

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

N 8000.297

3/28/05

Cancellation  
Date: 3/28/06

## **SUBJ: OXYGEN MASKS WITH CLIPS/RETAINERS**

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**1. PURPOSE.** This notice provides guidance to principal operations inspectors (POI), principal maintenance inspectors (PMI), and cabin safety inspectors (CSI) of operators and air carriers operating transport category airplanes. It serves to alert the Flight Standards community that many such airplanes may be fitted with a type of passenger oxygen mask stowed within a clip/retainer device in the overhead passenger service unit (PSU). Passengers may not be aware of the proper procedures for use of these masks because announcements and demonstrations by flight attendants and passenger briefing cards do not accurately represent this type of mask assembly. This notice recommends interim procedures to address these deficiencies until related training and briefing issues can be further resolved. This notice also requests that affected POIs and PMIs obtain certain information from their assigned operators and certificate holders and report their findings using the Performance Tracking and Reporting System (PTRS).

**2. DISTRIBUTION.** This notice is distributed to the division level in the Flight Standards Service in Washington headquarters; to the branch level in the regional Flight Standards divisions; to the Flight Standards District Offices; and to the Regulatory Standards Division at the Mike Monroney Aeronautical Center. This notice is also distributed electronically to the division level in the Flight Standards Service in Washington headquarters and to all regional Flight Standards divisions and district offices. This information is also available on the Federal Aviation Administration (FAA) Web site at:

<http://www.faa.gov/avr/afs/notices/8000/N8000-297.doc>.

**3. APPLICABILITY.** This notice contains information for principal inspectors who have responsibility for operators of airplanes equipped with overhead PSU that contain drop-down oxygen masks. These units may or may not contain the oxygen mask assemblies in question.

### **4. DISCUSSION.**

**a. Chance discovery.** A principal inspector recently observed an unfamiliar passenger oxygen mask assembly on a passenger-carrying airplane.

**b. What's different about the assembly?** By design this mask is stowed inside the overhead PSU within a plastic clip that is attached by its own lanyard to an anchor point in the PSU. The purpose of the clip/retainer is to facilitate both stowage and deployment of the mask. These clips are similar in appearance and purpose to clip/retainers that have been permanently installed in seat back PSUs. However, unlike those in seat back PSUs, the clip/retainers in the

overhead PSUs are not fastened directly to the PSU. Rather, they are tethered to an anchor point in the PSU by a lanyard.

**c. How it works.** When the passenger oxygen system is activated, two doors of the PSU open and an oxygen mask held in a clip/retainer falls and becomes available for use by the passenger. The mask itself is a normal passenger oxygen mask and is donned in the familiar manner. The lanyards on the mask and on the clip/retainer are of different lengths by design, with the shorter lanyard attached to the clip/retainer. During the fall from the PSU, the clip/retainer extends its lanyard first and should separate from the mask, thus making the mask available for immediate use by the passenger. Should the mask remain inside the clip/retainer after deployment, the passenger must first separate the mask from the clip/retainer. The mask can then be used as described in current flight attendant briefings and as depicted on current passenger briefing cards. The clip/retainer is attached to its own separate lanyard and will remain hanging in front of the passenger after deployment and separation from the mask.

**d. Where are these masks found?** This new design PSU with the oxygen mask stowed inside a deployable clip/retainer may be installed on several makes and models of aircraft, either as original equipment or as a retrofit. As of this publication, aircraft that are known to contain this design mask assembly via original equipment manufacturer (OEM) are: the EMB 135/140/145, the ERJ-170, the Fokker 70 and 100, some MD-80/90s and DC-10s with interior retrofits, and the Bombardier CL-700/900. This list may not include all PSU installations containing mask assemblies with clip/retainers that are installed via OEM and certainly does not address aircraft that may have mask assemblies with clip/retainers installed via a retrofit.

**e. How can you tell which mask assemblies are installed?** As of the publication date of this notice, it is unknown whether an easy method exists for determining if a PSU contains masks with stowage clip/retainers. Overhead PSUs with double doors may be an indication that the masks have clip/retainers, and there may be other indications not yet known.

**5. THE SAFETY ISSUE.** A safety issue exists because current briefings and demonstrations by flight attendants and passenger briefing cards do not provide an accurate verbal description or an accurate visual depiction of what passengers might experience when these masks with clip/retainers fall in front of them. As a result, each operator should take necessary immediate corrective action to ensure that passengers are getting appropriate safety information.

**6. ACTION.** All POIs, PMIs, and CSIs, as applicable, associated with operators of aircraft equipped with any overhead PSUs that contain oxygen masks should complete the following tasks:

**a.** The POI, PMI, and CSI, if applicable, should review this notice and available applicable guidance.

**b.** The POI, PMI, and CSI, if applicable, should immediately provide the information in this notice to their respective operators.

**c.** The POI and CSI, if applicable, should determine that their operators are providing passenger briefings, equipment demonstrations, and passenger briefing cards that accurately depict the types of masks that are installed on each aircraft. Additionally, where a mixed installation of mask assembly designs exists, the POI or CSI, if applicable, should determine that operators brief and demonstrate to passengers appropriate procedures for each type mask assembly that is installed.

**d.** The POI and CSI, if applicable, should determine that their operator's flight attendant training and manuals contain this information.

**e.** The PMI should determine that maintenance programs are in place to support each type of oxygen mask system installed.

**f.** If an operator has determined that all or some of its fleet are equipped with PSUs that contain the clip/retainer style mask assemblies, the PMI should review the maintenance program and parts support for that system for completeness.

**g.** In addition, the POI and PMI should report the following information through the Program Tracking and Reporting Subsystem (PTRS), as detailed in the reporting paragraph of this notice:

**(1)** Within 30 days, the operator is to complete the following actions and report the information to the principal inspectors. The POI and PMI should then report this information through PTRS:

**(a)** Determine the number of aircraft that are equipped with the oxygen mask designed with the stowage clip/retainers by make and model.

**(b)** Indicate whether each aircraft has all one design mask or has a mixed installation.

**(c)** Review the maintenance program for the clip/retainer style overhead PSU system.

**(2)** The POI and CSI, if applicable, should, within 90 days, verify that operators have passenger briefing cards on their aircraft that clearly illustrate the types and use of oxygen mask assemblies installed and that flight attendant training and manuals contain this information. Report this information via PTRS as instructed in paragraph 7.

## **7. REPORTING.**

**a.** POIs and PMIs should document that they have read and conveyed this notice to their operator's operations and maintenance representative. These PTRS entry requirements apply to Air Transportation Oversight System (ATOS) and non-ATOS certificate-holding district offices.

**(1)** The POI should use PTRS activity code "1381" and the PMI should use PTRS activity code "3381" (without quotes) (Directed Action).

(2) The POI and PMI should enter “N8000xxx” (without quotes) into the “National Use” field.

**b.** Within 30 days, POIs and PMIs should document the information collected during the operator’s compliance (or noncompliance) with the actions specified in paragraph 6g(1).

(1) The POI should use PTRS activity code “1380” and the PMI should use PTRS activity code “3390” (without quotes) (Special Emphasis).

(2) The POI and PMI should enter “N8000xxx” (without quotes) into the “National Use” field.

(3) The POI and PMI should place in the comments section of PTRS the numbers of aircraft that have masks with clip/retainers installed by make and model and indicate how many (if any) have a mixed installation.

**c.** Within 90 days, POIs should document that their operators (where appropriate) have modified and placed into use in all of their affected aircraft passenger briefing cards that clearly instruct on the use of and depict the types of oxygen masks that are installed on each aircraft, and that their operators have included the same information in flight attendant training and appropriate manuals.

(1) The POI should use PTRS activity code “1380” (without quotes) (Special Projects).

(2) The POI should enter “N8000xxx” (without quotes) into the “National Use” field.

**8. DISPOSITION.** This notice will not be incorporated into Order 8400.10, Air Transportation Operations Inspector’s Handbook. Questions concerning passenger oxygen mask installations with clip/retainers should be directed to the Air Transportation Division, AFS-200, at (202) 267-7965 or the Aircraft Maintenance Division, AFS-300, at (202) 267-9338.

James J. Ballough  
Director, Flight Standards Service

**APPENDIX 1. PHOTOS OF OVERHEAD PSU MASK DEPICTING  
RELATIONSHIP TO STOWAGE CLIP/RETAINER**



Oxygen Mask Remaining in Stowage Clip/Retainer After Deployment



Oxygen Mask Removed From Clip/Retainer and Available for Donning