



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

AUG 12 2015

Mr. Jeremy D. McCauley
United States Air Force
240 McChord Street
Hickam AFB, HI 96853

Ref. No. 15-0084

Dear Mr. McCauley:

This is a response to your April 27, 2015 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to documentation accompanying hazardous materials shipments. In your email, you describe a scenario whereby a domestic shipment of "UN1005, Ammonia, Anhydrous" is shipped under a competent authority approval (CA2001120001) and a Department of Transportation Special Permit (DOT-SP 15837) as a Division 2.3 poisonous gas material. On each piece of documentation (e.g., shipping paper, competent authority approval, and DOT Special Permit), the subsidiary hazard Class 8 corrosive is not listed. Your questions are paraphrased and answered below.

Q1. For a shipment of "UN1005, Ammonia, Anhydrous," must the subsidiary hazard Class 8 be considered when authorizing documentation (i.e., a competent authority approval and DOT Special Permit) does not list the subsidiary hazard and it is offered for transportation using the international primary hazard classification of Division 2.3?

A1. The answer is yes. The subsidiary risk of this material is applicable. When transported using the international classification of Division 2.3, "UN1005, Ammonia, Anhydrous" is required to be labeled with the subsidiary hazard Class 8 in accordance with § 172.402(g)(3). Consequently, in accordance with § 172.202(a)(3), the subsidiary hazard must be represented on a hazardous materials shipping paper when the subsidiary hazard warrants labeling. A subsidiary hazard might not be indicated on a competent authority approval or DOT Special Permit as these documents merely reference the materials for which the corresponding document is authorized for use. Additionally, relief from the HMR is not provided except as stated by the authorizing documents (i.e., a DOT Special Permit or competent authority approval). Therefore, unless the authorizing documentation explicitly notes the subsidiary hazard is not to be considered, the subsidiary hazard Class 8 applies to the shipment.

Q2. Is the Department of the Navy Certificate of Equivalency (COE) NA-07-850 required to accompany future shipments of this material?

A2. The answer is no. CA2001120001 and DOT-SP 15837 replace COE NA-07-850 and both sets of documentation would not be required to accompany the shipment. Only a copy of the competent authority approval and the DOT Special Permit would be required as outlined in the conditions for use of those documents.

I hope this information is helpful. If you have any more questions, please do not hesitate to contact this office.

Sincerely,



Dirk Der Kinderen
Acting Chief, Standards Development
Standards and Rulemaking Division

Goodall, Shante CTR (PHMSA)

Suchak
173.304a
Shipping Requirements
150084

From: Geller, Shelby CTR (PHMSA)
Sent: Tuesday, April 28, 2015 2:07 PM
To: Hazmat Interps
Subject: FW: FOUO\ Interpretation Request
Attachments: SDDG CA2001120001 DOT-SP 15837.PDF; COE NA-07-850.pdf

Dear Shante and Alice,

Attached is a request for a formal letter of interpretation. I spoke with Mr. McCauley about his issue.

Thanks,
Shelby

-----Original Message-----

From: MCCAULEY, JEREMY D WG-08 USAF AMC 735 AMS/TROK [mailto:jeremy.mccauley.1@us.af.mil]
Sent: Monday, April 27, 2015 4:15 PM
To: PHMSA HM InfoCenter
Subject: FOUO\ Interpretation Request

This e-mail contains FOR OFFICIAL USE ONLY _____
Sir/Ma'am

Two shipments have been offered for air transport from Joint Base Pearl Harbor/Hickam, Hawaii to Travis AFB, California. These configurations are transported on a regular basis between the two locations and the shipper always certifies the shipment for international. I have attached the Shippers Declaration for Dangerous Goods, CA201120001, and DOT-SP 15837. Also attached is a COE NA-07-850, which the shipper still attaches with the shipments, but has stated it is old and the CA is current. These shipments are being transported under CA2001120001 and DOT-SP 15837. After reviewing and verifying the shipment packaging and documentation met the requirements of the CA and DOT-SP, it was found that the shipper certified under Class 2.3(International) which requires a subsidiary risk of Class 8 IAW 49 CFR§172.101 Hazardous Materials Table. The exemptions within the CA2001120001 and DOT-SP 15837 only exempt the provisions of 49 CFR§171.22(e) and §173.304a.

The Inspection authority's interpretation is that under 49 CFR§172.101 Hazardous Materials Table, The chemical Ammonia, Anhydrous UN1005, Class 2.3 certified for International is listed with a subsidiary risk of Class 8 and should be documented and labeled accordingly since this is not listed as an exemption within the CA2001120001 or DOT-SP 15837. The shipper believes since the CA2001120001 and DOT-SP 15837 do not list a subsidiary risk under Class 2.3 on the documents, that this hazard has no subsidiary risk when certified as Class 2.3. Therefore, the subsidiary risk on the package or documentation has not been applied. The shipper, also, believe this should be shipped under Class 2.3(international) verses a Class 2.2(domestic) shipment.

Can you clarify that the subsidiary risk applies to the hazard as certified in this situation, regardless that the CA2001120001 or DOT-SP 15837 does not list them, but they are listed within the §172.101 Hazardous Materials Table or does the subsidiary risk need to be listed on the

CA2001120001 and/or DOT-SP 15837 to apply? Additionally, does the COE still need to be provided or is it obsolete. In order to avoid confusion for future shipments of other hazards concerning CA's or DOT-SP's in regard to subsidiary risks listed in the 49 CFR§172.101 Hazardous Materials Table, but not listed on a CA or DOT-SP. Would subsidiary risk always apply unless a specific exemption is listed on the CA or DOT-SP. Your assistance in this matter is greatly appreciated.

Respectfully,
Mr. Jeremy D. McCauley, WG08, DAF
Hazardous Materials Shipment Inspector
240 McChord Street
Hickam AFB, Hawaii 96853
DSN: 449-6931
Comm: 808-449-6931

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least two copies to the airline.)

| | |
|---|--|
| Shipper (808) 348-3971 DLA DISTRIBUTION PEARL HARBOR 2000 GAFFNEY ST BLDG 1900 PEARL HARBOR USA HI 96860 4518 USA | Air Waybill No. Page 1 of 1 Pages Shipper's Reference Number N322535107WX02XXX <i>(optional)</i> |
|---|--|

Consignee N66604
 NUWC NEWPORT NAVAL STATION NEWPORT
 47 CHANDLER ST BLDG 1404
 NEWPORT RI 02841-1709
 NEWPORT RI 028411709

Two completed and signed copies of this Declaration must be handed to the operator

WARNING
 Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.

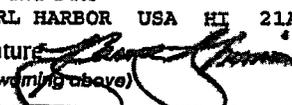
| TRANSPORT DETAILS | | | | | | | |
|---|---|-------|-------------------|----------|---------------------|------|-----|
| This shipment is within the limitations prescribed for: <i>(delete non-applicable)</i> | Airport of Departure | | | | | | |
| <table border="1"> <tr> <td>PASSENGER</td> <td>CARGO</td> </tr> <tr> <td>MEMBER</td> <td>AIRCRAFT</td> </tr> <tr> <td>AIRCRAFT</td> <td>ONLY</td> </tr> </table> | PASSENGER | CARGO | MEMBER | AIRCRAFT | AIRCRAFT | ONLY | HIK |
| PASSENGER | CARGO | | | | | | |
| MEMBER | AIRCRAFT | | | | | | |
| AIRCRAFT | ONLY | | | | | | |
| Airport of Destination: SUU | Shipment type: <i>(delete non-applicable)</i> | | | | | | |
| | NON-RADIOACTIVE RADIOACTIVE | | | | | | |

NATURE AND QUANTITY OF DANGEROUS GOODS
 UN Number or Identification Number, proper shipping name, Class or Division, (subsidiary risk), packing group (if required), and all other required information.

UN1005, AMMONIA, ANHYDROUS "TOXIC-INHALATION HAZARD" "ZONE D", 2.3//
 1 PLASTIC CONTAINER X 0.137 KG//CA2001120001

Additional Handling Information "PACKAGING AUTHORIZED BY COMPETENT AUTHORITY OF THE UNITED STATES OF AMERICA (USA). "PACKAGED IN ACCORDANCE WITH 49 CFR 173.7 (A) BY THE AUTHORITY OF CCN-NA-07-850".
 EXPIRATION DATE FOR COMPETENT AUTHORITY: SEE DOT-SP 15837
 EMERGENCY RESPONSE GUIDEBOOK NUMBER 125 ATTACHED
EMERGENCY CONTACT: 1-800-851-8061/+1-804-279-3131

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.

Name/Title of Signatory
HAROLD SHIMURA
CERTIFIER
 Place and Date
 PEARL HARBOR USA HI 21APR2015
 Signature 
(see warning above)





U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety Administration

East Building, PHH-32
1200 New Jersey Avenue, Southeast
Washington, D.C. 20580

APPROVAL CA2001120001
(SIXTH REVISION)

ISSUED BY THE COMPETENT AUTHORITY OF THE UNITED STATES
EXPIRATION DATE: SEE DOT-SP 15837

1. APPROVAL HOLDER: Department of Defense
Scott Air Force Base, IL
United States

2. REGULATORY AUTHORITY:
 - a. International air transport exemption: Part 1, Chapter 1, Section 1.1.3 of the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI).
 - b. For international flights, the ICAO TI may require exemption authorization by the States of origin, transit, over flight, and destination of the consignment, as well as the State of the air operator.
 - c. Chapter 6.2, Section 6.2.1.1.2 and Chapter 7.9, Section 7.9.2 of the International Maritime Dangerous Goods (IMDG) Code.
 - d. For shipments outside of the U.S., see Paragraph 7.g. of this approval.

3. SYNOPSIS: This Competent Authority Approval, referred to hereafter as approval, serves as an "Approval" as defined in 49 CFR 171.8, an "exemption" as defined in 1;3.1.1 of the ICAO TI.

The Department of Defense is authorized to offer for transportation or transport Submarine High Data Rate (HDR)/ Advanced Communications Mast (ACM) configured with a non-DOT specification pressure vessel containing anhydrous ammonia, in accordance with the provisions of this approval. When packaged in accordance with the terms of this approval, the non-DOT specification pressure vessel containing anhydrous ammonia need not comply with the

packaging requirements in Packing Instruction 200 of the IMDG Code or with the prohibition forbidding anhydrous ammonia aboard aircraft in columns 10 through 13 of 3; 2, Table 3-1 of the ICAO TI. The most recent revision supersedes all previous revisions.

4. **BASIS:** This approval is issued in response to the Department of Defense (DOD)'s application dated February 22, 2013.

5. **PERIOD OF VALIDITY AND CONDITIONS OF APPROVAL:** This approval does not provide relief from any requirement of the Hazardous Materials Regulations, the ICAO TI, or the IMDG Code except as stated herein. This approval is valid until the posted expiration date of DOT-SP 15837 or unless terminated by the Associate Administrator for Hazardous Materials Safety.

a. **Approved Material(s):** Only the following material(s) may be transported under the terms of this approval.

| Hazardous Materials Description | | | |
|---------------------------------|------------------------|-----------------------|--------------------------|
| Proper Shipping Name | Hazard Class/ Division | Identification Number | Packing Group |
| Ammonia, anhydrous | 2.3 | UN1005 | N/A Hazard Zone D |

b. **Packaging Requirements:**

- 1) The HDR/ACM mast is configured with an integral cooling system consisting of metallic heat pipes containing reagent grade anhydrous ammonia as the working fluid. The cooling system contains a total quantity of 136.4 grams of anhydrous ammonia at a working pressure of 667 psia. The mast is packaged for shipment using either a wooden box conforming to Drawing (37895) 995653 or a reusable plastic/aluminum shipping container conforming to drawing (49956) H279020, on file with the Approvals and Permits Division.
- 2) For both ACM and HDR, anhydrous ammonia is encased in Swales Thermal Systems heat pipes. The

heat pipes are mounted inside a two-piece cold plate assembly. The cold plate assembly is mounted inside titanium housing. There are two different heat pipes in the cold plate assembly. The physical construction of the heat pipes for the two systems is identical. The amount of anhydrous ammonia in each assembly is 136.4 grams. The ACM and HDR design must conform to drawings H328877-1 and G745289-1, on file with the Approvals and Permits Division.

- 3) When packaged in accordance with the terms of this approval, the non-DOT specification pressure vessel containing anhydrous ammonia need not comply with the packaging requirements in Packing Instruction 200 of the IMDG Code or with the prohibition forbidding anhydrous ammonia aboard aircraft in columns 10 through 13 of 3; 2, Table 3-1 of the ICAO TI.

- c. Marking Requirements: Each package, and overpack if used, prepared under the provisions of this approval must be plainly marked with the approval number: CA2001120001.

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

*As authorized by 49 CFR 171.24(a) and 171.25(a).

7. SPECIAL PROVISIONS:

- a. The approval holder may only act as a shipper (offeror) under the terms of this approval.
 - b. The item(s) authorized under the terms of this approval are authorized for transportation only when transported by, or under the direction or supervision of DOD.
 - c. A current copy of this approval and DOT-SP 15837 must be maintained and made available for examination at each location where materials are packaged and offered for transportation under its authority.
 - d. A current copy of this approval and DOT-SP 15837 must accompany any shipment made under the terms of this approval.

- e. All requirements of DOT-SP 15837 must be met.
- f. Any person who receives a package covered by this approval may reoffer it for transportation provided no modification or change is made to the package and it is reoffered for transportation in conformance with this approval.
- g. This approval in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of transit and destination.
- h. The approval holder must maintain a record of all activity conducted under the authority granted in this approval. The record must contain a listing and number of shipments made to include:
 - 1) Dates of shipment; and
 - 2) Description of each type of shipment.
- i. All of the above information must be made available upon request to a DOT representative or an enforcement official.
- j. Shipments or operations conducted under this approval are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR 171.15 - Immediate notice of certain hazardous materials incidents, and 49 CFR 171.16 - Detailed hazardous materials incident reports. In addition, the holder of this approval must notify the Associate Administrator for Hazardous Materials Safety - OHMSPA, in writing, of any incident involving a package, shipment, or operation conducted under the terms of this approval.

8. GENERAL PROVISIONS:

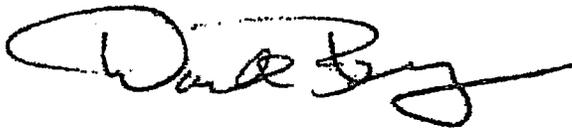
- a. Failure by any person to comply with the terms and conditions of this approval and the Hazardous Materials Regulations, 49 CFR Parts 171-180, the ICAO TI or the IMDG Code may result in the modification, suspension or termination of that person's authority to use this approval. Failure to comply may also subject that person to penalties prescribed by 49 U.S.C. §§ 5123 and 5124. This approval may be modified, suspended or terminated in its entirety if

that action is justified in light of changes in circumstances or additional information not available when this approval was issued. Unless immediate modification, suspension or termination is necessary to avoid a risk of significant harm to persons or property, before action is taken, that person will be notified and provided with an opportunity to show why the proposed action should not be taken.

- b. Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this approval must be provided training on the requirements and conditions of this approval in addition to the training required by §§ 172.700 through 172.704.
- c. Any person operating under the terms of this approval must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

Issued in Washington, D.C.

Dated: 09/27/2013



For Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-32.



July 31, 2013



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

Pipeline and Hazardous
Materials Safety Administration

DOT-SP 15837

EXPIRATION DATE: June 30, 2015

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Department of Defense
Scotts AFB, IL
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of a Submarine High Data Rate (HDR)/ Advanced Communications Mast (ACM) configured with a non-DOT specification pressure vessel containing anhydrous ammonia. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
 - c. No party status will be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 171.22(e) and § 173.304a in that transportation by air is not authorized and DOT specification packaging is required, except as provided herein.
5. BASIS: This special permit is based on the application of Department of Defense dated March 7, 2013 submitted in accordance with § 107.105 and additional information dated May 20 and June 13, 2013 and the public proceeding thereon.

July 31, 2013

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Hazardous Materials Description | | | |
|---------------------------------|------------------------|-----------------------|--------------------|
| Proper Shipping Name | Hazard Class/ Division | Identification Number | Packing Group |
| Ammonia, anhydrous | 2.2/2.3* | UN1005 | N/A, Hazard Zone D |

* Division 2.3 for international transportation. Division 2.2 as an alternative when only domestic transportation is involved.

7. SAFETY CONTROL MEASURES:a. PACKAGING:

The HDR/ACM mast is configured with an integral cooling system consisting of metallic heat pipes containing reagent grade anhydrous ammonia as the working fluid. The cooling system contains a total quantity of 136.4 grams of anhydrous ammonia at a working pressure of 667 psia. The mast is packaged for shipment using either a wooden box conforming to Drawing 995653 or a reusable plastic/aluminum shipping container conforming to drawing H279020, on file with the Office of Special Permits and Approvals.

For both ACM and HDR, anhydrous ammonia is encased in Swales Thermal Systems heat pipes. The heat pipes are mounted inside a two-piece cold plate assembly which in turn is mounted inside titanium housing. There are two different heat pipes in the cold plate assembly but the physical construction of the two systems is identical. The amount of anhydrous ammonia in each assembly is 136.4 grams. The ACM and HDR design must conform to drawings H328877 and G745289, on file with the Office of Special Permits and Approvals.

b. OPERATIONAL CONTROLS -

- (1) The item(s) authorized under this special permit are authorized for transportation only when transported by, or under the direction or supervision of DOD.

- (2) This special permit in no way affects the need to obtain any required authorization from other agencies of the United States Government or competent authorities of the countries of transit, over-flight or destination.

8. SPECIAL PROVISIONS:

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

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

9. MODES OF TRANSPORTATION AUTHORIZED: Motor Vehicle, Cargo Aircraft, Cargo Vessel, Rail Freight.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft, or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit 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 special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

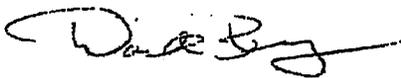
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Continuation of DOT-SP 15837

Page 5

July 31, 2013

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

PO: LAVALLE/RS





DEPARTMENT OF THE NAVY
NAVAL INVENTORY CONTROL POINT
700 ROBBINS AVENUE 5450 CARLISLE PIKE - PO BOX 2020
PHILADELPHIA PA 19111-5098 MECHANICSBURG PA 17055-0788

COM & FTS 791 -
DSN & EXT 430 -
FAX #
IN REPLY REFER TO:
4030
Ser 0772/086
09 August 2007

CERTIFICATE OF EQUIVALENCY

NA-07-850

Submarine High Data Rate (HDR)/
Advanced Communications Mast (ACM)

1. AUTHORITY. 49 CFR 173.7(a) and NAVSUPINST 4030.55B
2. COMMODITY. Submarine High Data Rate (HDR)/Advanced Communications Mast (ACM) configured with a non-DOT specification pressure vessel containing anhydrous ammonia and having the following classification.
 - a. Proper Shipping Name: Ammonia, Anhydrous
 - b. DOT/DOD Hazard Class/Div. 2.3
 - c. UN Number: UN1005
3. PACKAGING DESCRIPTION. Packaging: The HDR/ACM mast is configured with an integral cooling system consisting of metallic heat pipes containing reagent grade anhydrous ammonia as the working fluid. The cooling system contains a total quantity of 136.4 grams of anhydrous ammonia at a working pressure of 667 psia. The mast is packaged for shipment using either a wooden box conforming to Drawing(37895) 995653 or a reusable plastic/aluminum shipping container conforming to drawing (49956) H279020, submitted with the application. For both ACM and HDR, anhydrous ammonia is encased in Swales Thermal Systems heat pipes. The heat pipes are mounted inside a two-piece coldplate assembly. The coldplate assembly is mounted inside titanium housing. There are two different heat pipes in the coldplate assembly. The physical construction of the heat pipes for the two systems is identical. The ACM and HDR design must conform to drawings H328877-1 and G745289-1, submitted with the application.
 - a. DOT Marking: Ammonia Anhydrous
UN 1005
CCN-NA-05-850
 - b. DOT Labels: Poison Gas (2.3)
Corrosive (8)

Subj: CCN-NA-05-850 (Cont.) SUBMARINE HIGH DATA RATE MAST/
Advanced Communications Mast (ACM)

4. BASIS. This Certificate of Equivalency (COE) is based on the design and testing requirements provided by Raytheon Co and Swales Thermal System.

NAVICP. All supporting technical data is on file at NAVICP Code 0772.12.

5. TRANSPORTATION REQUIREMENTS.

- a. Shipping papers shall be annotated: Packaged in accordance with 49 CFR 173.7(a) by the authority of CCN-NA-07-850.
- b. A copy of this certificate shall accompany each shipment.
- c. Motor vehicle in accordance with 49 CFR 177 authorized.
- d. Military air shipment in accordance with NAVSUP PUB 505/AFJMAN 24-204(I)

6. CERTIFYING OFFICIAL.

ENDORISING OFFICIAL



Gerald L. Boyd
Asset Protection, Pollution
Prevention Division - Mech
Logistics Management Specialist
Naval Inventory Control Point



James O'Connor,
Asset Protection, Pollution
Prevention Division - Mech
Site Manager
Naval Inventory Control Point