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

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

JAN 21 2003

DOT-E 11536
(FIFTH REVISION)

EXPIRATION DATE: December 31, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: The Boeing Company
Los Angeles, California

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of Division 2.2 gases in non-DOT specification packagings (spacecraft) and limited quantities of Division 1.4S explosives secured within the spacecraft. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.102 Special Provision 101 for naming the specific substance, venting requirements under § 173.24(g), for packaging requirements under § 173.62 and § 173.202, and § 173.304 and 175.3 in that a non-DOT specification cylinder is not authorized, except as specified herein.

5. BASIS: This exemption is based on the application of The Boeing Company dated December 18, 2002 submitted in accordance with §§ 107.109 and 107.117 and a determination that it is necessary to preclude serious economic loss.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi-fication Number	Packing Group
Ammonia, anhydrous	2.3	UN1005	Hazard Zone D
Argon, compressed	2.2	UN1006	N/A
Articles, explosive, n.o.s.	1.4S	UN0349	II
Helium, compressed	2.2	UN1046	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Krypton, compressed	2.2	UN1056	N/A
Nitrogen, Compressed	2.2	UN1066	N/A
Xenon, compressed	2.2	UN2036	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings are components of a spacecraft. Xenon gas must be packaged in carbon-filament wrapped aluminum or titanium cylinders complying with the applicable sections of MIL-STD-1522A (USAF) for pressurized systems, dated May 28, 1984. Anhydrous ammonia must be packaged in heat pipe/radiators. Pressure relief devices are not required. All spacecraft batteries must be non-spillable in compliance with the requirements of § 173.159(d). The explosives must be secured in the spacecraft. The spacecraft must be packaged in the "Belfast container" (7705995), the "Goodyear container" (3015001-7), the HS-A11 containers (7789707, 3857090 or 7990150), the HS-376 shipping container (3566812), or the HS 601 shipping container (7730520) with continuous nitrogen or air flow as shown in the original application and the application for modification. Note: the nitrogen or air flow expelled from the shipping container during transit is not to be considered leakage of hazardous material.

b. The requirements for venting under 173.24(g) is waived. When nitrogen flow is used, precautions must be taken to prevent the creation of asphyxiating conditions in a closed space and only unpressurized cargo compartments may be used when shipping by air.

8. SPECIAL PROVISIONS: None required by this exemption.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel, cargo aircraft only.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

    - All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

    - Registration required by § 107.601 et seq., when applicable.

    Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

    No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

R. Ryan Pitt

Robert A. McGuire
for Associate Administrator for
Hazardous Materials Safety

JAN 21 2003
(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: KFW/AM