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U.S. Department of Transportation
Research and Special Programs Administration

FEB 19 1988

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

DOT-E 9927

1. LTV Missiles and Electronic Group, Dallas, Texas, is hereby granted an emergency exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein of the nonflammable gas described in paragraph 3 below for transportation in commerce, subject to the limitations and special requirements specified herein. This exemption authorizes the one-time shipment of a non-DOT specification container, and provides no relief from any regulation other than as specifically stated. Each of the following is hereby granted the status of a party to this exemption.

National Aeronautics & Space Administration, Washington, D.C. - PTE-1.

2. BASIS. This exemption is based on the application of LTV Missiles & Electronic Group dated October 2, 1987, and additional information dated January 26, 1988, submitted in accordance with 49 CFR 107.103 and 107.113 and supporting letter from the National Aeronautics and Space Administration (NASA) dated February 9, 1988. Granting this exemption is in the national interest based on the statement by NASA. The granting of party status is based on the following application(s) submitted in accordance with 49 CFR 107.111 and 107.105 and the public proceeding thereon.

National Aeronautics & Space Administration's application dated February 9, 1988.

3. HAZARDOUS MATERIALS (Descriptor and class). Anhydrous ammonia classed as a nonflammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). Ammonia, anhydrous.

5. REGULATION AFFECTED. 49 CFR 173.304(a)(2).

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle.

7. SAFETY CONTROL MEASURES. Packaging prescribed is a nonrefillable, non-DOT specification container described as a body mounted radiator panel consisting of one panel containing a network of four heat pipes. Each heat pipe will consist of evaporator section and a condenser section made of 6061 or 7075 aluminum alloy. The system must conform with LTV Aerospace and Defense drawing 83-29353 Rev. 0 on file with the Office of Hazardous Materials Transportation (OHMT) . Maximum amount of ammonia is 2.30 pounds. Maximum operating pressure for each heat pipe is 322 psig. Each heat pipe must be proof tested to 2.6 times operating pressure and must have a design burst pressure of at least 8.9 times operating pressure. Designs must be qualified by testing at least 2 representative samples prior to initial shipment.

8. SPECIAL PROVISIONS.

a. A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

b. The body mounted radiator panel must be shipped in a strong outside packaging.

c. Only one round trip is authorized between Dallas, Texas and Huntsville, Alabama.

9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package or damage to the packaging must be reported to the OHMT as soon as practicable.

10. EXPIRATION DATE. May 15, 1988 or upon completion of one shipment.

Issued at Washington, D.C.:

FEB 19 1988

(DATE)

Alan I. Roberts
Director
Office of Hazardous Materials
Transportation

Address all inquiries to: Director, Office of Hazardous Materials Transportation, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Branch.

Dist: FHWA