

September 23, 2008



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 14757

EXPIRATION DATE: December 31, 2008
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1. GRANTEE: Orbital Sciences Corporation  
Dulles, VA
2. PURPOSE AND LIMITATION:
  - a. This emergency special permit authorizes the one-time, one-way transportation in commerce of a damaged satellite, containing certain materials listed in paragraph 6 below, in non-DOT specification packages. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  - 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 consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
  - c. No party status will 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 lithium batteries may not exceed 35 kg and/or certain materials are forbidden by air; § 173.301(f) in that containers are not fitted with pressure relief devices; and §§ 173.302a(a)(1), 173.304a(a)(2) and 175.3 in that non-DOT specification packagings are not authorized, except as specified herein.

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5. BASIS: This emergency special permit is based on the applications of Orbital Sciences Corporation dated August 25 and September 11, 2008, submitted in accordance with § 107.117 and a determination that it is necessary to prevent significant economic loss.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper shipping name</b>	<b>Hazard Class/ Division</b>	<b>Identi- fication Number</b>	<b>Packing Group</b>
Acetone	3	UN1090	II
Amines, liquid, corrosive, n.o.s., or Polyamines, liquid, corrosive, n.o.s.	8	UN2735	I
Amines, solid, corrosive, n.o.s., or Polyamines, solid, corrosive n.o.s.	8	UN3259	I
Ammonia, anhydrous	2.3	UN1005	N/A
Carbon dioxide, solid or Dry ice	9	UN1845	III
Cartridges, power device	1.4C	UN0276	II
Dinitrogen tetroxide	2.3	UN1067	N/A
Engines, internal combustion, flammable gas powered	9	UN3166	N/A
Environmentally hazardous substances, liquid, n.o.s.	9	UN3082	III
Ethane	2.1	UN1035	N/A
Ethanol or Ethanol Solution	3	UN1170	II
Helium, compressed	2.2	UN1046	N/A

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Hazardous Materials Description			
Proper shipping name	Hazard Class/ Division	Identification Number	Packing Group
Hydrazine, anhydrous or Hydrazine aqueous solutions with more than 64 percent hydrazine, by mass	8	UN2029	I
Isopropanol or Isopropyl alcohol	3	UN1219	II
Lithium batteries, contained in equipment	9	UN3091	II
Methane, compressed or Natural gas, compressed (with high methane content)	2.1	UN1971	N/A
Nitrogen trifluoride, compressed	2.2	UN2451	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	3	UN1268	I
Petroleum gases, liquefied or Liquefied petroleum gas	2.1	UN1075	N/A
Propane see also Petroleum gases, liquefied	2.1	UN1978	N/A
Propylene see also Petroleum gases, liquefied	2.1	UN1077	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are non-DOT specification containers which are installed in spacecraft or components of spacecraft and over-packed in a wood or metal box constructed in accordance with drawings on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA).

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b. OPERATIONAL CONTROLS -

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

(2) The satellite propulsion system must be flushed with an ethanol solution to leave no more than 26 or 27 gm of the hydrazine (fuel), and no more than 0.1 gm of dinitrogen tetroxide. The propulsion system must be inerted with helium or nitrogen pad.

8. SPECIAL PROVISIONS:

a. There are two aircraft charters set up for the shipment of the materials listed in paragraph 6 of this special permit. The cargo aircraft are Polet Airlines, Antonov A 124 aircraft and the shipment will depart from Baikonur, Kazakhstan and may arrive at anyone of the following U.S. airports:

- (1) Dulles International Airport (IAD)
- (2) Los Angeles International Airport (LAX)
- (3) Newburgh Stewart International Airport (SWF)
- (4) Orlando Sanford International Airport (SFB)
- (5) Orlando International Airport (MCO)
- (6) El Paso International Airport (ELP)

b. Advance permission from airport. The operator of the aircraft must have advance permission from the owner or operator of each manned airport where the material is to be loaded or unloaded or where aircraft is to land while the materials are on board. When the destination is changed after departure because of weather or other unforeseen circumstances, permission from the owner or operator of the alternate airport must be obtained as soon as practicable.

c. Flight plan. The operator of the aircraft must include the following information in the "Remarks" section of each flight plan when the provisions of this special permit are exercised:

- (1) The classification of each hazardous material aboard the aircraft.

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(2) The net weight of each class of hazardous material aboard the aircraft.

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

e. MARKING - The overpack containing the damaged satellite must be marked on two sides in letters at least 2 inches high on a contrasting background, "DOT-SP 14757".

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.

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.:



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for Theodore L. Willke  
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](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: MAZZULLO/WONG