(FOR RENEWAL, SEE 49 CFR SECTION 107.105.)

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

2. **PURPOSE AND LIMITATION:** This exemption authorizes the one-time shipment of an X-Ray Timing Explorer (XTE) satellite which contains propane, a Division 2.1 material, in non-DOT specification containers. This exemption provides no relief from any regulation other than as specifically stated herein.

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

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR 173.34(d), and 173.304(d)

5. **BASIS:** This exemption is based on NASA application dated March 31, 1995 submitted in accordance with 49 CFR 107.103 and the public process thereon.

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

<table>
<thead>
<tr>
<th>Hazardous materials description/ proper shipping name</th>
<th>Hazard Class/ Division</th>
<th>TD Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane</td>
<td>2.1</td>
<td>UN1978</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **PACKAGING AND SAFETY CONTROL MEASURES:**

   a. **PACKAGING** - Packaging prescribed is an X-Ray Timing Explorer (XTE) satellite which contains a system of five non-DOT specification box type, sealed and double walled propane containers (PCUs). The PCUs are made from 6061-T6 aluminum alloy; are an integral part of the instrument Proportional Counter Array (PCA); and each holds 3.4 liters of propane at 1.05 atmospheres. The XTE spacecraft's general configuration is as shown in Enclosure-1 of NASA's application, on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). Pressure relief devices are not required. The XTE satellite is contained in a shipping container designed and tested as described in Enclosure 3 of NASA's application on file with OHMEA.
Continuation of DOT E-11439

b. **MARKING** - The outside of the XTE spacecraft shipping container must be marked DOT E-11439 in letters at least 2 inches high on a contrasting background.

8. **SPECIAL PROVISIONS:**

   a. The XTE spacecraft is to be shipped from the Goddard Space Flight Center, Greenbelt, Maryland to John F. Kennedy Space Center, Cape Kennedy, Florida, by dedicated motor vehicle and cargo aircraft.

   b. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

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

10. **MODAL REQUIREMENTS:** A copy of this exemption must be carried aboard the aircraft and motor vehicle used to transport packages covered by this exemption. In accordance with the provisions of 49 CFR Part 107, Appendix B to Subpart B, paragraph 3, the shipper shall furnish a copy of this exemption 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 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.

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 unless a regulation has been amended making the exemption no longer necessary.

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. (49 CFR 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 incidents 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

MAY - 4 1995

(Address)

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.

Dist: FHWA, FAA