

May 09, 2016



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 14469
(THIRD REVISION)

EXPIRATION DATE: 2020-04-30

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Space Systems/Loral
Palo Alto, CA
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of a series of Space Systems/Loral (SS/L) satellites containing non-DOT specification pressure vessels pressurized with anhydrous ammonia with pressures up to 2,000 psig. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with use as a component of a transport vehicle or other device or other uses not associated with transportation in commerce.
 - c. Party status will not be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Column (9B) in that anhydrous ammonia is forbidden on cargo aircraft; § 173.301(f) in that the non-DOT specification packaging is not fitted with a pressure relief device; and

§§ 173.302a(a)(1), and 173.304a(a)(2) in that non-DOT specification packaging is not authorized except as specified herein.

5. BASIS: This special permit is based on the application of Space Systems/Loral dated May 3, 2016 submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Ammonia, anhydrous	2.2/2.3*	UN1005	N/A, Hazard Zone D

* Division 2.3 for international transportation. Division 2.2 as an alternative when only domestic transportation is involved.

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are non-DOT specification pressure vessels (heat pipes) which are part of Space Systems/Loral (SS/L) satellites described in the application for special permit on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The non-DOT specification pressure vessels (heat pipes): are without valves and pressure relief; are fabricated by MELCO from 6061-T6 and 6063-T6 aluminum alloy tubing; and meet the following minimum requirements:

- (1) Maximum expected operating pressure of 26 bars (382 psig) at 60°C;
- (2) Design proof test of 113 bars (1,661 psig); and
- (3) Design burst pressure of 250 bars (3,675 psig).

b. OPERATIONAL CONTROLS -

- (1) The heat pipes may not be charged to a pressure exceeding 2,000 psig.

(2) Each satellite must be shipped in the Satellite Container shown on SS/L Figure 7 on file with the OHMSPA.

(3) No more than ten shipments may be made in a one year period.

(4) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the heat pipes are not fitted with pressure relief devices and provide appropriate guidance in case receptacles are exposed to fire.

8. SPECIAL PROVISIONS:

a. The transportation of the satellite shipping container authorized under this special permit is limited to those locations specified in Table 1 of the special permit application on file with OHMSPA.

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

c. The satellite shipping container must be marked "DOT-SP 14469" on two opposite sides in letters and numbers at least 2 inches in height on a contrasting background.

d. Air transportation is limited to chartered cargo aircraft dedicated to Space Systems/Loral satellite transportation.

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

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

May 09, 2016

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

- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

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

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

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous

May 09, 2016

materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Dr. Magdy El-Sibaie

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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

PO: BMOORE/SGrey