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

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

DOT-E 9921
(FIRST REVISION)

FEB 21 1991

1. Rockwell International Corporation, AnaHeim, California, is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein of the hazardous materials described in paragraph 3 below for transportation in commerce, subject to the limitations and special requirements specified herein. This exemption authorizes shipment of packages containing reserve-activated lithium thionyl chloride battery module, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on Rockwell International Corporation's application dated December 10, 1990, submitted in accordance with 49 CFR 107.111 and 107.103 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and class). Lithium metal, classed as flammable solid; thionyl chloride solution, classed as corrosive material.

4. PROPER SHIPPING NAME (49 CFR 172.101). Lithium metal and Thionyl chloride solution.

5. REGULATION AFFECTED. 49 CFR 173.206, 173.247

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle

7. SAFETY CONTROL MEASURES. Packagings prescribed are as follows: The cell is constructed of a stainless steel casing which consists of two separate hermetic compartments separated by a hermetic burst disk; one compartment contains no more than 2.0g of lithium metal and the other compartment contains no more than 50g of thionyl chloride electrolyte. The battery is constructed of a 304L stainless steel box which is hermetic. Each battery contains no more than 35 cells. The batteries are packed in a DOT Specification 19A wooden box with appropriate cushioning materials.

8. SPECIAL PROVISIONS.

a. Persons who receive packages covered by this exemption may reoffer them for transportation provided no modifications or changes are made to the packages, all terms of this exemption are complied with, and a current copy of this exemption is maintained at each facility from which such reoffering occurs.

b. The construction of the battery must be as described in the application, including Figures 1-3, dated January 11, 1988, submitted by Atlus Corporation.

9. REPORTING REQUIREMENTS: Any incident involving loss of packaging contents or packaging failure must be reported to the Associate Administrator for Hazardous Materials Safety as soon as practicable.

10. EXPIRATION DATE. February 1, 1993.

Issued at Washington, D.C.

FEB 21 1991

J. Suzanne Hedgepeth

for Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

(DATE)

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

Dist: FHWA.