JUN 16 2000

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

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

DOT-E 11103
(SIXTH REVISION)

EXPIRATION DATE: December 31, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Space Systems/Loral
Palo Alto, California

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of a GOES Satellite assembly containing non-DOT Specification spherical containers pressurized with certain Division 2.2 materials. This exemption provides no relief from any Hazardous Materials Regulation (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 § 173.302 in that a non-DOT specification spherical pressure vessel is authorized as prescribed herein.

5. BASIS: This exemption is based on the application of Space Systems/Loral's (SS/L) dated June 12, 2000, submitted in accordance with § 107.109 supplemental information dated June 13, 2000.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Proper Shipping Name/ Hazardous Materials Description | Hazard Class/ Division | Identi-fication Number | Packing Group |
|---|---|---|---|
| Helium compressed | 2.2 | UN1046 | N/A |
| Nitrogen, compressed | 2.2 | UN1066 | N/A |

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed are non-DOT specification spherical containers which are part of the GOES Satellite assembly described in SS/L's application.

(1) The containers are:

(i) Propellent Tanks (Loral part No. 570536): Titanium 6-4-4 alloy spheres. The tanks are 22 inches in diameter and designed and tested for a maximum working pressure of 250 psig as per SS/L Specification SE 572851 and information provided in Attachment (1) and (2) of SS/L's application on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). The tanks may be charged to a pressure not exceeding 50 psig during transportation.

(ii) Pressurant Tank (Part No. 570535): 316L stainless steel spherical container over wrapped Kevlar 49 fitted with welded end bosses. The tank is 22 inches in diameter, and designed and tested for a working pressure of 4000 psig per SS/L Specification SE 572851 and information in Attachments (3) and (4) of SS/L's application on file with the OHMEA. The pressurant tank may be charged to a pressure not exceeding 250 psig during transportation.

b. The GOES satellite must be shipped in the Satellite Container Shown on SS/L drawing 563660 on file with the OHMEA.

c. MARKING - The satellite shipping container must be marked "DOT-E 11103" on two opposite sides in letters at least 2 inches in height on the contrasting background.

8. SPECIAL PROVISIONS: The transportation of the GOES Satellite shipping container authorized under this exemption from Space Systems Loral's Palo Alto facility is limited to the following movements and return movements:

a. From Palo Alto, California to Moffit Naval Air Base from the Shuttle Landing Strip, Kennedy Space Center (KSC), Florida, to the Astrotech Space Operation's Titusville, Florida. Land transport must be by dedicated motor vehicle. Transportation from the Moffit Naval Air Station to the Shuttle Landing Strip at KSC must be by Air Force aircraft.

b. From Palo Alto, California to the Jet Propulsion Laboratory facility in Pasadena, California by dedicated motor vehicle.

c. From Palo Alto, California to Boeing Aircraft in Seattle, Washington or Lockheed Aircraft in Sunnyvale, California by dedicated motor vehicle.

d. From Palo Alto, California to Rockwell, Space Systems Division, Seal Beach, California or TRW Inc., Rendono Beach, California by dedicated motor vehicle.

e. From Palo Alto, California via Moffett Federal Air Field to either the Arnold Engineering Development Center (AEDC) on Arnold Air Force Base, Tullahoma, Tennessee, the Redstone Arsenal, Huntsville, Alabama or the Air Force Facilities at Smyrna, Tennessee. Ground transportation must be by dedicated motor vehicle. Transportation from Moffett Naval Air Station to the Tennessee or Alabama destinations will be on Air Force aircraft.

f. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each 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 the 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 at Washington, D.C.:

JUN 16 2000

Robert A. McGuire
Acting Associate Administrator for
Hazardous Materials Safety

(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.

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The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: sln