EXPIRATION DATE: February 28, 2001

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Boeing North American, Inc.
   Downey, California.

2. PURPOSE AND LIMITATION:
   a. This exemption authorizes the transportation in commerce
      of Division 6.1 material and Division 2.3 material, in
      propellant tanks designed to a military specification. This
      exemption provides no relief from any regulation other than
      specifically stated herein.
   b. The safety analyses performed in development of this
      exemption 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.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.226 and
   § 173.336 in that a non-DOT specification packaging is
   authorized.

5. BASIS. This exemption is based on Boeing North American,
   Inc.'s application dated May 27, 1998, submitted in
   accordance with § 107.109 and supplemental information dated
   April 9, 1999.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<table>
<thead>
<tr>
<th>Hazardous materials description -- proper shipping name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinitrogen tetroxide, liquefied</td>
<td>2.3</td>
<td>UN1067</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Continuation of DOT-E 11930 (3rd Rev.)

<table>
<thead>
<tr>
<th>Hazardous materials description -- proper shipping name</th>
<th>Hazard Class/Division</th>
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<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylhydrazine</td>
<td>6.1</td>
<td>UN1244</td>
<td>I, Zone A</td>
</tr>
</tbody>
</table>

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. The packaging consists of eight non-DOT specification, aluminum propellant tanks without pressure relief devices. The tanks are designed in conformance with military specification MIL-STD-1522 for pressure vessels, with a minimum burst pressure of 1.8 times the maximum operating pressure. Each propellant tank consists of an outer shell, an inlet tube and a positive-displacement expulsion liner, all made from 2219-T851 aluminum. The tank is 7.20 inch diameter by 7.28 inches high. The maximum volume is 1.8 liters. During shipping, the propellant tank will not be pressurized. Quantities are limited to not more than 2.32 kilograms of Dinitrogen tetroxide or 1.46 kilograms of Methylhydrazine per tank.

b. Each propellant tank is placed into an 8-gallon, UN 1A2 steel drum which is lined with polyethylene foam. One 8-gallon metal drum will be overpacked into a 55-gallon, UN 1A2 metal drum lined with polyethylene foam.

8. SPECIAL PROVISIONS:

a. The propellant tanks will be transported by commercial truck operated by J.B. Kelly Trucking, Amarillo, Texas and by cargo vessel operated by Matson Navigation Company, Long Beach, California. Transportation must be from Boeing’s Canoga Park, California facility, Edwards Air Force Base, California and/or Kaiser Marquardt, Van Nuys, California to Kwajalein Missile Range, Marshall Islands.

b. MARKING: The outside of the 55 gallon UN 1A2 drum must be plainly and durably marked "DOT-E 11930"

c. This exemption serves as a Competent Authority Approval (CA-9801017) issued by the Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, of the United States Department of Transportation, in accordance with the International Maritime Dangerous Goods (IMDG) Code, Volume II, Introduction to Class 2, Paragraph 2.3.2.
9. **MODES OF TRANSPORTATION AUTHORIZED.** Motor vehicle and cargo vessel.

10. **MODAL REQUIREMENTS:** A current copy of this exemption must be carried aboard the cargo vessel and motor vehicle used to transport the package covered by this exemption.

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 Hazardous Materials transportation law, 49 U.S.C. 5101 *et seq*:

   o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

   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 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.:  

Alan I. Roberts  
Associate Administrator for Hazardous Materials Safety
Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Program.

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, SW, Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

Dist: FHWA, USCG
PO: sln99