

August 15, 2006



U.S. Department  
of Transportation

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

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 14366

EXPIRATION DATE: October 31, 2006
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(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: The Boeing Company  
Huntington Beach, CA
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the one-way transportation in commerce of the Orbital Express ASTRO satellite containing explosives, lithium batteries and helium in alternative packaging by motor vehicle from California to Florida. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the 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 §§ 173.62, 173.302, and 173.185 in that the use of non-DOT specification packaging is not authorized except as specified herein..
5. BASIS: This special permit is based on the application of The Boeing Company dated June 1, 2006 submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Articles, explosive, n.o.s.	1.4C	UN0351	II
Helium, compressed	2.2	UN1046	N/A
Lithium batteries, contained in equipment	9	UN3090	II

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is the Orbital Express ASTRO satellite which must be as described in the Boeing application for special permit on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The satellite contains components and subassemblies which contain hazardous materials:

(1) Explosive devices must be as described in United States Competent Authority Approval EX2005030309 dated April 4, 2005. The explosives will not have electrical power during transportation to prevent premature detonation.

(2) Three (3) Lithium Ion batteries must be as described in United States Competent Authority Approval CA2004110013 dated November 16, 2004.

(3) Pressurized subsystem consisting of three (3) non-DOT specification pressure vessels designed and tested to MIL-STD-1522: (1) aluminum-lined graphite composite pressure vessel manufactured by General Dynamics with a maximum expected operating pressure (MEOP) of 4000 psig at 50°C and a volume of 3340 cubic inches; (1) Titanium pressure vessel with a MEOP of 150 psig at 50°C and a volume of 7362 cubic inches; (1) spherical pressure vessel Titanium pressure vessel with a MEOP of 150 psig at 50°C and a volume of 2316 cubic inches.

b. OPERATIONAL CONTROLS -

(1) The satellite must be prepared for transportation in accordance with drawings on file with the OHMSPA. The satellite must be triple bagged to provide an antistatic condition, secured to a metal shock attenuation system and enclosed in a wood shipping container. The shipping container must be secured to a flat bed trailer with an external air conditioning system to provide cool air to the satellite during transportation.

(2) Transportation of the Orbital Express ASTRO satellite must be by private or contract carrier in exclusive use of the Boeing Company. The shipment must be accompanied by trained personnel and appropriate emergency equipment.

(3) One-time transportation is authorized from Huntington Beach, California to Cape Canaveral Air Force Station in Florida.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

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 outer shipping container must be plainly and durably marked "DOT-SP 14366" as specified in §§ 172.302(b) and (c).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor Vehicle.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.

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 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 Robert A. McGuire  
Associate Administrator  
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

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](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: CWFreeman/sln