAZMAT investigations, conducting legal reviews, and issuing Notices of Proposed Civil Penalties through the coordinated efforts of the Hazardous Materials Division and Office of the Chief Counsel (AGC).

**FAA response:** Concur. The Assistant Administrator for Security and Hazardous Materials, ASH-1 will implement new timeframe goals for completion of legal enforcement HAZMAT investigations. The Chief Counsel is implementing new timeframe goals for initiating and completing HAZMAT enforcement cases. We expect that these goals will be adopted by December 31.

We understand that the guidelines referenced in this recommendation pertain to recommendation 3. We will adopt guidelines as part of our response to that recommendation. We recommend, therefore, that the reference to acceptable guidelines in this recommendation be deleted.

**OIG Recommendation 2:** Implement a nationwide plan to distribute equitably the number of HAZMAT cases per attorney.

**FAA response:** Concur. AGC is implementing a plan to more evenly distribute the HAZMAT cases among the FAA legal offices. This will be accomplished by December 31. ASH is implementing a plan to have appropriate cases originated in the region of the shipper; this will have the effect of more evenly distributing the case load among the regional offices. The Office of Security and Hazardous Materials expects to initiate a policy to distribute certain legal enforcement cases from the region where they are reported and initially investigated to the region where the shipper is located by December 31.

**OIG Recommendation 3:** Develop and implement alternate means of administering HAZMAT enforcement cases, such as the ticketing system used by Research and Special Programs Administration (RSPA).

**FAA response:** Partially Concur. The FAA has had successful experience with a streamlined enforcement process for certain cases involving passengers who carried weapons in their baggage. See 14 CFR § 13.29. Under this procedure the security division manager, not the attorney, issued notices of violation, which provided violators with the option of having his or her penalty reduced by 50 percent if the violator paid the penalty within 30 days. We expect to propose a similar alternative system for certain passenger HAZMAT violation cases. In addition, we will consider whether such an approach can also be used in other types of violations that are factually straightforward and involve relatively low-dollar penalties. Implementation

of an alternative process will require rulemaking. We expect to have a draft Notice of Proposed Rulemaking in agency coordination by September 30, 2005.

**OIG Recommendation 4:** Finalize and implement the voluntary disclosure reporting program. FAA needs to take a systematic approach in effectively managing the program, to include disseminating all useful information to the air carriers, HAZMAT shippers, and Department of Transportation's Operating Administrations with HAZMAT oversight and enforcement responsibilities.

**FAA response:** Concur. The FAA has drafted a voluntary disclosure advisory circular that would apply to certain air operator requirements. The draft advisory circular is now being coordinated with other concerned lines of business within FAA, such as the Chief Counsel's Office and the Flight Standards Service. We expect to publish this advisory circular by December 31.

**OIG Recommendation 5:** Implement a pilot project with the Transportation Security Agency (TSA) and one or more air carriers to determine the effectiveness and cost of having an automated operating system to record and process violations of the HAZMAT regulations discovered during the screening of passengers' carry-on and checked baggage. In the interim, FAA should collaborate with the TSA to implement system-wide procedures for notifying FAA of HAZMAT incidents associated with passengers' carry-on baggage.

**FAA response:** Concur. Airport security screeners are not conducting a search for hazardous materials. They are conducting a search for weapons and prohibited items. The FAA does not support any initiative that would divert the attention of airport security screeners from their efforts to locate and remove weapons and other prohibited items.

The TSA issued an interpretative rule [68 FR 9902] that clarifies the types of property considered to be weapons, explosives and incendiaries. The TSA interpretative rule also advised passengers concerning the types of items prohibited by the Hazardous Materials Regulations (HMR). As part of their security duties, screeners do notice prohibited hazardous materials in plain view. Under an interpretation issued by the Department of Transportation, passengers who present prohibited hazardous materials at the screening checkpoint are in violation of the HMR. [68 FR 9735].

The FAA and the TSA currently have a Memorandum of Agreement (MOA) that includes a Hazardous Materials Annex that calls for the agencies to establish procedures for a referral process when the TSA finds a passenger with prohibited HAZMAT. While the FAA has received some referrals from the TSA, the TSA has not yet agreed to procedures to make such referrals routinely. FAA's Office of Security and Hazardous Materials is participating in an agency-wide initiative to revise the existing MOA with the Department of Homeland Security (DHS) and TSA. As part of this initiative, the FAA is seeking direct access to the hazardous materials



information contained in the Dangerous Goods module of TSA's Performance and Reports Information System (PARIS). PARIS is the database that records the TSA's inspection and investigation findings. This Dangerous Goods module identifies passengers who have abandoned the most observable and dangerous hazardous materials at the security checkpoint. The FAA will raise the possibility of a pilot project to gain access to the relevant PARIS data as part of the initiative to revise the MOA with TSA/DHS. The Office of Security and Hazardous Materials expects to complete discussions with TSA/DHS concerning automated access to HAZMAT information about passenger's carry-on baggage by December 31.

**OIG Recommendation 6:** Issue an advisory circular notifying all air carriers that they must report to FAA all unauthorized HAZMAT found in passengers' checked baggage and take enforcement actions against those air carriers not complying with the reporting requirements.

**FAA response:** Concur. Concerning suspected unauthorized hazardous materials noticed by security screeners in checked baggage, these screeners bring such items to the attention of the respective air carrier for resolution. Air carriers, in turn, report these items to the FAA. Currently, the FAA is receiving over 1,000 such reports a month. In response to these reports, FAA has taken two actions. First, we have developed a database entry screen for field agents to enter and prioritize the details of these reports. Instances involving more serious HAZMAT are individually investigated while an automated outreach, educational notice is generated to the passengers responsible for the instances involving less serious HAZMAT. Approximately 2,000 reports have been processed in this manner. However in many cases, air carriers advise that they do not have, or cannot provide, the passenger's address. With tickets purchased over the internet, carriers report they do not always know their passenger's address. In addition, individual air carriers and the Air Transport Association have reported that they cannot always report the passenger's address to the FAA because of privacy concerns. Therefore, the FAA is coordinating with RSPA to amend the HMR to add a requirement for air carriers to provide the address of the passenger responsible for the incident, if they know it or can reasonably obtain it.

Additionally, the FAA has taken several actions to remind air carriers that they must comply with the requirements to report violations mandated by 49 CFR 175.31. The FAA conducts over 3,000 hazardous materials assessments of air carrier airport stations annually. As part of the assessment, FAA agents are required to ask airline representatives if they are aware of the HAZMAT reporting requirements and enter their response into the computerized inspection results. As indicated above, since the advent of 100% checked baggage security screening, FAA is currently receiving over 1,000 reports of unauthorized HAZMAT in checked luggage from air carriers each month. TSA's procedures call for security screeners who suspect unauthorized hazardous materials in checked baggage to notify the appropriate air carrier and to record the event in a log. FAA field agents check these TSA logs at airports and compare it to the reports received from air carriers. Occasionally, the

logs record an incident that was not reported to the FAA. In many of these cases, TSA screeners are recording suspected HAZMAT that is actually allowed under 49 CFR 175.10, and therefore no air carrier report to FAA is necessary. In a few cases, the logs list unauthorized HAZMAT, not reported to FAA as required. Recently, in several isolated cases, FAA sent Letters of Investigation to air carriers that apparently did not report unauthorized HAZMAT that were recorded by security screeners in various TSA logs. Air carriers have maintained that they are not always notified by screeners, as the TSA procedures call for, and that they are not allowed to review the logs themselves. Several of these cases are still under investigation by the FAA. The FAA will take enforcement action in accordance with FAA Order 2150.3A if these investigations find that reporting violations were committed.

Upon completion of the on-going discussions with TSA concerning the MOA and RSPA's rulemaking efforts, FAA will draft and issue an Advisory Circular clarifying the air carrier's HAZMAT reporting requirements. RSPA has notified the FAA that its timeline to complete a final rule revising these discrepancy reporting requirements and other requirements for the transport of hazardous materials by aircraft is February 2006. Given this timeline, the Office of Security and Hazardous Materials expects to issue an Advisory Circular by May 31, 2006.

**OIG Recommendation 7:** DOT's Office of Safety, Energy and Environment establish and implement a process for resolving HAZMAT regulatory disputes between the FAA and RSPA to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

(Response provided by OST)

**Other comments on the report:**

The draft report notes the extent of the reduction in civil penalties from the amount recommended by the inspectors and the attorneys. While we do not dispute the accuracy of the OIG's findings in this regard, we believe the findings should be placed in context, and request that the final report reflect this context.

Penalties recommended by the inspectors are made before the attorney evaluates the sufficiency of the evidence that supports an alleged violation and the inspector's application of sanction guidance. The amount recommended by the inspector or proposed by the attorney both occur before an informal conference is held. It is at the informal conference that the FAA often becomes aware of circumstances that constitute a defense to an alleged violation or that warrant mitigation of the penalty (e.g., corrective action). Likewise, it is often after the penalty has been proposed that the agency is able, after receiving information from the alleged violator, to conduct the statutorily-mandated evaluation of the violator's ability to pay, which frequently results in a reduction from the recommended penalty.

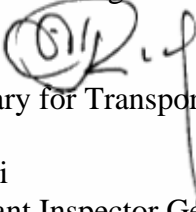


U.S. Department of  
Transportation  
Office of the Secretary  
of Transportation

# Memorandum

Date: September 21, 2004

**Subject:** **Action:** Response to Draft Report on New Approaches Needed in Managing FAA's Hazardous Materials Program

**From:** Emil H. Frankel   
Assistant Secretary for Transportation Policy

**To:** Alexis M. Stefani  
Principal Assistant Inspector General  
for Auditing and Evaluation

Within the office of the Assistant Secretary for Policy, the Office of Safety, Energy and Environment (OSEE) is the focal point for intermodal DOT hazardous materials (hazmat) issues. This office is working to foster a department-wide approach to implementing hazardous materials programs. One office responsibility is to facilitate the resolution of disagreements among operating administrations on hazmat issues where they have been unable to reach a mutually agreed on solution. OSEE was already aware of the differences between FAA and RSPA cited in the OIG draft report, and has initiated a process to resolve outstanding hazmat disputes and reach agreement on appropriate actions necessary to fully and appropriately protect the public and the transportation infrastructure.

## **RECOMMENDATION AND RESPONSE**

**Recommendation 7:** Establish and implement a process for resolving HAZMAT regulatory disputes between FAA and RSPA to ensure that the unique safety requirements for shipments of HAZMAT by air are being effectively addressed.

**Response:** Concur. OST Policy, FAA, and RSPA, are developing a plan of action that will identify the steps needed to resolve the areas of concern identified in the OIG draft report. This process will be used as a model to address any future disagreements between the operating administrations. We anticipate having this process formalized by February 2005, completing this recommendation.