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

JAN 31 1995

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

DOT-E 11203

EXPIRATION DATE: December 30, 1996

(FOR RENEWAL, SEE 49 CFR SECTION 107.105.)

1. GRANTEE: McDonnell Douglas Aerospace, Huntington Beach, California.

2. PURPOSE AND LIMITATION: This exemption authorizes the one-time shipment of "flight-ready" spacecraft components, each containing one or more of the hazardous materials described in paragraph 6, in specially designed non-DOT specification transport containers, from Titusville, Florida to Vandenberg AFB, California. This exemption provides no relief from any regulation other than as specifically stated.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Sections 173.61, 173.62(a), 173.302, and 177.848.

5. BASIS: This exemption is based on the application of McDonnell Douglas Aerospace dated January 11, 1994, and supplemental information dated September 22 and October 6, 1994, submitted in accordance with 49 CFR 107.103 and the public process thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials description/proper shipping name	Hazard Class/ Division	Identification number	Packing Group
Compressed gas, flammable, toxic, n.o.s. (hydrazine, anhydrous and helium)	2.3	UN1953	Inhalation Hazard Zone C
Rocket motors	1.3C	UN0186	II
Fuzes, detonating	1.4S	UN0257	II
Release devices, explosive	1.4S	UN0173	II

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are for "flight-ready" spacecraft components.

i. The anhydrous hydrazine and the compressed helium are contained in a combination packaging consisting of an inner packaging and an outer packaging. The inner packaging, depicted in Drawing No. 1D60924, is a titanium pressure vessel of 332 cubic inch (1.44 gal) capacity, pressure tested at 600 psig. The vessel contains six pounds of hydrazine and helium gas, which is used as the pressurant and will fill the ullage of the vessel during transportation. The outer packaging is a specially designed container fabricated from aluminum, sized so that if the vessel releases the pressurized helium into the volume of the outer packaging, the internal pressure of the outer packaging will not exceed 2 psig. The outer packaging is equipped with a port for inserting a detector probe to sample the interior vapor space prior to opening the container. The outer packaging also contains fuzes and release devices, but with no means of initiation.

ii. The rocket motors, detonating fuzes and explosive release devices are attached to a spin table which will be securely packaged in a wooden box. The box will be secured by nylon straps to the floor of the transport van. Containment consists of the wooden box as an inner packaging and the specially designed Delta Booster Van as an outer packaging. The van is of double wall aluminum construction with non-flammable foam insulation. The safe and arm device which initiates the rockets must not be installed during transportation.

iii. The uniquely designed vehicle, a Delta Booster Van, an 85-foot trailer shown on Sketch No. SF1S-002, must be used for this transportation.

b. TESTING - The titanium vessel containing hydrazine must be hydrostatically pressure tested at 600 psig using the test procedure described in the application.

8. SPECIAL PROVISIONS:

a. The shipper using this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

b. The driver must be instructed on the nature of the materials in the shipment, the potential hazards involved, and procedures to be followed in the event of emergencies enroute.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS: A copy of this exemption must be carried aboard the motor vehicle used to transport packages covered by this exemption.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- Registration required by 49 CFR 107 et seq., when applicable.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect unless a regulation has been amended making the exemption no longer necessary.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

JAN 31 1995

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: DHM-31.

JAN 31 1995

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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