



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

JUN - 4 2002

Mr. Mark Rogers  
Director, Dangerous Goods Program  
Airline Pilots Association, International  
P.O. Box 1169  
Herndon, Virginia 20172

Ref. No. 01-0171

Dear Mr. Rogers:

Thank you for your July 5, 2001 letter to Mr. Robert McGuire, Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration (RSPA), expressing your concerns regarding package failures and the use of performance-oriented packagings for transportation of hazardous materials by aircraft. This letter is to inform you of our progress in addressing these issues. Please accept my apology for our delay in responding.

We do not agree that reports of packaging failures necessarily indicate that performance-oriented packagings are of lesser integrity than the specification packagings that they replaced. The number of incidents reported has been on the rise for many years, including those years before the adoption of UN standards. This increase appears due, in part, to increases in the amount of cargo carried, better enforcement, and better reporting by the airlines. Also, many releases appear to be caused by poor selection or preparation of packagings (e.g., improper securement of closures), rather than by deficiencies in package design or regulatory requirements.

We share your concern about incidents involving packaging failures in the air mode and are particularly concerned about the number of instances of leakage from closures. Further, we strongly agree that there is a need to consider raising the standards for packaging used for transportation by aircraft, including awareness of those standards, and our current efforts are addressed to that. For example, on May 13, 2002, we published a notice in the *Federal Register* (67 FR 31974; copy enclosed) to remind hazardous materials shippers of their responsibilities to properly identify, package, and communicate the hazards of those materials in conformance with the HMR. The notice emphasizes the requirements for air transportation because of the number of reported incidents involving air transportation and the vulnerability of air transportation to potentially catastrophic accidents. As indicated in the notice, many incidents result from noncompliance with the requirements of the Hazardous Materials Regulations (HMR). They are frequently caused by a shipper's lack of awareness of requirements, rather than a deliberate attempt to violate the HMR or an inherent deficiency in the packaging used. The notice details general packaging requirements for air shipments of hazardous materials, including requirements for inner packagings, pressure differential capability, closures, and absorbent material.

In addition, the Department's Intermodal Hazardous Materials Programs Office (IHMP) recently conducted an in-depth review of hazardous materials cargo incidents reported to RSPA. Based



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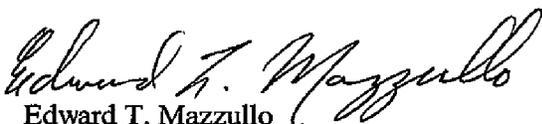
on a review of incidents for calendar years 1998-2000, IHMP sent letters to those shippers with the highest number of incidents involving packaging failures in transportation to inform them of the incidents and offer to work with them to reduce the number of packaging failures in the future. Indications are that this effort is yielding positive results.

We also have initiated a rulemaking project to address issues raised by internal reviews of current requirements, enforcement actions, and requests for interpretation by packaging manufacturers, third-party labs, and shippers as to how the packaging requirements are applied. This project will result in proposals to revise the performance-oriented packaging requirements to clarify requirements, address deficiencies, and make the standards easier to follow and understand.

Finally, we are working with our counterparts in the United Nations and the International Civil Aviation Organization (ICAO) to address problems involving closures on performance-oriented packagings and to raise shipper awareness of air transport packaging requirements. The ICAO Dangerous Goods Panel has adopted a requirement specifying that a packaging must be closed according to information provided by the packaging manufacturer and that manufacturers and subsequent distributors of packagings must provide information as to procedures to be followed for filling and closing the packaging and the types of closures required. In addition, the next edition of the ICAO Technical Instructions on the Transport of Dangerous Goods will include a requirement that shippers must mark packagings with an air eligibility mark. This new marking requirement should increase shipper awareness of the air transport packaging requirements. These changes were based on proposals jointly developed by RSPA and FAA. We recently submitted a proposal to the UN Transport of Dangerous Goods Subcommittee to include a vibration test for non-bulk packagings in the UN Model Regulations. We are also considering future proposals to enhance packagings used for air transport, such as requiring liners for all outer packagings that are not capable of retaining liquids. This is similar to a requirement recently included in the International Air Transport Association's Dangerous Goods Regulations.

I extend our sincere appreciation to you and your organization for your ongoing efforts to create a safe transportation environment for the air transportation of hazardous materials. We look forward to working with you on these crucial issues. Please contact me if you have questions or need further information.

Sincerely,



Edward T. Mazzullo  
Director, Office of Hazardous Materials Standards

Enclosure



**AIR LINE PILOTS ASSOCIATION, INTERNATIONAL**

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Air/Packaging

July 5, 2001

Mr. Robert McGuire  
Associate Administrator for Hazardous Materials Safety  
Research and Special Programs Administration  
400 7<sup>th</sup> Street, S.W.  
Washington, DC 20590

Subject: Performance Oriented Packaging (POP)

Dear Mr. McGuire:

The Air Line Pilots Association (ALPA), representing the safety interests of 59,000 professional airline pilots flying for 51 airlines in the United States and Canada, has a number of serious concerns regarding the use of Performance Oriented Packaging.

It has come to our attention over the past several years that the failure rate of performance-oriented packaging in the air mode has been increasing at a rate that we consider unacceptable. Our information is gathered from industry, the air carriers and most important, the statistics released by the FAA's Dangerous Goods and Cargo Security Division.

When considering that there were extremely few package failures in the air mode when specification packaging was regulation, we find that permitting packaging of less integrity has eroded the present packaging regulations.

It has been acknowledged by many in our industry that the metal chime quality of 1A1 metal containers has decreased with Performance Oriented Packaging, contributing to a substantial increase in the failure rate of these containers. It is also our understanding that measures have been taken by industry to correct this problem. However, of much greater concern is the number of seal/closure failures that have taken place since Performance Oriented Packaging was approved. According to the FAA's analysis of the Hazardous Materials Information System, in 1998/1999, of the more than 1800 package failures investigated, over 50% of package failures were attributed to closure failures in a wide spectrum of packaging. Another significant statistic in package failure is attributable to dropping.

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ALPA is also aware that RSPA, in attempting to Globally Harmonize, has accepted the UN standards of Performance Oriented Packaging. We commend the Global Harmonization effort by RSPA, but strongly request, in the interest of aviation safety, that RSPA revisit the packaging requirements on those packages that have experienced failure. This specific information should be in the FAA Dangerous Goods and Cargo Security Division database.

Another possible contributing factor to the increased failure rate might be the considerably higher level of air cargo that is handled today along with the accompanied increase in automation. This could account for a level of handling that was not considered when the present testing criteria for packaging was developed. Perhaps in today's environment the testing standards need to be raised. Some solutions for this might possibly be to require secondary closures (ex. tape) to augment the primary closure and go back to requiring absorbent material capable of totally absorbing liquids in inner packaging. Also define testing procedures for the 95-kpa test, which are currently not defined, resulting in different procedures employed by testing labs. These suggestions are only a few of the possible solutions that might exist.

In summary, for over 15 years it has been a standing policy of the Air Line Pilots Association to be able to inform its members and others that ask that "if the package is declared and properly packaged, it is safe." With the increasing failure rate of Performance Oriented Packaging being what it is, I no longer feel that we would continue to maintain this policy.

Sincerely,



Mark Rogers, Director  
Dangerous Goods Programs */msr*

MMR:ak

cc: Bob Richards, International Stds. Coordinator