

September 5, 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 11725  
(THIRTEENTH REVISION)

EXPIRATION DATE: October 31, 2010

(FOR RENEWAL, SEE 49 § 107.109)

1. GRANTEE: ATK Space Systems, Inc. (formerly Swales Aerospace, Inc.)  
Beltsville, Maryland
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of certain non-DOT specification containers containing certain Division 2.1, 2.2, 2.3 and 3 liquefied and compressed gases. This special permit provides no relief from any regulation other than as specifically stated herein.
  - b. The safety analyses performed in development of this special permit only considered the hazard and risks 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 § 173.301(f) in that the non-DOT specification containers are not fitted with pressure relief devices; §§ 173.302a(a)(1), 173.304a(a)(2) and 175.3 in that a non-DOT specification packaging is not authorized except as specified herein.
5. BASIS: This special permit is based on the application of ATK Space Systems dated May 2, 2008, submitted in accordance with § 107.105 and the public proceedings thereon.

September 5, 2008

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Ammonia, anhydrous*	2.2/2.3	UN1005	N/A
Ethane	2.1	UN1035	N/A
Methane, compressed or Natural gas, compressed ( <i>with high methane content</i> )	2.1	UN1971	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Nitrogen Trifluoride	2.2	UN2451	N/A
Propane <i>see also</i> Petroleum gases, liquefied	2.1	UN1978	N/A
Propylene <i>see also</i> Petroleum gases, liquefied	2.1	UN1077	N/A
Toluene	3	UN1294	II
Lithium batteries, contained in equipment	9	UN3091	II

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

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are three (3) non-DOT specification containers which are installed in spacecraft or components of spacecraft and are over-packed in an approved wooden box. The non-DOT specification containers are sealed in a polyethylene or nylon bag, packed in foam cushioning and over-packed in a DOT Specification UN 4C or UN 4D wood box or non-DOT specification wooden box meeting the material requirements of §§ 178.513(b)(1) and (2) or § 178.514 (b)(1). The pressure in the containers during transportation may not exceed 370 psig at 130°F. The burst pressure of the non-DOT specification container must be at

**September 5, 2008**

least 4 times the vapor pressure of the lading at 130°F. Packaging must be in accordance with drawings and specifications provided in the application on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The non-DOT specification containers are without valves or pressure relief devices and are described as follows:

(1) Heat pipes or variable conductance heat pipes, constructed of axially grooved tubing (aluminum alloy 6063 or 300 series stainless steel or combination thereof) with an end cap and fill tube welded to opposing ends, not to exceed 4 liters in volume.

(2) Capillary pumped loops constructed of 6061-T6 aluminum or 300 series stainless steel or a combination thereof, not to exceed 144 inches in length and 36 inches wide, and not to exceed 4 liters in volume.

(3) Reservoirs constructed of 6061-T6 aluminum or 300 series stainless steel, not to exceed 4 liters in volume. The maximum size of the reservoir is 6 inches in diameter and 24 inches in length.

b. TESTING - Welds must be radiographically inspected to MIL-STD-2219 or NAS1514 specification. Each non-DOT specification container must be pneumatically tested to a pressure 1.5 times the vapor pressure of the lading at 100°C, but not less than 1400 psig, without failure.

c. OPERATIONAL CONTROLS:

(1) Non-DOT specification containers may not contain more than 2.5 pounds of anhydrous ammonia.

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

(3) Stacking of boxes is prohibited during shipment.

(4) Non-DOT specification wooden boxes identified in paragraph 7.a. must be shipped by exclusive use motor vehicle.

**September 5, 2008**

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 modifications or changes are 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. MARKING

(1) The outer wooden box must be plainly and durably marked on two opposite sides on a contrasting background, "DOT-SP 11725" and "DO NOT STACK" as specified in § 172.301(c).

(2) Each non-DOT specification container must be marked with the design pressure and pneumatic test pressure.

d. The transportation of Division 2.3 (gases which are poisonous by inhalation) materials are not authorized aboard aircraft unless specifically authorized in writing by OHMSPA, as provided in Special Provision A2 in the International Civil Aviation Organization's (ICAO) Technical Instructions for the Safe Transportation of Dangerous Goods by Air.

e. Packagings permanently marked 'DOT-E 11725', prior to October 1, 2007 may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2007 must be marked 'DOT-SP 11725'.

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

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

**September 5, 2008**

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

**September 5, 2008**

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 Theodore L. Willke  
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials 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: CWF/dl/Moore