DOT-E 9138
(FOURTH REVISION)

EXPIRATION DATE: June 30, 2003

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. **GRANTEE:** National Aeronautics and Space Administration (NASA)
   Washington, DC

2. **PURPOSE AND LIMITATION:**
   a. This exemption authorizes the use of a cylinder without a safety relief device, for the transportation in commerce of Nitrogen. This exemption provides no relief from the Hazardous Materials Regulations (HMRS) other than as specifically stated herein.
   
   b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR §§ 173.302(a) and 175.3; § 173.34(d) in that cylinders without pressure relief devices are not authorized, except as specified herein.

5. **BASIS:** This exemption is based on the application of NASA dated June 28, 2001, submitted in accordance with § 107.109.

6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Proper Shipping Name/ Hazardous Materials Description</th>
<th>Hazard Class/ Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen, compressed</td>
<td>2.2</td>
<td>UN1066</td>
<td>N/A</td>
</tr>
</tbody>
</table>
7. **SAFETY CONTROL MEASURES:** PACKAGING - Prescribed packaging is a fiber reinforced plastic (FRP), full composite (FC) cylinder complying with DOT-E 8162 without safety relief devices. Cylinders have a maximum service pressure of 3600 psi and a water capacity of 58 pounds (1600 cubic inches). Cylinders must be shipped as an integral part of NASA manned maneuvering unit (MMU) assembly and protected during transportation inside a strong shipping container.

8. **SPECIAL PROVISIONS:**

   a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

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

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

10. **MODAL REQUIREMENTS:**

    a. A current copy of this exemption must be carried aboard each cargo aircraft used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.

    b. Transportation will be limited to 6 cylinders per cargo aircraft, per shipment.

    c. When transported by motor vehicle, the MMU and its associated equipment must be shipped as shown in the sketch included in NASA's letter dated March 2, 1984.

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 Federal 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.
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 in Washington, D.C.:

Robert A. McGuire
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: DHM-31.

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.

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