U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

DEC 3 - 1992

DOT-E 8141
(SIXTH REVISION)

1. Boeing Defense and Space Group, Seattle, Washington, 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 large lithium cells and batteries for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the transport of individual cells and modules consisting of three cells containing lithium metal and thionyl chloride, 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:

Yardney Technical products, Inc., Pawcaluck, CT - PTE-1.
Department of Defense, Washington, DC - PTE-2.

2. BASIS. This exemption is based on Boeing Defense & Space Group's application dated January 15, 1992, submitted in accordance with 49 CFR 107.105 and the public proceeding thereon. The granting of party status is based on the following application submitted in accordance with Section 107.111 and the public proceeding thereon and 107.105.

Yardney Technical Products, Incorporated's application dated December 10, 1991.
The Department of the Army's application dated June 29, 1992 and supplemental letter dated November 25, 1992.

3. HAZARDOUS MATERIALS (Descriptor and class). 10,000 ampere hour cells or smaller containing lithium metal and thionyl chloride; and modules consisting of multiple cells containing lithium metal and thionyl chloride not to exceed 30,000 ampere hour total capacity of the multiple cell package; classed as flammable solids. NOTE: Effective October 1, 1993, the appropriate numberic hazard class or division and a new proper shipping description must be used in place of the written hazard class and old proper shipping description.

4. PROPER SHIPPING NAME (49 CFR 172.101). Lithium batteries.

5. REGULATION AFFECTED. 49 CFR 172.101, 173.206, 173.247.

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, cargo vessel.

DEC 3 - 1992

7. SAFETY CONTROL MEASURES. Outside packaging must be wooden boxes. Inside packaging must be as described under paragraph 2.3 (shipping containers) of Attachment 1, to the supplemental information dated August 7, 1979, or as described in the Boeing Company's letter dated January 24, 1984, attachments 1 and 2 or as described in Air Force Special Packaging Instruction (SPI) 01-166-7412. Individual cell packaging must be as prescribed in 49 CFR 173.206. Packages must bear both FLAMMABLE SOLID and DANGEROUS WHEN WET labels.

8. SPECIAL PROVISIONS.

a. Batteries shipped under this exemption must be constructed in accordance with paragraphs 2.1 through 2.1.5 and paragraph 2.2 of Attachment 1 to the supplemental information dated August 7, 1979.

b. The vehicles used to transport batteries shipped under this exemption must be vans subcontracted from a company experienced in the transport of hazardous materials. Packaged cells and batteries must be blocked and braced in accordance with the applicable paragraphs of Subpart I of Part 393 of 49 CFR so as to prevent damage and short circuits during transport.

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

d. Drivers must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire, or accident.

e. When shipments are made by vessel, packages must be stowed on deck and protected from the weather.

f. Persons who receive cells and/or modules covered by this exemption may reship them pursuant to the provisions of 49 CFR 173.22a.

g. Cells and modules as described in paragraph 3 of this exemption which have been used or stored may be shipped by the Department of Defense after having been cooled to minus 320°F before being offered for transportation. The shipping container is molded fiberglass reinforced plastic with urethane insulation in accordance with Yardney Technical Products, Incorporated's drawing 99-1340829. The package must contain enough dry ice to maintain a temperature of minus 100°F during the entire trip.

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. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.)

10. EXPIRATION DATE. January 31, 1994.

Issued at Washington, D.C.:

DEC 3 - 1992

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, Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Program.

Dist: FHWA.