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

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

DOT-E 8362 (EXTENSION)
FOURTH REVISION March 14, 1990

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 8362 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to October 31, 1993. This change is effective from the issue date of this extension. All other terms of the exemption remain unchanged.

This extension applies only to party(ies) listed below based on the application(s) received in accordance with 49 CFR 107.105. This extension constitutes a necessary part of this exemption and must be attached to it.

J. Suzanne Hedgepeth
Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

JAN 15 1992
(DATE)

Dist: FHWA FRA

EXEMPTION HOLDER	APPLICATION DATE
HEDB Corporation Santa Clara, CA	October 24, 1991
Science Applications International Corporation San Diego, CA	November 5, 1991

U.S. Department
of Transportation

**Research and
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DOT-E 8362
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1. Altus Corporation, Palo Alto, California, is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulation to offer packages prescribed herein of large lithium batteries for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the shipment of cells or batteries 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.

Science Applications International Corporation -PTE-1.

2. BASIS. This exemption is based on Altus Corporation's application dated November 27, 1989, submitted in accordance with 49 CFR 107.105 and 107.103 and the public proceeding thereon. The granting of party status is based on the following application submitted in accordance with 49 CFR 107.111 and the public proceeding thereon:

Science Applications International Corporation's dated November 28, 1989.

3. HAZARDOUS MATERIALS (Descriptor and class). 2,000 ampere hour cells or smaller containing lithium metal and thionyl chloride, or batteries constructed of such cells; classed as flammable solid.

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

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

6. MODE OF TRANSPORTATION AUTHORIZED. Motor vehicle and rail freight.

7. SAFETY CONTROL MEASURES. Packaging prescribed is:

a. For a battery structure comprising 30 cells maximum:

Inner packaging is a rigid metal structure of aluminum, steel and components which secure the location of each of the cell units. Rubber insulators, between each cell, cushion any cell movement or applied shock and vibration to the system.

Outer packaging is a sturdy wooden box fabricated from Group 2 woods as per 49 CFR 178.168-9 and design according to Drawing No. 0757-1032 (30 Cells) or Drawing No. 0757-0078 (6 or 8 cells). All drawings submitted 11/27/89. Gross weight of package not to exceed 1,600 pounds and not more than 30 cells are authorized per package.

b. For transportation of individual cells, 10 maximum:

Inner packaging is 1.5 inch thick cushioning of rigid nonflammable foam. Additionally, foam separators between each cell cushion any cell movement from applied shock and vibration to the system.

Outer packaging is a sturdy wooden box fabricated from Group 2 woods as per 49 CFR 178.168-9 and design according to Drawing No. 0757-1034 submitted 11/27/89. Gross weight of package not to exceed 560 pounds and not more than 10 cells are authorized per package.

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

c. No other hazardous materials may be shipped in the same vehicles with batteries shipped under this exemption. No shipment may be made if the packages show signs of damage.

d. Packages must bear both FLAMMABLE SOLID and DANGEROUS WHEN WET labels.

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

10. EXPIRATION DATE. January 31, 1992.

Issued at Washington, D.C.:

MAR 14 1990

Alan I. Roberts
Director
Office of Hazardous Materials
Transportation

(DATE)

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, FRA