Federal Aviation Administration
Office of Security and Hazardous Materials

Dangerous Goods Advisory Bulletin

Information of Concern to Air Carrier and Repair Station Personnel

Number: DGAB-07-02 **Date: August 21, 2007**

SUBJECT: **Chemical Oxygen Generators (COGs) and Chemical Oxygen Generators Installed in Equipment**

Since 2001, the FAA has investigated over 80 incidents of undeclared or improperly prepared oxygen generators. Combined, the subjects of these investigations have paid over $3,000,000 in civil penalties to the US Federal Government. While continuing its aggressive enforcement in this area, the FAA is also increasing its outreach efforts on oxygen generators.

ACTION: **For Air Carriers and Repair Stations**

- Review procedures and training for the acceptance, rejection, handling, storage incidental to transport, packaging and loading of oxygen generators, related equipment, and other company material (COMAT).
- Ensure that all employees and contractors that handle COMAT, parts and spares can recognize oxygen generators—including when installed in equipment.
- Ensure these personnel understand that:
    - Oxygen generators are regulated as hazardous materials (dangerous goods).
    - Oxygen generators are forbidden as cargo (including COMAT) on passenger aircraft.
    - Oxygen generators must be properly declared, documented, labeled, marked, and packaged when transported as cargo (including COMAT) on cargo-only aircraft or when transported by surface modes.
    - Spent oxygen generators are forbidden from all air transport and are regulated as a hazardous material for other modes of transport.

Transportation Requirements

Chemical oxygen generators have been forbidden as cargo on passenger-carrying aircraft since May 1996 as a result of the ValuJet 592 accident. Oxygen generators may be shipped by other means of transport (cargo-only aircraft, highway, rail, and vessel) but only if properly prepared and offered in accordance with the US Department of Transportation (DOT) Hazardous Materials Regulations (49 CFR, Parts 100-185).

The proper shipping name for a chemical oxygen generator is **"Oxygen generator, chemical"** and the basic shipping description is:

Identification Number	Proper Shipping Name	Hazard Class and Division	Packing Group
UN 3356	**Oxygen generator, chemical**	**5.1**	**II**

Use of International Regulations (ICAO / IATA)

Although the US DOT makes allowances for the use of the international **ICAO Technical Instructions** (the basis for the IATA Dangerous Goods Regulations), there are additional limitations for oxygen generators in the US variations to the ICAO TI and in 49 CFR section 171.11. These limitations include:

- Oxygen generators must have US DOT approval prior to transport.
- Oxygen generators are always forbidden as cargo on passenger aircraft—ICAO Special Provision A144 (Aircrew PBE as cargo on passenger aircraft) may not be used in the US.

Recognize the Terms

Some commonly used industry terms and COMAT descriptions that may describe a chemical oxygen generator or aircraft components containing chemical oxygen generators are:

COG

Generator

O2 Generator or **O2 GEN**

Oxygen Generator or **Oxy Gen**

Passenger Service Unit or **PSU**

Oxygen Module or **Oxy Box** or **Oxy Mod**

Protective Breathing Apparatus or **PBA**

Protective Breathing Equipment or **PBE**

Smoke Hood

Recognize the Equipment

While oxygen generators may be shipped separately, they are often contained in or are an integral part of aircraft components like Protective Breathing Equipment (PBE) and Passenger Service Units (PSU). PBEs and PSUs can be contained in aircraft flight decks, flight attendant jump seats, passenger seating areas and lavatories. See the following illustrated examples:

PSU

PSU has COG

COGs

PBE

New US DOT Regulations

Finally, the FAA advises that all air carriers and repair stations review the recent DOT final rule titled "Hazardous Materials Regulations: Transportation of Compressed Oxygen, Other Oxidizing Gases and Chemical Oxygen Generators on Aircraft" published on January 31, 2007. It outlines new requirements for the packaging, shipping and transporting of oxidizing materials including oxygen generators. The rule can be viewed at the link below:

http://hazmat.dot.gov/regs/rules/final/72fr/docs/72fr-4442.pdf

We thank you for your continued support of the safe transport of hazardous materials / dangerous goods by air.

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