U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

DOT-E 9941 (EXTENSION)
SIXTH REVISION November 10, 1993

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 9941 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to July 31, 1996. 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.

Suzanne Hedgepeth

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

AUG 29 1994
(DATE)

Dist: FHWA USCG FAA

EXEMPTION HOLDER	APPLICATION DATE
Thiokol Corporation - Huntsville Division Huntsville, AL	July 28, 1994

ADVISORY

IF YOU ARE A HOLDER OF AN EXEMPTION THAT AUTHORIZES THE USE OF A PACKAGING WITH A MAXIMUM CAPACITY LESS THAN 450 L (119 GALLONS) OR A MAXIMUM NET MASS LESS THAN 400 KG (882 POUNDS), PLEASE BE ADVISED THAT YOUR EXEMPTION MAY NOT BE RENEWED BEYOND SEPTEMBER 30, 1996. IN ADDITION, NO NEW CONSTRUCTION OF PACKAGINGS WHICH FALL WITHIN THE NON-BULK CAPACITIES LISTED ABOVE ARE AUTHORIZED AFTER SEPTEMBER 30, 1994. THIS IS CONSISTENT WITH THE IMPLEMENTATION OF THE NEW PACKAGING REQUIREMENTS ADOPTED UNDER DOCKET HM-181. ANY APPLICATION SUBMITTED TO THIS OFFICE TO RENEW AN EXEMPTION BEYOND THE SEPTEMBER 30, 1996 DATE WILL BE DENIED UNLESS THE APPLICATION CONTAINS SUPPORTING INFORMATION TO JUSTIFY THE CONTINUATION OF THE EXEMPTION.

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DOT-E 9941
(EIGHTH REVISION)

EXPIRATION DATE: April 30, 1999

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. GRANTEE: Thiokol Defense and Launch Division
Brigham City, UT

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain rocket motors in a propulsive state, with or without igniters installed. This exemption provides no relief from any regulation other than as specifically stated herein.

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

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR 172.101, 173.62.

5. BASIS: This exemption is based on the application of Thiokol Defense and Launch Division, dated April 14, 1997, submitted in accordance with 49 CFR 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi-fication Number	Packing Group
Rocket Motors	1.3C	UN0186	n/a

7. SAFETY CONTROL MEASURES:

a. Packagings prescribed depend on the family of the Castor rocket motor involved, and each family contains a number of configurations that have been approved and authorized for shipment under this exemption. All previously approved configurations are listed in part of this section. Thiokol drawing R67934 is typical of the packagings prescribed for Castor I motors, while R56178 is typical of those prescribed for Castor II motors. Castor I and Castor II motors must be

shipped in shipping containers per drawings R41810, R43650, or R48086 which were approved by the Bureau of Explosives under BA-1851. For the Castor IV, Castor IVA, and Castor IVB motors, instead of being packaged as described in § 173.62, each motor may be mounted on a dolly, then appropriately secured within an approved highway trailer (for motor vehicle transport), or within an approved magazine (for surface vessel transport) or within the cargo compartment or deck (for cargo aircraft transport). Thiokol drawings R60212 for the Castor IV motor, R68743 for the Castor IVA motor, and R67704 for the Castor IVB motor are typical of the current motor configurations installed on dollies ready for shipment. Dollies shown on drawings R70789 and R70919 may be used for Castor IVA and Castor IVB motors. Copies of the above drawings, and of those listed in part d of this section, are on file in the Office of Hazardous Materials Exemptions and Approvals (OHMEA). Other configurations of the Castor I, Castor II, Castor IV, Castor IVA, and Castor IVB motors are authorized under this exemption provided that:

(1) The motor assembly has been classified a Division 1.3C, UN 0186 explosive and assigned an EX-file number by the Associate Administrator for Hazardous Materials Safety and,

(2) Packaging drawings for Castor I or Castor II motors, or drawings depicting Castor IV, Castor IVA, or Castor IVB motors mounted on an appropriate dolly, along with the motor assembly drawings and classification documents, are on file OHMEA and,

(3) The Associate Administrator for Hazardous Materials Safety confirms, in writing, that the motor configuration and packaging are covered under this exemption.

b. Rocket motors may be shipped with igniters installed and in a propulsive state under the conditions specified in the National Aeronautics and Space Administration's letter dated August 27, 1975. Initiator devices installed in the rocket igniters must be those identified by Teledyne McCormick Selph P/N 811524A (Through Bulkhead Initiator) or other similar non-electric initiators approved by the Bureau of Explosives or the Bureau of Mines.

c. Electric initiators may be separately packaged and installed within the shipping container for Castor II motors per drawings R38688 and R52490 or R56178. The igniter assembly and the initiator squibs for the Castor I motor must be packaged and shipped separately from the rocket motor itself.

d. The following table summarizes the motor assemblies and packagings authorized by this exemption:

Motor Assembly Drawing No.	Classified By	Packing Drawing No.	Packaged In or On
CASTOR I MOTORS:	(Packaged in Containers)		
R67906	EX-9009208	R68243	P-1002-00[a]
R67934	EX-9009209	R68244	R43650 or 7-16-728[a]
CASTOR II MOTORS:	(Packaged in Containers)		
R43562	b	R43739	R43650
R52488 or R52491 or R56176	b	R52490 or R56178	R43650
R54498	b	R54496	R43650
R55759	b	R55761	R41810 or R48086
CASTOR IV MOTORS:	(Packaged on Road Dollies)		
R52435 or R53069	b	R52437	R51826
R55813 or R55814	b	R55816	R51826
R59022	b	R59024	R51826
R60131	b	R60133	R51826
R60136	b	R60138	R51826
R60210	b	R60212	R51826
R60216	b	R60218	R51826

Motor Assembly Drawing No.	Classified By	Packing Drawing No.	Packaged In or On
CASTOR IVA MOTORS: (Packaged on Road Dollies)			
R64452	EX-8711008	R65174	R51826
R64462	EX-8711006	R64465	R51826
R65168	EX-8711007	R65171	R51826
R67590	EX-8711009A	R67885	R51826
R68703-601	EX-9604071	R71162	R70789A
R68723	EX-9103100	R68743	R51826
R68727	EX-9103099	R68717	R51826
R70648	EX-9301089	R70789	R70750
69-74210-501	EX-9310277	R71162	R70789A
69-74210-502	EX-9310278	R71162	R70789A
69-74210-503	EX-9310279	R71162	R70789A
69-74210-504	EX-9310280	R71162	R70789A
69-74210-505	EX-9310281	R71162	R70789A
69-74210-506	EX-9310282	R71162	R70789A
69-74210-507	EX-9310278	R71162	R70789A
69-74210-508	EX-9310279	R71162	R70789A
CASTOR IVB MOTORS: (Packaged on Road Dollies)			
R67695	EX-9010094A	R67704	R51826
R70585	EX-9203010	R67704 (Rev G)	R51826
R70755	EX-9301086	R70919	R70754
R70761	EX-9301087	R70919	R70759
R70763	EX-9301088	R70919	R70762

NOTES: [a] P-1002-000 was a Baltimore Steel Company drawing; 7-16-728 was a Butler Manufacturing drawing. Both ar very similar to Thiokol drawings R41810, R43650, or R48086.

[b] Early configuration of these motors were classified by either the U.S. Army or the U.S. Air Force. These specific configurations basically were classified by inclusion in DOT-E 9941 issued April 11, 1988, and the First Revision thereof, issued February 24, 1989.

8. SPECIAL PROVISIONS.

a. A copy of this exemption must be carried aboard each motor vehicle, vessel, and aircraft 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. Each vehicle must be plainly marked on the right side near the front in letters at least two inches high on a contrasting background, "DOT-E 9941".

d. Motor carriers used to transport rocket motors authorized by this exemption must have a "SATISFACTORY" safety rating as prescribed in 49 CFR Part 385.

e. 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.

f. This exemption does not grant authority to use foreign controlled airspace or airports outside the United States.

g. The outside of each package must be plainly and durable marked "DOT-E 9941".

h. The provisions of 49 CFR 175.320(b) apply.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel and cargo only aircraft.

10. 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. Section 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 107.601 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.

11. 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.:

Ann Mazzullo 5/15/97

for Alan I. Roberts (DATE)
Associate Administrator
for Hazardous Materials Safety

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.

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.

Dist: FHWA, USCG, FAA