US Department
of Transportation

**Research and
Special Programs
Administration**

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

DOT-E 9501

1. Hughes Aircraft Company, Los Angeles, California, is hereby granted an exemption from those provisions of this Department's Hazardous Materials Regulations specified in paragraph 5 below to offer packages prescribed herein of a nickel-hydrogen cell for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the transportation of a potassium hydroxide solution and hydrogen gas under pressure to be shipped in a non-DOT Specification cylinder constructed of Inconel, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on an application from Hughes Aircraft Company dated August 23, 1985 and supplemental information dated November 22, 1985, submitted in accordance with 49 CFR 107.103, and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and Class). Aqueous 31% potassium hydroxide solution classed as corrosive material; hydrogen gas under a pressure of 900 psig classed as flammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). Compressed gas, n.o.s.

5. REGULATIONS AFFECTED. 49 CFR 173.302, 175.3.

6. MODE OF TRANSPORTATION AUTHORIZED. Motor vehicle, cargo vessel, cargo-only aircraft.

7. SAFETY CONTROL MEASURES. Packaging prescribed is non-DOT Specification compressed gas cylinder constructed of Inconel having a test pressure of 1375 psig and a service pressure of 900 psig. The capacity of the cylinder may not exceed 65 cubic inches. The cylinder must be constructed and tested in accordance with the descriptions and drawings in the application. The cylinder may be used only as a single trip packaging and may not be reshipped in a charged condition. The cylinder must be overpacked as described in the application.

8. SPECIAL PROVISIONS.

a. This device is a battery (cell) and the terminals must be protected against short circuits.

b. A copy of this exemption must be carried aboard each vessel and aircraft used to transport packages covered by this exemption.

9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package must be reported to the Office of Hazardous Materials Transportation as soon as practicable.

10. EXPIRATION DATE. October 31, 1987.

Issued at Washington, D.C.:

JAN 16 1986

(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