U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

MAY 13 1997

DOT-E 11849

EXPIRATION DATE: **April 30, 1999**

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

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

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of the P91-1 ARGOS satellite having certain Division 1.4S, Division 2.1, 2.2, Class 7 and Class 8 hazardous articles and substances installed in non-specification packagings, subject to the provisions herein. 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 Sections 173.62(c),Packing Method E-141; 173.159; 173.302; 173.304-307; 173.314-315; 173.421; and 177.848(d)Segregation Table.

5. BASIS: This exemption is based on the application of Boeing North American, Inc. dated February 24, 1997, submitted in accordance with 49 CFR 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi-fication Number	Packing Group
Igniters (EX-8601869)	1.4S	UN0454	II
Hydrogen, compressed	2.1	UN1049	--
Ammonia, anhydrous, liquified (Inhalation Hazard)	2.2	UN1005	--
Compressed gases, n.o.s. (contains 90 percent argon and 10 percent methane)	2.2	UN1956	--
Carbon dioxide	2.2	UN1013	--
Xenon	2.2	UN2036	--
Nitrogen, compressed	2.2	UN1066	--
Radioactive materials, excepted, package-instruments or articles	7	UN2910	--
Batteries, wet, non-spillable	8	UN2800	III

7. PACKAGING AND SAFETY CONTROL MEASURES:

PACKAGING - The P91-1 ARGOS satellite itself shall be packaged securely in an air-tight non-specification aluminum container designed to mount on a flat-bed truck trailer chassis. The individual hazardous materials within the satellite shall be packaged as follows:

a. The electro-explosive devices installed in the satellite shall all have shorting plugs (Faraday caps) in the firing circuitry and "unable/arm/fire" restricted command sequences in place to prevent premature firing during transport.

b. Not more than 10 pounds of anhydrous ammonia shall be contained in a non-specification spherical stainless steel pressure vessel of 0.04 inches thickness with a capacity of 1925 cubic inches and a rated burst pressure of 2000 psi. The maxium operating pressure of the ammonia pressure vessel shall not exceed 300 psi.