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

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

DOT-E 12880
(SECOND REVISION)

NOV 8 2002

EXPIRATION DATE: March 31, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Northrop Grumman Corporation
Baltimore, MD

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of Dangerous Goods in Apparatus containing anhydrous ammonia in the integral cooling unit. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

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

4. REGULATIONS FROM WHICH EXEMPTED: § 172.102, Special Provision 136 in that Anhydrous Ammonia is not authorized to be classed as Dangerous goods in Apparatus, class 9 except as specified herein; § 173.222(b)(3) in that the package is required to be equipped with a pressure relief device in accordance with § 173.301(f) and be a DOT specification container in accordance with § 173.304(a)(2) except as specified herein.

5. BASIS: This exemption is based on the application of Northrup Grumman Corporation dated July 10, 2002 submitted in accordance with § 107.105 and the public proceeding thereon. Additional information dated November 7, 2002.

6. HAZARDOUS MATERIALS (49 CFR § 172.101): NOV 8 2002

Hazardous Materials Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi- fication Number**	**Packing Group**
Dangerous Goods in Apparatus	9	UN3363	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is an avionics unit called a POD that contains a maximum of 25 grams of anhydrous ammonia in its integral cooling unit. The anhydrous ammonia is contained in a heat pipe fabricated from seamless 300 or 400 series stainless steel tubing with welded or soldered joints.

b. TESTING - The heat pipe design is tested in accordance with Northrop Grumman SDLR-009 Preliminary Test Plan for Targeting Loop Heat Pipe on file with the Office of Hazardous Materials Exemptions and Approvals(OHMEA).

c. OPERATIONAL CONTROLS -

(1) The POD must be shipped in an airtight polyethylene case in accordance with Packaging Strategies, Incorporated drawing PS9555B dated April 2, 2002 on file with the Office of Hazardous Materials Exemptions and Approvals.

(2) Each outside packaging must be marked "DOT-E 12880".

(3) At 54.4°C (130°F), the design burst pressure of the heat pipes must be at least 4 times the vapor pressure of the lading.

(4) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the heat pipes are not fitted with pressure relief devices and provide appropriate guidance in case receptacles are exposed to fire.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

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 § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

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. (Sections 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 incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

NOV 8 2002

Robert A. McGuire
For 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.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: SStaniszewski