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15 May 12

From: Commander, Naval Sea Systems Command

Subj: NAVSEA SW020-AG-SAF-010, TENTH REVISION, "NAVY  
TRANSPORTATION SAFETY MANUAL FOR AMMUNITION,  
EXPLOSIVES, AND RELATED HAZARDOUS MATERIALS"

Ref: (a) NAVSEA SW020-AG-SAF-010, Ninth Revision of 1 August  
2009

Encl: (1) Abstract of Significant Changes  
(2) Transportation Policy Review Team Comments

1. NAVSEA SW020-AG-SAF-010, Tenth Revision is officially issued and supersedes reference (a), which should be destroyed. This revision provides updated regulatory instructions and administrative changes. Enclosure (1) highlights significant changes that have been incorporated into the basic text. These significant changes were staffed with AA&E Transportation representatives from various Naval activities and their concurrences were posted to the NOSSA website per enclosure (2).

2. The requirements contained in NAVSEA SW020-AG-SAF-010 are continuously monitored to ensure compliance with current Department of Transportation and Department of Defense regulations. Users are encouraged to submit recommendations for improvement as described in paragraph 1-11 of the manual. Revisions to this manual will be issued as required.

3. The Naval Ordnance Safety and Security Activity point of contact is Mario Harley (N55), DSN 354-6066, commercial (301) 744-6066, or email [mario.harley@navy.mil](mailto:mario.harley@navy.mil).

A handwritten signature in black ink, appearing to read "Karen S. Burrows".

KAREN S. BURROWS  
By direction

Distribution:  
Explosives Safety Technical Manuals (ESTM) Distribution List

## ABSTRACT OF SIGNIFICANT CHANGES

1. Throughout the manual, references to Naval Surface Warfare Center, Indian Head Division, Detachment Earle, Naval Packaging, Handling, Transportation and Storage (PHST) Center, Colts Neck, NJ, have been changed to reflect the new detachment name and location (effective July 2011) as a result of the 2005 Base Realignment and Closure (BRAC).
2. Paragraphs 1-5b and 1-5.1.1b: Changes location of Navy Supply School to reflect recent move due to BRAC.
3. Paragraph 1-7.4b: Clarifies permissible movements of SOLAS material as those transported to pier from magazine.
4. Paragraph 2-2d: Clarifies qualification requirements for personnel responsible for inspecting conveyances transporting AA&E.
5. Paragraph 2-2m: Assigns watch of 24-hour emergency telephone number to Base Physical Security or Command Duty Office.
6. Paragraph 2-6.1: Provides guidance on a new web-based entry system for obtaining waivers from the 100-mile government vehicle (self-transport) regulations.
7. Paragraphs 2-6.1, 2-8.4.1, and 5-10.2.1: Replaces reference to Naval Operational Logistics Support Command (NOLSC) with new command name, NAVSUP Logistics Operations Center (effective 1 July 2011).
8. Paragraph 2-6.1: Replaces reference to the canceled NAVSUP Pub 1 (cancelled) with NAVSUPINST 4600.86 (series).
9. Paragraphs 2-6.4.2b and 5-9.4.2: Clarifies the prohibition on board ships of explosive compositions that ignite spontaneously or undergo decomposition.
10. Paragraph 2-7.1.2: Updates requirements for safe haven established by Naval Ordnance Safety and Security Activity (NOSSA) Naval Message 281039Z Sep 09.
11. Paragraph 3-5.1: Standardizes specification for emergency response label by requiring black lettering on a white background.

12. Paragraph 3-7.2: Incorporates new procedure for using DD Form 2890 as a replacement to DD Form 836, to agree with the Defense Transportation Regulation (DTR).
13. Paragraph 5-4: Requires loading activities to maintain records of shipments for a period of two years after the material has been shipped and/or received.
14. Paragraph 5-6: Updates guidelines on empty container certification to agree with those published in NAVSUP P-805.
15. Paragraph 5-6.1e: Replaces reference to Defense Reutilization Marketing Office with new command name, Defense Logistics Agency (DLA) Disposition Services.
16. Paragraph 5-7.1: Adds a cautionary note regarding the use of motor vehicles with glass windows molded into the cargo area.
17. Tables 5-1 and 5-2: Updates notes to agree with the current 49 Code of Federal Regulations (CFR).
18. Paragraph 5-7.5.6: Clarifies requirements for security of barges and lighters containing ammunition and explosives.
19. Paragraph 5-7.8: Clarifies receiving activity responsibilities with regard to after hour deliveries.
20. Paragraph 5-9.4.3f: Clarifies procedure for neutralizing spillage or leakage of liquid hazardous materials.
21. Paragraph 5-9.5.6.1: Adds requirement for HERO Safe satellite tracking devices on vessels towing CONUS commercial barges containing AA&E.
22. Paragraph 5-9.7.1: Clarifies preloading inspection procedure, including rejection of containers considered to be inadequate.
23. Paragraph 8-4.5: Updates National Stock Numbers (NSNs) for field service padlocks.
24. Paragraph 8-6.5: Presents guidelines on Trailer Tracking Service (TTS/DCS) as a Transportation Protective Service (TPS) for Security Risk Code (SRC) I-IV arms, ammunition and explosives (AA&E) moving in commercial box vans.

25. Figures 8-4 through 8-7: Adds sample photos of trailer/trailer door sensors used with TTS.
26. Paragraph 8-10: Adds note reiterating DTR 4500.9-R policy requiring confirmation of SRC I and II shipments within two hours of delivery.
27. Paragraph 9-5.1: Adds instructions for shipment of expended torpedoes Mk 46, Mk 48, Mk 50, and Mk 54, addressing potential for activation of Mk 84 Sonar Transmitter.
28. Figure 9-3: Updates version of PCP warning label.
29. Paragraph 9-8: Updates source of NAVAIR 28-SSQ-500-1, Technical Manual for Sonobuoys.
30. Appendix C: Updates Vehicle Size and Weight Chart with latest information available from J. J. Keller.
31. Tables D-1 and D-2: updates list of Department of Transportation Special Permits and Department of the Navy Certificates of Equivalency.

**STAFFING RESULTS FROM THE  
TRANSPORTATION POLICY REVIEW TEAM (TPRT)**

Team membership: NMC CONUS EAST DIVISION, NMC CONUS WEST DIVISION, NMC EAST ASIA DIVISION, NMC COMOMAG, DAC, NSWC, ESSOLANT, ESSOPAC, and USMC

**SW020-AG-SAF-010 9th Rev.**

a. To clarify the DoD requirement to provide safe haven to DOD AA&E shipments when extreme circumstances occur.

TPRT Response: Full team concurrence with proposed change.

b. This change highlights the issue that DD Form 2890 replaces DD Form 836 and who is responsible for its origination.

TPRT Response: Full team concurrence with proposed change.

c. This guidance is being modified to further amplify the procedures.

TPRT Response: Full team concurrence with proposed change.

d. This change formally expands satellite monitoring to AA&E barge movements in North American waters.

TPRT Response: Full team concurrence with proposed change.

e. This change will provide additional options for the transport of navy limited quantity of small arms via commercial express carriers.

TPRT Response: Full team concurrence with proposed change.

f. This requirement has become necessary in order to educate commercial munitions carrier drivers about the potential of acoustic audible sounds during transit.

TPRT Response: Full team concurrence with proposed change.

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**1 MAY 2012**

## NAVSEA SW020-AG-SAF-010 TENTH REVISION

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### LIST OF EFFECTIVE PAGES

Total number of pages in this manual is 254. They are all original Revision Ten pages. The date of the issue for all pages in this manual is 1 May 2012. Change bars are included to assist the reader in identifying areas where changes to requirements/procedures have occurred.

**NAVSEA TECHNICAL MANUAL CERTIFICATION SHEET**

1 OF 1

CERTIFICATION APPLIES TO: NEW MANUAL \_\_\_\_\_ REVISION 10 CHANGE \_\_\_\_\_

APPLICABLE TMINS/PUB NO.: NAVSEA SW020-AG-SAF-010

PUBLICATION DATE (MO, DA, YR): 1 MAY 2012

READING GRADE LEVEL (RGL): \_\_\_\_\_

TITLE: NAVY TRANSPORTATION SAFETY MANUAL FOR AMMUNITION, EXPLOSIVES AND RELATED HAZARDOUS MATERIALS

TMCR/TMSR/SPECIFICATION NO.: 840668-000

**CHANGES AND REVISIONS:**

PURPOSE: TO SET FORTH EXISTING REGULATIONS FOR TRANSPORTATION OFFICERS AND OTHER NAVY AND MARINE CORPS PERSONNEL ENGAGED IN TRANSPORTING AMMUNITION, EXPLOSIVES AND RELATED HAZARDOUS MATERIALS.

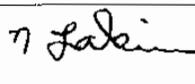
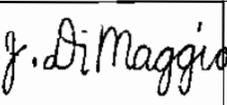
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TMDER/ACN NUMBERS INCORPORATED: \_\_\_\_\_

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## FOREWORD

1. It is the policy of the Department of the Navy to maintain a strict and effective explosives transportation safety program. In accordance with the authority vested by [OPNAVINST 8020.14 \(series\)](#), NAVSEA SW020-AG-SAF-010 Tenth Revision sets forth the regulations governing the packaging, handling, and transportation of arms, ammunition, explosives and related hazardous materials (AA&E). This publication defines terms, describes responsibilities, discusses shipping and receiving requirements, procedures and documents, and provides guidance on firefighting and disposal of explosives. Detailed transportation data, including container marking, Bill of Lading (BL) descriptions, etc. is provided in [NAVSEA SW020-AC-SAF-010](#).
2. This publication is not intended to supersede, contravene, or modify any federal, state, municipal or local laws, or any supplement thereto. If any provision of this publication appears to conflict with any other published regulation concerning the shipment of AA&E, the facts should be reported in detail to the Commanding Officer, [Naval Ordnance Safety and Security Activity \(NOSSA\) \(N5\)](#), Farragut Hall, 3817 Strauss Avenue, Suite 108, Indian Head, MD 20640-5151.
3. The Commandant of the Marine Corps has determined the provisions of this publication to be applicable to Marine Corps activities involved in the transportation of AA&E.
4. Changes to this publication will be issued as required. Comments or suggestions for improvement to this NAVSEA technical manual should be addressed as specified in [chapter 1](#), paragraph 1-10.
5. Distribution related inquiries shall be addressed through the appropriate point of contact as listed on this DVD.
6. This publication supersedes NAVSEA SW020-AG-SAF-010 Ninth Revision, dated 1 August 2009, which should be destroyed.

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## SAFETY SUMMARY

This publication is a transportation safety manual which contains the instructions and regulations necessary for the safe transportation of arms, ammunition, explosives and related hazardous materials (AA&E). While the entire content of this publication is a warning to the user, the following warnings and cautions appear in the text, and are repeated here for emphasis:

### **WARNING**

Plastic bedliners generate static electricity and are not authorized for use in the transport of scrap or bulk explosives in any container, or for the transport of any ammunition or explosive that is not packaged in its approved shipping container. Special care shall be taken to secure all cargo in vehicles with plastic bedliners because of the slippery nature of the liner surface. In addition, the filling of gas cans with flammable liquids while sitting on a liner in a truck bed is prohibited, as it has been identified as a cause of inadvertent ignition. ([Page 5-6](#) and [Page 6-4](#))

### **CAUTION**

Stake-side trucks, open-top semi-trailers, or soft-side trailers shall not be substituted for enclosed trailers or vans when transporting palletized or non-palletized/unitized boxed ordnance. (Refer to [NAVSEA SW020-AF-HBK-010](#)). Soft-side trailer curtains and their supports are not designed to restrain cargo, as are the walls of enclosed trailers and vans, and do not provide the same level of security. ([Page 5-8](#))

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## CHAPTER 1

### INTRODUCTION

#### 1-1. PURPOSE

The purpose of this manual is to inform Navy and Marine Corps transportation officers (TOs), both military and civilian, of the regulations and procedures regarding the safe handling and transportation of arms, ammunition, explosives and related hazardous materials (AA&E). The explosives safety policies of the [Department of the Navy \(DON\)](#) are directed at providing high quality AA&E in sufficient quantity to satisfy fleet and Marine Corps requirements in a safe manner.

#### 1-2. SCOPE

This manual provides safety requirements, rules and regulations for the preparation and safe transportation of AA&E at DON activities. Existing regulations pertaining to the safe handling and movement of AA&E are either quoted or referenced in this manual. The instructions in this manual are supplemented by detailed information in applicable technical manuals or documents covering the handling and transportation of specific ammunition and ammunition components. All non-nuclear missiles and conventional weapons and their explosive components are considered within the scope of this manual.

#### NOTE

All regulations and guidelines specific to the shipment of AA&E by rail have been removed from this manual. This information is now found in [NAVSEA SW023-AK-SAF-010](#), "Movement and Inspection of Ammunition, Explosives and Hazardous Materials by Rail".

1-2.1. MANDATORY AND ADVISORY REGULATIONS. The requirements in this manual that use the commands "shall", "will", or "must" are mandatory, unless they are specifically waived or exempted by Chief of Naval Operations (CNO) in accordance with the provisions of [OPNAVINST 8020.14/MCO P8020.11 \(series\)](#). Advisory requirements are those in which "may" or "should" are used. These advisory requirements shall be followed unless exceptions are authorized in writing by the shore station commanding officer.

#### 1-3. ORGANIZATION

This manual is organized into nine chapters and four appendices. It describes the explosives safety regulations and operating procedures that involve the transportation of AA&E. The manual contains the general requirements that define the TO's responsibilities, discusses the various modes of transportation and discusses Performance Oriented Packaging (POP) requirements and their effect on [Department of Defense \(DOD\)](#) transportation.

## 1-4. RESPONSIBILITIES

The [Naval Ordnance Safety and Security Activity \(NOSSA\)](#), in accordance with the CNO and Naval Sea Systems Command (NAVSEASYS COM) directives, exercises general supervision over explosives safety throughout the Navy. This includes technical supervision over the safety of AA&E throughout Navy and Marine Corps activities, and supervision over specific work involving shipping, preparation, assembly, loading, testing, storing, handling, use and maintenance of AA&E performed by Navy and Marine Corps shore stations. The Commanding Officer (CO) at Navy and Marine Corps shore activities is responsible for enforcing these requirements. The mandatory safety rules and regulations specified in this publication, [NAVSEA OP 5 Volume 1](#) (Ammunition and Explosives Safety Ashore), [NAVSEA OP 4](#) (Ammunition and Explosives Safety Afloat), [NAVSEA SW020-AD-SAF-010](#) (Explosives Safety Accidents and Lessons Learned), [NAVSEAINST 8020.18 \(series\)](#) (Transportation Emergency Response Involving DOD Conventional Munitions and Explosives), [NOSSAINST 8020.18 \(series\)](#) (Transportation Accident/Incident Report Procedures Involving Ammunition and Explosives) and [MCO P8020.10](#) (Marine Corps Ammunition Management and Explosives Safety Policy Manual) are explicit.

1-4.1. TRANSPORTATION OFFICERS (TOs). TOs within the DON are responsible for the following functions:

- a. Custody of, accounting for, issuing, and converting bills of lading (BL's).
- b. Preparing and issuing Transportation Control and Movement Document, DD Form 1384, in accordance with Defense Transportation Regulation, Part II, Cargo Movement ([DTR 4500.9-R](#)).
- c. Exercising sound traffic management procedures and forwarding all shipments at the most economical overall cost to the Government consistent with safety, security and delivery requirements.
- d. Full compliance with, and enforcement of, policies and procedures in this manual and other directives as may be issued by or for bureaus, commands, or offices of the DON.
- e. Furnishing guidance on transportation and attendant problems to authorized contractor personnel.

1-4.2. SHIPPING INSPECTORS. Rigid adherence to the well-defined procedures for inspecting conveyances to be used in the transport of AA&E is a mandatory requirement. No safety precaution shall be taken for granted and no laxity in NAVSEA safety procedures is permitted. Every shipping inspector shall ensure that any approved conveyance or shipment meets all safety requirements cited in this manual, [NAVSEA SW020-AF-HBK-010](#), and [NAVSEA SW023-AK-SAF-010](#) as applicable. In addition, it is required that each shipping inspector meet the responsibilities defined in [NAVSEA SW020-AF-HBK-010](#) and [NAVSEA SW023-AK-SAF-010](#), and attend periodic stand-up safety meetings as scheduled by his/her activity. Successful completion of initial training and recertification courses is required as outlined in [paragraphs 1-5](#) through [1-6](#).

## 1-5. EXPLOSIVES SAFETY TRAINING PROGRAM

[NAVSEA OP 5 Volume 1](#), Appendix D, provides in-depth guidance on the Navy's explosives safety training program. Military personnel (active and reserve duty) assigned to shore station positions involving responsibilities for ammunition and explosives should attempt to complete the applicable explosives safety training prior to reporting. Civilians (including contractors) assigned to positions involving responsibilities for ammunition, explosives and related hazardous materials (A&E) shall have the applicable explosives safety training. It is the responsibility of the activity to consult with legal personnel to ensure that the explosives safety training for contractors is specifically documented in the contract if a condition of employment is specified. All personnel, unless otherwise noted, shall be scheduled to complete, or have completed, the required training within 6 months of reporting.

One of the following courses is mandatory for TOs responsible for the arrangement and billing of the transportation of A&E:

a. Technical Transportation of Hazardous Materials ([AMMO-62](#)): Availability: Defense Ammunition Center (DAC), McAlester, OK or DAC On-Site. Course description: Provides personnel from all services detailed technical information pertaining to all phases of the transportation of A&E.

b. Transportation of Hazardous Materials ([A-822-0012](#)). Availability: Navy Supply Corps School, Newport, RI. Course description: Provides personnel from all services detailed technical information pertaining to all phases of the transportation of A&E. This is an equivalent course to the AMMO-62 provided by DAC.

1-5.1. QUALIFICATION OF CERTIFYING OFFICIALS. The preceding courses satisfy the initial training requirement for personnel assigned responsibility for authorization of the Shipper's Declaration for Dangerous Goods Form. No individual may perform duties related to the handling and certification of A&E unless this course has been satisfactorily completed in accordance with the criteria set forth by the school, within the preceding 24 calendar months. Activities engaged in the preparation of A&E for shipment shall establish appropriate procedures to ensure proper certification of shipments by military aircraft as well as commercial carriers. This includes cyclic retraining and requalification of designated personnel. Personnel who satisfactorily complete the required training shall be authorized in writing by the individual's CO to certify A&E shipments. Any individual who has been twice enrolled and twice failed to successfully complete the required training will be reassigned to a position which does not include the requirement to qualify for certification of A&E.

1-5.1.1. One of the following courses satisfies the 24-month refresher training requirement for personnel who have successfully completed the course specified in paragraph 1-5(a).

a. General Transportation of Hazardous Materials ([AMMO-37-DL](#)): Availability: Web only.

b. Transportation of Hazardous Material Recertification ([A-822-0011](#)). Availability: Navy Supply Corps School, Newport, RI.

A variety of transportation courses are offered by the [Army Transportation School](#) at Fort Eustis, Virginia. One of these courses, entitled the Basic Freight Traffic Course (8C-F12/553-F1), is designed for personnel new to the area of transportation (military E-4 and above, DOD civilian GS-03 and above).

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This course provides general information on commercial freight documentation, demurrage, freight services, tariffs and tenders, as well as a basic overview of transportation. Wherever possible, such personnel should be provided this training.

### 1-6. EDUCATION OF INSPECTORS, EXPLOSIVES DRIVERS AND LOCAL TRAINING INSTRUCTORS

[NAVSEA OP 5 Volume 1](#), Appendix D, provides information on training courses for inspectors of conveyances to be used in the transport of A&E, explosives drivers and local instructors of explosives safety related courses. Table D-1 of [NAVSEA OP 5 Volume 1](#) presents guidance on which courses are mandatory for each position.

### 1-7. DRIVER QUALIFICATIONS AND AUTHORIZED RIDERS

1-7.1. DRIVER QUALIFICATIONS. All Navy and Marine Corps military, civilian and contractor personnel shall be qualified and properly licensed to operate motor vehicles transporting A&E in accordance with the regulations of [NAVSEA SW020-AF-HBK-010](#). License requirements differ among civilian, military and contractor personnel. Refer to Table 2-1 of [NAVSEA SW020-AF-HBK-010](#) for a summary of licensing requirements.

1-7.1.1. Driver Clearance. Verification of a driver's clearance shall be accomplished by review of the Joint Personnel Adjudication System (JPAS) database, or by a Visit Authorization Letter (VAL) provided by the carrier's Facility Security Officer (FSO).

1-7.2. QUALIFIED REPRESENTATIVES. A qualified representative is an individual who has been designated by the shipper to attend the motor vehicle and:

- a. Is aware of the nature of the AA&E contained in the vehicle,
- b. Has been instructed in emergency procedures in accordance with [NOSSAINST 8020.18 \(series\)](#),
- c. Is authorized and trained to move the motor vehicle.

1-7.3. DRIVER/RIDER CRITERIA FOR ORGANIC MOVEMENTS ON AND OFF-STATION.

1-7.3.1. Off-Station Drivers/Riders. Two explosives drivers or one explosives driver and one qualified representative are required for all A&E movements off-station using organic means of transportation. When three-passenger motor vehicles are used, only the two assigned explosives drivers (or explosive driver and qualified representative) shall occupy the cab of the vehicle. No other passengers are permitted either in the cab or in the cargo compartment of the three-passenger motor vehicle. When a six-passenger motor vehicle is used, two explosives drivers or one explosives driver and one qualified representative together with three authorized personnel may occupy the cab of the vehicle. No personnel are permitted to ride in the cargo compartment of the six-passenger motor vehicle.

**NOTE**

An exception to this rule may be permitted during point-to-point on-station moves that require crossing over a public roadway; or movements over public access roads between an on-station point of origin and an adjacent annexed on-station destination point that is located in reasonably close proximity to the point of origin. Examples include movements between an ammunition issue point and a live-fire training range, between an inland conveyance holding area and a pier, or between a magazine and an operating building, etc. In this case, the movement can be carried out with one explosives driver with a two-way communication device. This exception criteria pertains only to organic movements (DOD or Navy-owned vehicle driven by a civilian or military explosives driver). Station managers must take the Security Risk Category (SRC) of the AA&E and local Force Protection Condition (FPCON) environment into account when applying this exception rule and be prepared to make policy adjustments to compensate for heightened states of alert. See chapter 8 for Transportation Protective Services (TPS) instruction peculiar to varying SRCs.

1-7.3.2. On-Station Drivers/Riders. One explosives driver is permitted for all A&E movements on-station using organic means of transportation. When three-passenger motor vehicles are used, the explosives driver and two authorized riders are permitted to occupy the cab of the vehicle. When six-passenger motor vehicles are used, the explosives driver and five authorized riders are permitted to occupy the cab of the vehicle. This instruction is applicable to those instances when the motor vehicle must cross over a public highway to reach its destination at another on-station location. No personnel are permitted to occupy the cargo compartment of the A&E loaded motor vehicle during an on-station movement except when limited quantities of 1.4S small arms ammunition is being transported. Under these circumstances, responsible local station managers must establish criteria for determining the allowable quantity limits per each movement based on assessed safety and security risks relative to mission requirements. The cargo must be adequately secured in the body of the motor vehicle, and securely anchored seats must be provided for the additional personnel.

1-7.4. **LIMITED QUANTITIES OF SMALL ARMS AMMUNITION AND SAFETY OF LIFE AT SEA (SOLAS) MATERIALS**. On a case-by-case basis, commanding officers may authorize the transport of limited quantities of small arms ammunition, 1.4S, except .50 caliber, and SOLAS materials using privately owned vehicles (POV) or government vehicles as detailed in paragraph 1-7.4.1. Refer to [paragraph 2-6.1](#) for guidance on permissible operating distances.

a. For small arms ammunition, these movements are restricted to transportation between ammunition issue points and facilities for marksmanship training, qualification, competition, or other related requirements on or near the station. While in transit, the ammunition must be in the custody of designated military or security personnel. A DD Form 1907 and DD Form 2890 shall be issued to the custodian personnel. The ammunition must be under constant surveillance during stops en route to destination. Vehicles are subject to the load limit criteria of [paragraph 1-7.4.1](#). Full-package quantities of ammunition must be packaged in sealed MIL-SPEC wooden or wire bound wooden boxes. Less than full

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package quantities must be transported in sealed MIL-SPEC inner containers such as M1, M2 or M19 series metal containers. Except under the particular circumstances in the note section above, weapons and ammunition of the same caliber shall not be transported aboard the same motor vehicle.

b. For SOLAS materials, these movements are restricted to transportation directly to the pier, from magazine, for maintenance aboard ships and small craft. While in transit, the ammunition must be in the custody of designated personnel. The materials must be under constant surveillance during stops en route to destination and must be packaged in the original container/kits provided by the manufacturer.

c. For both SOLAS and small arms ammunition, the packages must be secured in the cargo compartment to prevent lateral movement. The cargo compartment must be equipped with a locking mechanism. The cargo compartment must be separated from the passenger compartment by suitable means. The vehicle must also be equipped with one serviceable fire extinguisher (refer to [NAVSEA SW020-AF-HBK-010](#)). The driver must possess a valid state driver's license. If government vehicles are used, drivers must also possess a Government Motor Vehicle Operator's Identification Card (OF-346). Under these particular circumstances, the explosives driver training criteria presented in [NAVSEA SW020-AF-HBK-010](#) are not applicable.

### 1-7.4.1. Small Arms Gross Cargo Weight Limitations.

<u>Vehicle Type</u>	<u>Gross Cargo Weight</u>
Sedan	200 lbs.
Van	250 lbs.
SUV	250 lbs.
Pick-up	300 lbs.

## 1-8. VEHICLE COMMUNICATIONS DEVICE

An organic motor vehicle used for transporting A&E off-station must be equipped with a Hazards of Electromagnetic Radiation to Ordnance (HERO) certified two-way telecommunications device. Drivers must maintain two-way radio communication capability with both the shipping and receiving activities, as well as municipal law enforcement and emergency response officials along the planned route.

1-8.1. HERO SAFE ordnance may be transported in vehicles equipped with HERO certified electrical and electronic devices (to include cellular and satellite phones). The transmitting antenna must be 10 feet or more from the ordnance. Very low power hand-held devices may meet the exception criteria outlined in Table 3-1 of [NAVSEA OP 3565 Volume 2](#).

## 1-9. TERMS AND ABBREVIATIONS

The definitions of terms and abbreviations commonly used in conjunction with the transportation and inspection of AA&E and other explosives safety requirements appear separately on this [DVD](#). These definitions are intended to reduce ambiguity and to provide uniformity of description and interpretation of technical information throughout this manual.

## 1-10. REFERENCE DOCUMENTS

A list of documents that contain the information referenced throughout this manual and related explosives safety technical documentation is presented separately on this [DVD](#). These documents are essential for complete understanding of the regulations pertaining to the transportation and inspection of AA&E contained within this manual.

## 1-11. REPORTING DEFICIENCIES IN MANUAL

Training activities, supply points, naval weapons stations and other shore activities are requested to arrange for the maximum practical use and evaluation of NAVSEA technical manuals. All errors, omissions, discrepancies and suggestions for improvements to NAVSEA technical manuals shall be reported to Commander, Naval Surface Warfare Center, Port Hueneme Division (NSWC/PHD) (Code 310), 4363 Missile Way, Port Hueneme, CA 93043-4307 on NAVSEA Technical Manual Deficiency/Evaluation Report (TMDER) Form 4160/1. A [copy of NAVSEA TMDER Form 4160/1](#) is included at the end of this publication. For activities with internet access, this form may also be completed and processed using NSWC/PHD website: <https://nsdsa.nmci.navy.mil/>. To expedite a response, also send as an email to [jeri.dimaggio@navy.mil](mailto:jeri.dimaggio@navy.mil). All feedback comments shall be thoroughly investigated and originators will be advised of TMDER resolution. If you prefer to submit a TMDER in Word format click here. [TMDER](#)

## 1-12. DATE OF PUBLICATION

The publication date shown on the title page of this manual, and any subsequent changes/revisions, is the estimated distribution date. However, these documents are effective upon receipt regardless of the date shown on the title page.

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## CHAPTER 2

### ADMINISTRATIVE REQUIREMENTS

#### 2-1. INTRODUCTION

This chapter discusses and defines the administrative responsibilities of the activity Transportation Officer (TO) as determined by the regulations governing the movement of arms, ammunition, explosives and related hazardous materials (AA&E). Various modes of AA&E transportation are addressed, as well as guidance on providing assistance to carriers, proper documentation of the AA&E movement, reporting accidents and shipment delays, and tracing shipments not received within the required timeframe.

#### 2-2. TRANSPORTATION OFFICER RESPONSIBILITIES

Policy guidance and procedures applicable to traffic management are provided in Department of Transportation (DTR) 4500.9-R. In addition to the responsibilities defined in [paragraph 1-4.1](#), the TO shall ensure that:

a. Per [DTR 4500.9-R, Chapter 202](#), the Military [Surface Deployment and Distribution Command \(SDDC\), Ft. Eustis, VA](#), is contacted sufficiently in advance of the planned AA&E shipments to ensure timely routing instructions, and that an advance railcar/motor vehicle notification of equipment requirement is provided to the serving carrier(s) at least 10 days in advance, if possible. Unnecessary delay in notification can lead to premium transportation costs to satisfy “short fuse” requirements.

b. Ensure the safe handling and transport of AA&E is in compliance with all governing regulations and instructions.

c. A Required Delivery Date (RDD) shall be determined for all shipments originated by Navy activities or shipped on behalf of Navy activities in accordance with [DTR 4500.9-R, Chapter 205](#). The RDD must be coordinated between the destination activity and the shipper and shall be annotated on the applicable shipping documents. Shipments must be scheduled to arrive at the destination activity within normal receiving hours, making every effort to avoid layover of shipments during weekends, holidays, and non-receiving hours.

d. Conveyances used to transport AA&E are properly inspected by personnel who meet qualifications as specified in [NAVSEA SW020-AF-HBK-010](#) and all applicable inspection forms are completed as required by this manual, [NAVSEA SW020-AF-HBK-010](#), and [NAVSEA SW023-AK-SAF-010](#).

e. Explosives drivers are properly instructed regarding the nature of the cargo, special precautions, and requirements for reporting accidents or delays en route. DD Form 2890 “Department of Defense (DOD) Multimodal Dangerous Goods Declaration”, [figure 3-5](#) is used for military explosives drivers. For commercial drivers, this information is provided on the shipping papers. Instructions to aircraft commanders are issued on the air cargo manifest.

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f. Trailer relocation agreements, NAVSEA Form 8023/1, [figure 2-4](#), executed with commercial motor carriers are maintained in appropriate record files.

g. Disability cost factors for mode/carrier selection are submitted to [SDDC](#).

h. Regulations and instructions governing the shipment of sensitive materials are enforced. (refer to [chapter 8](#) for further detail).

i. [Standard Form \(SF\) 364](#), [figure 2-5](#), “Supply Discrepancy Report (SDR)” is completed in the event of improper preservation, packaging and related marking, and other discrepancies listed on the form (see [paragraph 2-8.6](#)).

j. [DD Form 361](#), [figure 2-6](#), “Transportation Discrepancy Report (TDR)” is used to report damage, overages, or shortages in shipments of AA&E.

k. Shipper's certification, as required by [Code of Federal Regulations \(CFR\) 49 172.204](#) is signed and the TO is satisfied that all phases of transportation safety have been met prior to releasing the shipment.

l. Origin activity TOs shall begin tracing any shipment of classified or Security Risk Category (SRC) I or II AA&E that is not received within 12 hours of the estimated time of arrival on the RDD; tracing shall begin within 24 hours for SRC III or IV shipments. The SDDC Operations Center shall be notified if the carrier cannot provide a reasonable explanation for the delay.

m. Ensure that a 24-hour emergency watch telephone number is maintained by either the Base Physical Security or the Command Duty Office in order to respond to transportation accidents involving AA&E.

2-2.1. USE OF THE TRANSPORTATION SELF-ASSESSMENT TOOL. The [Transportation Self-Assessment Tool \(TSAT\)](#), found as a separate document on this DVD and at the [Naval Ordnance Safety and Security Activity \(NOSSA\)](#) website, is designed to ensure compliance with federal, DOD, and Department of the Navy (DON) rules and regulations pertaining to the safe and secure transport of DOD owned AA&E. TOs within the Continental United States (CONUS), shall review this document annually and ensure that all appropriate personnel have access to it. TOs, physical security officials, weapons managers, ordnance handlers, motor vehicle drivers, train crews, and vehicle and railcar inspectors shall use this document to aid in carrying out their daily ordnance transportation duties. TOs outside the Continental United States (OCONUS) may use the applicable sections of the TSAT for organic on-base movements.

### 2-3. REGULATIONS GOVERNING A&E SHIPMENTS

The regulations that govern the shipment of AA&E are discussed in this paragraph. In the event of conflict between regulations, the following order of precedence shall be observed. Whenever some regulations are more stringent, but in conflict with the regulations taking precedence, the more stringent requirements shall be observed.

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- a. Shipments within a Station.
  - (1) DOD regulations.
  - (2) DON regulations.
  - (3) Naval Sea Systems Command (NAVSEASYSCOM) regulations.
  - (4) Station regulations.
  
- b. Shipments within a Municipality.
  - (1) Municipal regulations.
  - (2) State laws and regulations.
  - (3) DOD regulations.
  - (4) DON regulations.
  
- c. Intrastate Shipments.
  - (1) State laws and regulations. Many states have adopted Department of Transportation (DOT) regulations as state requirement.
  - (2) County and/or municipal regulations.
  - (3) DOD regulations.
  - (4) DON regulations.
  
- d. Interstate Shipments.
  - (1) DOT regulations.
  - (2) State laws and regulations.
  - (3) County and/or municipal regulations.
  - (4) DOD regulations.
  - (5) DON regulations.
  
- e. Shipments by Water. Shipments that will move all or part of the way by water (barge, lighter, ship, etc.) are governed by DOD regulations, 49 CFR 176 and the International Maritime Dangerous Goods (IMDG) Code, for the water portion of the move. Further detail is provided in paragraphs 2-6.4 through 2-6.4.3.

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f. Shipments by Air. Military shipments that will move by air, i.e. [Airlift Mobility Command \(AMC\)](#) are governed by [NAVSUP Pub 505](#), [DTR 4500.9-R](#). Shipments by commercial aircraft are governed by [49 CFR](#), and the [International Civil Aviation Organization \(ICAO\)](#) Technical Instructions.

### 2-4. DISABILITY COST FACTOR DATA FOR MODE/CARRIER SELECTION

To standardize the method for providing disability cost data to [SDDC](#) for their evaluation and to ensure that the lowest overall cost is used considering all modes of transportation, the following policy applies:

a. Many Navy and Marine Corps activities have magazines, production plants or storage buildings which are not served by both rail tracks and roads. Therefore, if a shipment must be made from such facilities, the costs for double handling the cargo should be evaluated to ensure the lowest possible overall cost.

b. To determine the lowest cost, the data shown in NAVSEA Form 8023/2 ([figure 2-1](#)) shall be completed for each shipment. This form shall be provided to [SDDC](#) and should be attached to the Domestic Freight Routing Request and Order, DD Form 1085. The data may also be transmitted by mailing a photocopy, or by transmitting it via facsimile machine or Navy message. For emergency shipments, the data will be provided by telephone requesting emergency or expedited routings.

c. The [DTR 4500.9-R](#) requires that all shipments be closely monitored to ensure that double handling costs are furnished to [SDDC](#) and that routing assigned by that office provides that activity with the lowest overall rate of transport.

d. Whenever double handling is required, consignees as well as consignors shall advise the appropriate [SDDC](#) routing office of costs incurred for double handling the shipment.

e. An example of savings and benefits afforded by comparing double handling costs is shown in [figure 2-2](#).

f. All Navy and Marine Corps activities, when making shipments of material which require double handling or when one mode of transportation is estimated to be more costly (considering all factors,) shall provide this data to [SDDC](#) as prescribed in subparagraph *b*.

g. Upon receipt of routing from [SDDC](#), the TO shall ensure that the lowest overall cost of transport is selected. DON activities shall advise [NOSSA \(N5\)](#) in advance of shipment if the routing requires use of a more costly mode of transportation than that with the lowest overall cost.

h. In the event that the overall cost difference of one mode over another is less than \$100, the mode of transportation not requiring double handling shall be used. The elimination of double handling is a safety consideration worthy of the additional cost.

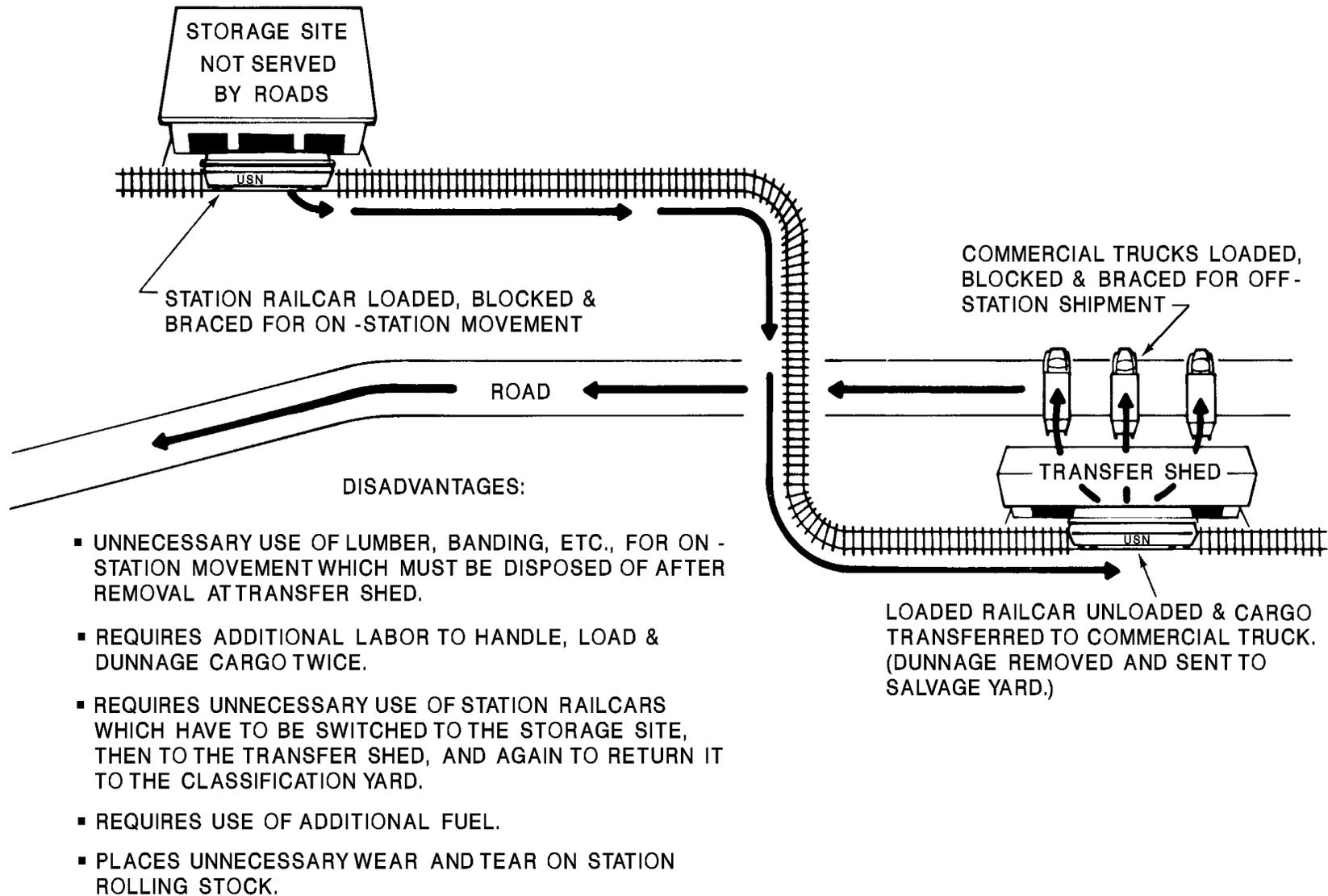
i. When a shipment requires urgent delivery it shall be transported by the most expeditious mode, regardless of cost. In these instances, disability cost data need not be submitted.

j. Unless otherwise impossible to deliver, no delivery of AA&E should be made prior to 10 days before the RDD.

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<b>DISABILITY COST DATA RECAP</b>		
(Loading, Handling, Dunnaging and Other Incidental Costs)		
NAVSEA 8023/2 (5-75)		
ITEM RECAPPED Bomb, 500 LB, MK 82 Mod 2 on Pallet, MK 9 (Class A Explosive)	DATE 15 November 2000	
REPORTING ACTIVITY NSWC Crane	SIGNATURE	
<b>FACTS:</b>	<b>PER CAR LOAD</b>	<b>PER TRUCKLOAD</b>
Number of Pallets	48	13
Number of Items	288	78
Weight (Gross)	153, 330	41,275
<b>COST DATA:</b>		
Inspection (Railcar/Truck)	\$10.15	\$9.25
Moving Railcar/Truck to Loading Site (See Note 1)	\$9.37	N/A
Lumber Banding, Nails, etc. (See Note 2)	\$303.31	\$45.01
Labor (See Note 3)	\$175.37	\$89.19
Move Railcar/Truck to Carrier's Acceptance Site (See Note 4)	\$9.37	N/A
<b>TOTALS</b>	<b>\$507.57</b>	<b>\$143.45</b>
<b>COST PER ITEM</b>	<b>\$1.76</b>	<b>\$1.46</b>
<b>REMARKS:</b>		
SAMPLE		
(Use backside if additional space is required)		
<b>NOTE:</b> (1) Includes the switching of a railcar from the activity classification yard or site where car was provided to activity by carrier, or includes shutting of motor carrier's trailer using station tractor, from truck lot to point of loading. (2) Includes such material as required to meet specifications of applicable WR or MIL-STD and to include that material used for intra-station movement to transfer site. (3) Includes cost of labor at loading site and at transfer shed if double handling is required, and to meet specifications of applicable WR or MIL-STD. (4) Includes switching movement of car or truck to scale for weighing and movement to site for carrier acceptance.		

**FIGURE 2-1. NAVSEA Form 8023/2, Disability Cost Data Recap**



**FIGURE 2-2. Example of Cargo Double Handling**

## 2-5. AMMUNITION/EXPLOSIVES PACKAGING AND TRANSPORTABILITY

Ammunition, explosives and related hazardous materials (A&E) shall be shipped and stored in approved containers in accordance with standard unitizing and conveyance loading procedures. Shipping and storage configurations for Navy approved ammunition items are listed in [NAVSEA SW020-AC-SAF-010](#). The ammunition items listed in this technical manual have been determined to meet Navy and DOD transportation and storage safety requirements as well as federal and international transport safety regulations. The latter regulations include [49 CFR 100-178 and 301-399](#), the [IMDG Code](#), and the [ICAO Technical Instructions](#). The [Naval Packaging, Handling, Storage and Transportation \(PHST\) Center, Naval Surface Warfare Center Indian Head Division, \(NSWCIHD\) Detachment Picatinny](#) is the cognizant activity responsible for establishing packaging design and test requirements, and approving the shipping configuration for Naval A&E. The packaging approval process verifies the adequacy of the shipping configuration to meet the life-cycle logistical characteristics of each item. The process also ensures compliance with Navy and DOD safety and security requirements, and all applicable federal and international A&E transport regulations.

**2-5.1. DOT SPECIAL PERMITS.** The Hazardous Materials Safety and Security Reorganization Act of 2005 amended the federal hazardous materials transportation law by changing the term "exemption" to "special permit". DOD special permits are written approvals that allow a shipment not currently authorized by the Hazardous Materials Regulations (HMR). The special permit number must be marked on the outside of the shipping container ([paragraph 3-3.1](#)). Appendix D provides a special permits listing and hyperlink connection to the [DOT](#) for obtaining a signed, paper copy of a special permit.

**2-5.2. CERTIFICATES OF EQUIVALENCY (COEs).** A&E shipped by, for, or to the DOD, including commercial shipments prepared under U.S. contract, must be packaged in accordance with the regulations of [49 CFR 173 and 178](#). When packagings are not in accordance with the [49 CFR](#) regulations, the [DOD](#) can certify that the packagings used are of equal or greater strength and efficiency. These certifications are issued as COEs. COEs, unlike CAAs, can be issued for packages containing hazard Class 1 items that have an interim hazard classification assigned but do not have an EX number assigned. A COE can be issued in instances where the packaging differs from what is prescribed by [49 CFR](#) (e.g., wood box instead of a steel box) or when packing instruction 101 is specified. COEs are not required for Class 1 items with a net item weight greater than 882 pounds (400 kilograms) or volume greater than 119 gallons (450 liters); see [NAVSEA SW020-AC-SAF-010](#). Each COE is identified by the calendar year and a Certification Control Number (CCN), which is preceded by the issuing service: "NA" for Navy, "AR" for Army, and "AF" for Air Force. A typical Navy COE might be identified by the CCN "NA-11-504". Refer to appendix D for a listing of COEs. [Title 49 CFR Parts 173.7\(a\) and 173.60\(b\)\(14\)](#) and [NAVSUPINST 4033.55/MCO 4030.40A](#) are relevant.

**2-5.3. COMPETENT AUTHORITY APPROVAL.** A CAA is a written approval granted by the [DOT](#) that states that the Competent Authority has reviewed the explosive hazard classification or packaging; that it meets both domestic and UN standards, and that it is approved for transportation. The [DOT](#) is the only recognized Competent Authority for the U.S. A CAA may be required for explosive hazard classification (e.g., commercial air carriers require a hazard classification CAA prior to accepting Class 1 air eligible material for shipment; see [ICAO Technical Instruction paragraph 1.3](#)) or for packaging. CAAs which are issued for packaging authorize the use of containers which differ from those specified (e.g., aluminum instead of steel or wood), or containers which have been approved by methods

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of testing differing from those prescribed by [DOT](#). Packaging CAAs are also required for Class 1 A&E assigned packing instruction 101 in [49 CFR](#), [ICAO](#) and [IMDG](#). CAA's are not required for Class 1 items with a net item weight greater than 882 pounds (400 kilograms) or volume greater than 119 gallons (450 liters); see [NAVSEA SW020-AC-SAF-010](#). Items which require a CAA cannot be shipped overseas until the DOT (the U.S. Competent Authority) grants a CAA. The commodity classification along with the type of packaging determines whether a CAA is required. CAAs must be attached to the shipping papers.

### 2-6. MODES OF TRANSPORTATION

AA&E may be transported by motor vehicle, railcar, water (barge, lighter, ship) or cargo aircraft unless otherwise prohibited by specific regulations. It is prohibited to ship A&E by mail, priority mail, parcel post or by privately-owned passenger vehicles (unless properly placarded and otherwise in full compliance with applicable NAVSEA instructions and [DOT](#) regulations), or by passenger-carrying vehicles, ships, or aircraft (except as authorized by [DOT](#), Coast Guard, or other applicable regulations).

2-6.1. **GOVERNMENT-OWNED VEHICLES (PERMISSIBLE OPERATING DISTANCES).** The use of government owned vehicles to move DOD cargo is regulated by [DTR 4500.9-R](#), [NAVSUPINST 4600.86](#), [DODINST 4500.36](#) and [NAVFAC P-300](#). Generally, the permissible operating distance for government owned vehicles shall not exceed 100 miles one way. The NAVSUP Logistics Operation Center, formerly the Naval Operational Logistics Support Center (NOLSC) and NOSSA work in concert to approve required deviations to the above when necessary.

2-6.1.1. **Obtaining Approval for Deviation.** Navy activities wishing to deviate from the 100 mile one-way limitation for transporting AA&E via government vehicles may now apply for approval via a web-based tool found at the secure [NOSSA website](#) (under 'Programs' go to AA&E Transportation; then to Self-Transport). This online function allows the Navy activity to submit an application for a 24-month deviation or a one-time emergency deviation, and also allows for logging usage of previously approved self-transport deviations. Information required includes origin/destination, anticipated mileage, planned number of movements, Net Explosive Weight (NEW), SRC, etc. Requestors will receive acknowledgement and approval via E-mail. This new web-based entry system will make it far easier for Navy activities to seek deviation approval and record all necessary self-transport usage data.

2-6.2. **COMMERCIAL MOTOR CARRIER SHIPMENTS.** Shipments of Class/Divisions 1.1, 1.2, and 1.3 A&E shall be tendered to commercial motor carriers authorized by [SDDC](#). Appendix A provides a list of approved A&E carriers. [DTR 4500.9-R, Chapter 204](#), and [SDDC Military Freight Traffic Unified Rules Publication \(MFTURP\) No. 1C-R](#) are relevant.

2-6.2.1. **Restrictions on Use of Leased Equipment.** Trip-leased commercial vehicles shall not be used to transport Class/Divisions 1.1, 1.2, and 1.3 A&E or any other A&E material which requires a Transportation Protective Service (TPS) (see [chapter 8](#)). The vehicles used must be owned or leased under a valid agreement by the company transporting the shipment, and the drivers must be full-time employees or under the direct control and responsibility of that company. The requirement does not preclude the interchange of equipment in furtherance of a through movement of traffic at a point or points which such carriers are authorized to serve.

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2-6.2.2. Lease Contract. The lease contract must be in writing and be signed by the contracting parties. Neither party can cancel with less than 30 days notice. Further, the contract must provide the exclusive possession, control, and use of the equipment and for the complete assumption of liability by the lessee. The leased equipment may not be further leased or sublet to any other carrier for the duration of the lease. The shipper shall ensure that a copy of the lease contract is carried in all leased vehicles and is available for inspection. The tractor must be placarded on each door with the name and Interstate Commerce Commission (ICC) authority number of the company to which the vehicle is leased.

2-6.2.3. Load Weight Distribution. Prior to the loading of AA&E, the TO shall ensure that the carrier provides the necessary information concerning weight distribution of the load within the vehicle. In no instance shall the maximum gross axle load exceed that allowed by the states in or through which the shipment will move. (Refer to [appendix C](#)).

2-6.2.4. Explosives on Vehicles in Combination. Class/Divisions 1.1 or 1.2 A&E shall not be loaded into or carried on any vehicle in a combination of vehicles if:

- a. More than two cargo-carrying vehicles are in combination.
- b. Any full trailer in the combination has a wheelbase of less than 184 inches.
- c. Any vehicle in the combination is a tank motor vehicle that must be marked or placarded under [49 CFR 177.823](#).
- d. The other vehicle in the combination contains any of the following hazardous materials: initiating explosives; Class 7, Yellow III labeled radioactive material; Class/Division 2.3 or Class/Division 6.1 materials; or hazardous materials in a portable tank or DOT specification 106A or 110A tank. [Title 49 CFR Part 177.835\(c\)\(1\) through \(4\)](#) is relevant.

2-6.2.5. Ordering Motor Vehicles. If possible, the TO shall provide the serving carrier(s) with a minimum 10-day advance notice of equipment requirements.

2-6.2.6. Routing of Shipments. Routing shall be in accordance with the requirements of [DTR 4500.9-R](#).

2-6.3. RAILROAD SHIPMENTS. See [NAVSEA SW023-AK-SAF-010](#). Navy and Marine Corps TOs should have access to current versions of DOT and [Federal Railroad Administration \(FRA\)](#) regulations, [DTR 4500.9-R](#), and NAVFAC P-301, "Navy Railway Operating Handbook".

2-6.4. WATER SHIPMENTS. Requirements and restrictions concerning the shipment of AA&E by water are described in [paragraphs 2-6.4.1](#) through [2-6.4.3](#).

2-6.4.1. Regulations, Instructions and Security Provisions. [DTR 4500.9-R Chapter 205](#), [DOD 5220.22-M](#), and [DOD 5200.1-R](#) should be consulted for regulations, instructions, and security provisions covering the shipment of classified items of AA&E by water transportation.

2-6.4.2. **Prohibited Explosives.** Class/Division 1.1 through 1.3 A&E shall not be shipped as cargo on any passenger-carrying vessel. In addition, the following types of explosives shall not be shipped by water transportation:

a. Fulminates or other detonating compounds in dry, bulk conditions.

b. Explosive compositions that may become self-reactive and/or may decompose when subjected, for a specified time, to a self-accelerating decomposition temperature, described in chapter 7.7 of the International Maritime Dangerous Goods Code, and determined by tests given in the United Nations Manual of Tests and Criteria, part II, chapter 28.

c. Compositions containing an ammonium salt and a chlorate.

2-6.4.3. **Authorization to Load or Unload Military Explosives.** Military explosives or other hazardous cargo may not be loaded on, or discharged from a vessel at any port or place in the United States, its territories, or possessions without authorization from the District Commander of the [U.S. Coast Guard](#), Captain of the Port (COTP), or other officer designated by the Coast Guard District Commander. Military explosives shall not be handled, loaded on, unloaded from, or stowed on a vessel except at military explosives piers or anchorages, or waterfront facilities authorized by the Coast Guard District Commander or COTP.

2-6.5. AIR SHIPMENTS. Refer to [paragraph 2-3f](#).

## **2-7. ASSISTANCE TO CARRIERS.**

In the interest of public safety, shipment security and operational efficiency, DON activities involved in the receipt, storage, and issue of DOD owned AA&E are required to assist commercial carriers by providing temporary parking and secure holding for motor vehicles engaged in the transport of these sensitive materials. Assistance may be in response to civil disturbances, natural disasters, hazardous road conditions, vehicle breakdowns, evidence of breaches of cargo integrity/safety/security, terrorist threat conditions, vandalism, or driver illness. Other circumstances beyond the driver's control, which create a need for assistance, may include response to delivery, receipt and in-transit dispatching contingencies and changing patterns of shipper demands for service. Responsiveness to carrier requests for assistance can be influenced by the prevailing Force Protection Condition (FPCON), the Security Risk Category (SRC) of the AA&E, the level of security offered by the activity, and the existing Explosive Safety Quantity-Distance (ESQD) limits of record for the activity's secure holding area.

2-7.1. **SECURE HOLDING AREA.** A secure holding area is a location within an activity's restricted area that is used for the temporary parking of commercially owned motor vehicles with lading consisting of Government owned AA&E materials. To qualify as a secured area, the site must meet the physical security criteria detailed in [Chapter 205 of DTR 4500.9-R](#), [DOD 5100.76-M](#), and [OPNAVINST 5530.13 \(series\)](#). Secure holding areas used for A&E must also comply with the ESQD requirements of [DOD Manual 6055.09-M](#), and [NAVSEA OP 5 Volume 1](#). Marine Corps activities shall also comply with [MCO 8020.10](#). The size of the lot, ESQD net explosive weight (NEW) capacity, and physical security accommodations will vary per each activity depending on local requirements and the volume and velocity of inbound/outbound AA&E traffic.

2-7.1.1. Secure Holding of SRC I and II AA&E. To provide secure holding of SRC I and SRC II AA&E, the holding area must be under Constant Surveillance (CIS). Constant surveillance means that the shipment must be under continuous full-time observation while the motor vehicle is parked in the holding area. The CIS requirement can be met in either of three ways: (1) the area can be equipped with either an intrusion detection system or closed circuit TV; (2) a security guard can be posted to provide dedicated continuous watch over the shipment--the security guard must remain within 100 feet of the shipment/motor vehicle while maintaining full unobstructed view thereof; (3) subject to activity Commanding Officer/Officer in Charge (CO/OIC) discretion, driver(s) or other qualified carrier representative remains in the cab of the vehicle, is fully attentive to the task at hand (not in sleeper), or remains within 100 feet of the vehicle while maintaining full unobstructed view thereof. The ESQD criteria discussed in [paragraph 2-7.1](#) apply. Note that AA&E materials that are shipped with a SECRET classification will be afforded the same physical security protection as SRC I and II AA&E.

2-7.1.2. Safe Haven. The origin transportation officer must schedule shipments to arrive at the destination within normal receiving hours, making every effort to avoid layover of shipments during weekends, holidays, and non-receiving hours. [DOD 5100.76-M](#) and [OPNAVINST 5530.13 \(series\)](#) require that installations and activities offer safe haven to motor carriers who have encountered an emergency situation during the transport of DOD AA&E. These regulations also require that activities accept AA&E shipments arriving during non-delivery hours. In either case, the activity shall ensure the vehicle is parked in a secure holding area and provided appropriate protection commensurate with the SRC of the delivered items. In the event that the quantity and hazard/class division of the shipment exceeds the ESQD limits sited for the secure holding area, or if the activity does not have a sited secure holding area; the activity CO/OIC will provide temporary parking at an alternate site on-station that affords ESQD protection to the maximum possible extent in accordance with acceptable risk. SRC I and SRC II AA&E will be provided the level of physical security protection detailed in [paragraph 2-7.1.1](#). Safe haven is strictly temporary in nature and is intended to minimize the length of time that ordnance is in the public domain. Vehicles carrying AA&E must be removed from the secure holding area as soon as practicable upon determination by the CO/OIC and/or appropriate civil authorities that any threat to the shipment's integrity has diminished.

2-7.1.3. Munition Carrier Access to DOD Installations in Response to Varying FPCON Levels. FPCON B, C, and D contingencies may arise that will cause a carrier to seek secure holding at the nearest DOD activity. Under these circumstances, the motor vehicle carrying AA&E will be allowed access to the activity's secure holding area and will remain parked in that area pending diminution of the existing threat. This principle applies regardless of whether or not the AA&E cargo is destined for the activity from which the carrier is requesting assistance. Secure holding area access in response to FPCON, B, C and D carrier assistance requests will follow the same safety and security criteria outlined in [paragraph 2-7.1.2](#). Activity AA&E shipping and receiving instructions should include FPCON alert and response procedures and provide requirements for security guards, motor vehicle inspectors, field operations personnel, supervisors, and TOs. FPCON levels are defined in DOD O-2000.12-H.

2-7.2. **ON-STATION TEMPORARY PARKING PROGRAM.** Each DON activity with a mission involving the receipt, storage, and issue of AA&E shall ensure that written procedures for those operations are developed, implemented, and strictly enforced. When the scope of the AA&E receipt and issue function indicates a recurring need for temporary parking of AA&E laden vehicles, a secure holding area will be established and used for that purpose in accordance with [paragraphs 2-7.1](#) and [2-7.1.1](#). Such areas shall also be used in situations when a carrier requires temporary non-emergency "in-transit"

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parking due to various routing and dispatching circumstances. All temporary parking of AA&E laden vehicles will be in compliance with the ESQD and physical security requirements of [paragraphs 2-7.1 and 2-7.1.1](#). Established on-station temporary parking procedures shall address the following requirements:

a. Procedures for Receipt of AA&E Laden Motor Vehicles. Procedures for receipt of AA&E laden motor vehicles during both normal receiving hours and before and after normal receiving hours must be developed. Procedures must account for vehicle inspection; duties and responsibilities of duty officer, guard force personnel, vehicle inspectors, and TOs; on-station AA&E route plans; location of and directions to entry/exit gates; secure holding yard access; and escort assignments.

b. Inspection of Motor Vehicles. Motor vehicles engaged in the transport of AA&E will be inspected per [paragraph 5-7.8.1](#) of this publication and [NAVSEA SW020-AF-HBK-010](#). Inspections are mandatory for all out-bound shipments at point of origin and for all in-bound shipments at destination. Inspection of motor vehicles involving shipments in-transit -- i.e., arriving at an interim DON activity in response to carrier request for assistance (Safe Haven/FPCON, etc.) -- is contingent upon existing conditions and/or visual evidence of breach of cargo integrity, equipment defects, or other circumstances that may warrant such inspection.

c. Instructions to Carriers/Drivers. Instructions to carriers/drivers must include normal receiving hours, after-hour delivery procedures, and secure holding capability (see [paragraph 2-7.2.1](#) for Transportation Facility Guide (TFG) guidance). Procedures should address station policy for advance notification of shipment arrival. Whereas each activity shall be prepared to respond expeditiously to occasions of after-hour deliveries, nonetheless, activity instructions must alert the carrier of its obligation to conduct the necessary liaison with the shipper to ensure that deliveries coincide with normal receiving hours. In accordance with the policy and procedures established in [paragraphs 2-7 thru 2-7.1.1](#), carriers/drivers will be informed that motor vehicles or dropped trailers may be left at the secure holding area until ready for dispatch to the in-bound shipment offload site or until ready for release of the outbound shipment. Drivers who elect to park their motor vehicles/trailers at the secure holding area must have in their possession at all times proper identification and proof of authorization to move the conveyances. Authorization to move the conveyances can be a copy of the BL or other shipping document attesting to the driver's commitment thereto. A form similar to that shown in [figure 2-3](#) shall be given to all drivers of incoming AA&E shipments alerting them to these provisions. Instructions to drivers must address carrier and U.S. Government limits of liability and other safety and security related details. Note that provided the terms and conditions of the temporary parking privilege are consistent with the BL and the contract of carriage, such temporary parking does not relieve the carrier of liability for the shipments, nor does the U.S. Government assume responsibility for the shipment or carrier equipment.

d. Instructions for Use of Secure Holding Areas. According to the safety and security criteria detailed in [paragraphs 2-7.1 and 2-7.1.1](#), secure holding areas will be used for the temporary parking of inbound and outbound AA&E laden motor vehicles. Subject to activity discretion, while awaiting disposition action, arrangements shall be made to (1) allow the driver to drop the trailer at the holding area and proceed off-station via the power unit; (2) keep the power unit attached to the trailer and allow the drivers to stay with the motor vehicle in the secure holding area; or (3) keep the power unit attached to the trailer at the secure holding area and assist the drivers in finding transportation to the nearest lodging facility off-station.

2-7.2.1. Transportation Facilities Guide (TFG). The **SDDC** TFG provides a convenient electronic method for conveying an activity's pertinent AA&E shipping and receiving instructions to DOD activities, DOD contractor shippers and munitions carriers. The TFG can be accessed via <http://eta.sddc.army.mil>. At a minimum, these instructions must include up-to-date traffic information including local AA&E traffic control routes, directions to the AA&E entry/exit gate, secure holding area capacity (number of vehicles and ESQD NEW), 24-hr. emergency response telephone number, name(s) and telephone numbers of key AA&E traffic personnel, hazard class/division of A&E received, normal AA&E receiving hours, before/after-hour receiving procedures, and advance delivery notification instructions. TOs must ensure that after-hours telephone numbers noted in either the Hazmat section or the Secure Holding section of the TFG match those found on the BL, and that the personnel requirements for individuals manning these after-hours telephone numbers are in compliance with **NOSSAINST 8020.18 (series)**. Activities should routinely keep carriers abreast of changes in safety, security and AA&E routing information and ensure that such is appropriately annotated on the BL.

2-7.3. **NOTIFICATION OF SHIPMENT DELAY.** DON activities that provide secure holding and temporary parking in response to carrier requests for in-transit assistance shall confirm that the driver(s) and/or carrier dispatcher has notified the shipper, consignee, and Defense Transportation Tracking System (DTTS) of the impending shipment delay.

2-7.4. **USE OF DOD INSTALLATIONS AS TRANSFER OR EXCHANGE POINTS BY COMMERCIAL CARRIERS.** Except under conditions deemed essential to the national defense or required in response to in-transit emergencies threatening public safety and cargo security, DOD activities will not be used by commercial motor carriers as transfer or interchange points in the normal routing of AA&E. The approval to permit such transfers and exchanges will be coordinated through the installation's CO/OIC in concert with the cognizant next higher echelon of command and the **SDDC** Operations Center. In this context, transfer means using an intermediate DOD activity to shift AA&E cargo between two or more conveyances; interchange means using an intermediate DOD activity to exchange carrier equipment used in transporting AA&E cargo. If emergent conditions require more immediate approval action on the part of the DOD activity, then such expedited action will be taken with written justification to follow for the record.

2-7.5. **AGREEMENT COVERING RELOCATION OF COMMERCIAL TRAILERS ON MILITARY INSTALLATIONS.** Under a NAVSEA Standard Agreement, NAVSEA Form 8023/1 (**figure 2-4**), a Navy activity may use a government power unit(s) to move an empty and/or loaded carrier trailer(s) in the event of an emergency or to expedite the loading/unloading of the trailer(s). These on-station movements will take place between the secure holding area and the load/offload site or between the empty trailer lot, the loading site and the secure holding area. Navy activities that use their power units to relocate commercial trailers shall issue an official agreement as indicated in **figure 2-4** with each affected commercial carrier. The activity TO shall maintain a record of the signed agreement for each carrier. A copy of the agreement shall be forwarded to the carrier.

2-7.6. **OTHER ASSISTANCE, INDEMNITIES AND LIABILITIES.**

a. In response to emergencies and to safeguard public well-being and cargo security, DOD activities will be prepared to provide technical assistance and on-site aid to commercial carriers, law enforcement officials, and emergency response personnel in the form of on-site clean-up, disposition and

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surveillance operations as a result of an accident or incident involving DOD AA&E shipments; refer to [NOSSAINST 8020.18 \(series\)](#). Such emergency response assistance may include Explosives Ordnance Disposal (EOD) services; AA&E moving and handling; load transfer and load blocking and bracing; salvage operations; A&E neutralization; and demolition or other disposition actions.

b. Applicable DOD and shipper-service regulations prescribe policies and procedures for the disposal of A&E. The following references are germane: [40 CFR Parts 260-266 and 270](#), [DOD Manual 4160.21-M](#), [DOD Manual 4160.21-M-1](#), [OPNAVINST 8026.2 \(series\)](#), and [NAVSEA OP 5 Volume 1](#).

c. When the services of the responding DOD activity are requested, the carrier must be advised in writing as follows:

(1) The carrier may be held responsible for all expenses, including salaries and wages incurred by the Government, for work performed on the carrier's account.

(2) DOD personnel act and perform their work as agents of the carrier in providing assistance.

(3) DOD personnel assigned to assist will retain their status as employees of the U.S. Government and as such will be entitled to benefits as provided by law.

(4) The U.S. Government will not recognize or submit to any action for property damage in connection with such assistance furnished, when actual labor, supervision or other services are performed at the carrier's request.

d. Carrier Notification Procedures.

(1) The activity TO is obligated to advise the carrier in writing with respect to the provisions detailed in [paragraph 2-7.6\(c\)](#) above. In addition, the notification document will request that the carrier acknowledge responsibility for performance of the services requested from the U.S. Government and that the performance of services by the DOD personnel will not relieve the carrier of tort liability. Under emergency conditions, when delay might contribute to added risk or threaten further harm to personnel and/or property, the TO will provide telephonic notification; this notification will be confirmed via a follow-up written document sent via facsimile or other electronic means.

### 2-7.7. PAYMENT FOR SERVICES.

a. The providing installation or activity will normally absorb costs associated with providing secure holding during emergencies and for other operational contingencies beyond the carrier's control. Charges may be applied for providing secure holding for routine non-emergency situations that may involve extra cost for services rendered beyond the norm, such as additional security.

b. Carriers will not be billed or held responsible for any service performed by DOD personnel that was not requested by the carrier. These services may include the dispatching of U.S. Government officials to observe the transfer of cargo or to suggest corrective measures in connection with such

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matters as seal breakage, shifting of loads, blocking and bracing adjustments, or other accident related areas of interest aimed at preserving shipment integrity, safety and security.

c. Collection of funds for services rendered will be in accordance with the proper finance office procedures and shipper-service regulations.

**NOTICE TO DRIVERS**

**LOCAL ORDINANCES PROHIBIT THE PARKING OF EXPLOSIVE-LADEN VEHICLES WITHIN THE CITY (COUNTY) LIMITS. VIOLATIONS OF THIS ORDINANCE CAN RESULT IN FINES AND/OR JAIL SENTENCES, OR BOTH.**

**THIS ACTIVITY PROVIDES A SECURE HOLDING AREA WHERE YOU MAY PARK YOUR EXPLOSIVE-LADEN MOTOR VEHICLE/TRAILER FOR A TEMPORARY PERIOD OF TIME PENDING DISPOSITION OF YOUR IN-BOUND SHIPMENT OR RELEASE OF YOUR OUT-BOUND SHIPMENT AS APPLICABLE. WE WILL PROVIDE A SECURITY GUARD OR OTHER DESIGNATED COMMAND REPRESENTATIVE WHO WILL ESCORT YOU TO OUR SECURE HOLDING AREA.**

**IT IS SUGGESTED YOU USE THIS PARKING FACILITY UNLESS YOU PLAN TO LEAVE THE IMMEDIATE VICINITY.**

**YOU MAY PICK-UP YOUR TRAILER AT ANY TIME DURING NORMAL WORKING HOURS PROVIDED YOU HAVE CERTIFIED DOCUMENTS (SHIPPING PAPERS, BILL OF LADING, ETC.) INDICATING PROOF OF THE ASSIGNED SHIPMENT AND CORRESPONDING MOTOR VEHICLE/TRAILER. PICK-UP AND RELEASE OF LOADED TRAILERS AFTER NORMAL WORKING HOURS IS NOT PERMITTED UNLESS OTHERWISE APPROVED BY THE COMMANDING OFFICER/OFFICER-IN-CHARGE IN RESPONSE TO TACTICAL, CONTINGENCY OR EMERGENCY SITUATIONS.**

**CONSISTENT WITH THE TERMS OF THE BILL OF LADING AND THE CONTRACT OF CARRIAGE, THIS TEMPORARY PARKING PRIVILEGE DOES NOT RELIEVE YOU OR THE CARRIER YOU REPRESENT OF THE LIABILITIES ASSOCIATED WITH THIS SHIPMENT, NOR DOES THIS DOD ACTIVITY ASSUME RESPONSIBILITY FOR THE SHIPMENT OR THE CARRIER'S EQUIPMENT.**

**YOUR COOPERATION IS SOLICITED AND APPRECIATED IN THE INTEREST OF SAFETY - YOURS, OURS, AND THE PUBLIC'S.**

**SAMPLE**

\_\_\_\_\_  
(Signature of Commanding Officer)

**FIGURE 2-3. Sample Navy and Marine Corps Activity Explosives-Laden Vehicle Parking Notice**

**AGREEMENT FOR RELOCATION OF COMMERCIAL TRAILERS  
ON GOVERNMENT INSTALLATIONS**

NAVSEA 8023/1 (9-74)

**AGREEMENT FOR RELOCATION OF COMMERCIAL TRAILERS  
ON GOVERNMENT INSTALLATIONS**

For the privilege extended by the Government to the carrier in permitting the carrier to park its equipment on the Government installation, the carrier agrees and hereby authorizes the Government to relocate or spot the equipment as the Government deems necessary. In relocating or spotting the equipment, Government personnel may utilize Government tractors.

**TERMS AND CONDITIONS:**

- A. The carrier will deliver its trailers or vans for the specific purpose of loading or unloading said trailers or vans of material shipped on U.S. Government Bills of Lading, SF 1103.
- B. Consignee and/or shipper may at its option, relocate or spot the said trailers or vans within the physical limits of its installation by using Government tractors and personnel.
- C. The carrier agrees that it shall exercise ordinary care and diligence to ensure that the trailers and vans are suitable for the purpose intended and warrants that the trailers or vans it supplies are either owned, or if not, are those which that carrier has a legal right to use and bail.
- D. Carrier agrees to indemnify and hold consignee and/or shipper harmless from claims for damages to trailers or vans which do not result from negligence of consignee or which are based upon the assertion that installation had no authority to spot or relocate said trailers or vans.
- E. Installation agrees that it shall exercise ordinary care and diligence in relocating or spotting said trailers or vans within the installation.

**SAMPLE**

COMMANDING OFFICER (Signature) <b>J. Edmondson (Capt. USN)</b>	PRESIDENT OF CARRIER (Signature) <b>J. Johnson, Pres.</b>
ACTIVITY NAME <b>Naval Weapons Support Activity, Crane, Ind.</b>	CARRIER NAME <b>ABC Transit Co. Joslin, Ala.</b>
DATE <b>15 Nov. 2000</b>	DATE <b>15 Nov. 2000</b>

**FIGURE 2-4. NAVSEA Form 8023/1, Agreement for On-Station Relocation of Commercial Trailers**

## 2-8. NOTIFICATIONS AND REPORTS

All Navy and Marine Corps activities shipping AA&E shall comply with the requirements of [NAVSEAINST 8023.5 \(series\)](#) to eliminate current and future discrepancies in AA&E shipments by and for the DOD. The penalties for violations of [DOT](#) regulations are also cited in [NAVSEAINST 8023.5 \(series\)](#). Guidance and general procedures for the preparation of notifications and reports concerning the movement of AA&E are presented in [paragraphs 2-8.2](#) through [2-8.8](#). In addition to the following requirements, adherence to all federal, state, and local regulations is mandatory.

**2-8.1. CARRIER PERFORMANCE.** In accordance with [DTR 4500.9-R, Chapter 207](#), the Carrier Performance Program (CPP) is designed to ensure that DOD shippers receive the best available service from commercial cargo carriers. This program establishes minimum levels of acceptable performance and prescribes procedures for recording and reporting a carrier's failure to provide satisfactory service. Shipping activities shall implement the CPP as applicable to ensure that carrier performance is adequately monitored. Per the CPP, and when circumstances warrant the action, shipping activities may issue letters of warning and notifications of non-use to the carrier. Related service elements, standards, and procedures are prescribed in [DTR 4500.9-R, Chapter 207](#). TOs must report service failures or other carrier performance issues that require headquarters review to the [SDDC](#) Operations Center, with a copy to [NOSSA \(N5\)](#). Carrier performance failures must be documented to substantiate the TO's claim and records must be maintained accordingly.

**2-8.2. ADVANCE NOTIFICATION OF VOLUME FREIGHT SHIPMENTS.** [DTR 4500.9-R](#) defines planned volume movement and establishes the requirement for TOs to report such movements to Headquarters, [SDDC](#), Ft. Eustis, VA. Compliance with the preceding requirement in its entirety is mandatory. [NOSSA \(N5\)](#) shall simultaneously be supplied with a copy of the advance notification for use as backup data for transportation budgetary planning; review of loading, blocking, bracing, and handling requirements; and review of carrier service capabilities.

**2-8.2.1. Volume Movement Report.** Information for volume movements shall be submitted to [SDDC](#) at least 30 days prior to the date of movement, or up to 60 days when time permits. If the movement develops within a shorter time frame, the information shall be submitted as soon as possible. If sufficient data is not available to prepare a Volume Movement Report (VMR), or when a VMR is not required; a request for routing shall be made as soon as possible.

**2-8.2.2. Volume Movement Equipment Requirements.** To ensure the availability of sufficient transportation equipment for volume movements, the TO shall provide an advance railcar/motor vehicle notification of equipment requirements to the serving carrier(s) with a minimum of 10 days notice, if possible. Upon receipt of the routing from [SDDC](#), the railcar/motor vehicle order shall be placed as soon as possible. Unavailability of transportation equipment and any required amendments to the route order shall be reported to [SDDC](#) as soon as possible.

**2-8.3. REPORT OF SHIPMENT (REPSHIP).** Shippers of TPS material will forward a Report of Shipment (REPSHIP) to the consignee. The REPSHIP shall identify the AA&E by SRC. Shippers shall notify the designated receiving activity prior to a shipment's departure. Such notification will be by traceable means (see [paragraphs 2-8.3.1](#) through [2-8.3.1.1](#)). This advance notice enables the receiving

activity to make proper preparations for receipt of the shipment without delays or detention charges. All receiving activities shall establish and maintain suspense lists to ensure timely receipt of the material.

**2-8.3.1. REPSHIP Procedures.** All Navy CONUS AA&E shipping activities processing DTTS shipments to DOD CONUS activities are required to use the DTTS website for transmittal of REPSHIPS to receiving activities for shipments requiring Satellite Motor Surveillance Service (SNS). DTTS will automatically generate and forward the REPSHIP to the receiving activity. The submission of REPSHIPS via traditional fax or email is no longer required for shipments sent from CONUS Navy AA&E activities to DOD CONUS activities. Activities must enter the shipment load data into the Global Freight Management (GFM) system. Once the data is entered, the relevant REPSHIP data elements are automatically sent to DTTS. Upon receipt, DTTS will automatically create and forward an electronic REPSHIP to the receiving activity. All Navy CONUS AA&E receiving activities shall confirm delivery receipt of SRC I and II shipments using the DTTS website. For shipments not requiring SNS, shippers must continue to submit REPSHIPS via normal facsimile or email transmission.

**2-8.3.1.1. Commercial Contract Shipments.** The procedure outlined in [paragraph 2-8.3.1](#) does not pertain to commercial contract shipments that are shipped outside the Defense Transportation System (DTS). Navy CONUS AA&E shipments destined for CONUS commercial activities shall continue to execute historical REPSHIP procedures.

**2-8.4. SHIPMENTS CONSIGNED TO COASTAL PORTS.** For shipments consigned to coastal ports for export, a REPSHIP shall be sent by the shipping activity to the transshipping port by any traceable means within 24 hours of the shipment's delivery to the carrier. If the report is telephoned, confirmation in writing is required. The information specified below must be included in the REPSHIP and must be presented in the following format:

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MEMORANDUM FOR CONUS WATER TERMINAL

FROM: SHIPPING ACTIVITY

SUBJ: REPSHIP

EXPORT TRAFFIC RELEASE (ETR) AND VESSEL NAME AND/OR VOYAGE NUMBER.

1. CONVEYANCE NUMBER.
  - (A) CARRIER AND ROUTING.
  - (B) GOVERNMENT BILL OF LADING NUMBER. TOTAL NET EXPLOSIVES WEIGHT (NEW).
  - (C) SEAL NUMBER(S) AND ANY OTHER SECURITY DEVICES APPLIED SUCH AS UPPER RAIL LOCKS, WIRE TWISTS, ETC.
  - (D) TYPE TRANSPORTATION PROTECTIVE SERVICE (SSS, DDPS, RSS, NONE, ETC.) AND WHEN APPLICABLE, MTX-GS SERVICE NUMBER.
  - (E) JULIAN DATE OF SHIPMENT.
  - (F) JULIAN DATE OF ESTIMATED TIME OF ARRIVAL (ETA).
  - (G) EXPORT TRAFFIC RELEASE NUMBER AND BOOKED VESSEL NAME AND/OR VOYAGE NUMBER.
    - (1) TRANSPORTATION CONTROL NUMBER.
    - (2) NATIONAL STOCK NUMBER (NSN) AND DEPARTMENT OF DEFENSE IDENTIFICATION CODE (DODIC).
    - (3) DIMENSIONS OF UNITIZED LOADS (LENGTH, WIDTH, HEIGHT IN INCHES).
    - (4) TOTAL ROUNDS, TOTAL PIECES, TOTAL WEIGHT, TOTAL CUBE.
    - (5) WHEN ONLY ONE LOT, FURNISH LOT NUMBER AND NEW: FOR MORE THAN ONE LOT, FURNISH: LOT NUMBER, ROUND COUNT, PIECES, WEIGHT, CUBE AND NEW FOR EACH LOT.
    - (6) PROJECT CODE.
    - (7) SECURITY CLASSIFICATION SUCH AS (SENSITIVE-CATEGORY 2; CONFIDENTIAL; NONE, ETC.).

### NOTE

When a conveyance contains more than one shipment unit, begin next paragraph as (H), continue with each data element (1) through (7) above and continue with additional lettered paragraphs until the conveyance is completely documented. Begin next conveyance as paragraph 2 and furnish same sequence of data as above. Maintain above paragraph sequence until REPSHIP is completed.

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2-8.4.1. Distribution of the REPSHIP shall be as follows:

- a. One copy to the consignee (coastal port).
- b. For OCONUS transshipments, one copy to [NOSSA \(N5\)](#), [NAVSUP Logistics Operations Center \(formerly NOLSC\)](#), Mechanicsburg, PA and one copy to each of the following: Overseas Consignee; COMNAVLOGPAC; COMNAVSURFLANT.
- c. If requested on the order for shipment, one copy to the cognizant branch of [NOSSA](#).

2-8.5. ACCIDENT AND DELAY REPORTING. When loads of AA&E are being shipped by motor vehicle, drivers shall be given written instructions to notify both the shipping activity and the receiving activity by the fastest available means in the event the shipment is involved in an accident, incident or is delayed en route for 5 hours or more. These instructions shall include 24-hour emergency response telephone numbers for both consignor and consignee. Delays resulting from delivery being restricted to normal working hours shall not be reported. The Navy driver's responsibilities in the event of accident, incident or delay are described in [NAVSEA SW020-AF-HBK-010](#). Refer to [NAVSEAINST 8020.18 \(series\)](#) and [NOSSAINST 8020.18 \(series\)](#) for further guidance.

2-8.5.1. When a Navy or Marine Corps activity is notified of an accident or incident involving a shipment of AA&E being transported by motor vehicle, rail or air (other than via DTTS notification); a telephone report shall be made to [NOSSA \(N5\)](#) at DSN 354-6066, or Commercial (301) 744-6066, and to the military service/ammunition command that originated the shipment. Marine Corps activities shall also submit a telephone report to the USMC Command Center at (703) 695-7366. A follow-up report shall be made by message. Copies of the follow-up report shall be sent to the following:

- a. Commanding Officer, [NOSSA \(N5\)](#). Marine Corps activities shall also submit a copy to USMC Command Center, using the format contained in [MCO 5102 \(series\)](#).
- b. [Naval Safety Center](#) (Codes 40, 42 and 43).
- c. Commander, [SDDC](#) (Code DTTS).
- d. The appropriate shipper service management element, as listed in [DTR 4500.9-R](#).

2-8.5.1.1. Refer to [OPNAVINST 5102.1 \(series\)](#) for guidance on mishap reporting. Marine Corps activities shall be governed by [MCO P5102.1](#). Report symbol OPNAV 5102-4 is assigned to the motor vehicle mishap report, and should be used as the follow-up report for any accidents or incidents involving transportation of AA&E by motor vehicle, railcar or air. This information is intended as a supplement to the requirements of [DODINST 6055.07](#) and [DOD 6055.09-M](#). The following items should be addressed under item #20 of Report Symbol OPNAV 5102-4:

- a. Reporting activity and UIC, full name of carrier, including carrier's alpha code, consignor and consignee, with UIC's or alpha codes.
- b. DODIC or NALC, type of commodity, net explosive weight and number of packages.

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- c. Origin and destination of shipment.
- d. Requisition number and BL.
- e. Vehicle or railcar initials and numbers. (Container number, if air shipment).
- f. New vehicle or railcar number (if load was transferred). (Container number, if air shipment).
- g. Original seal number(s) (if load was transferred), new seal number(s) and name of individual supervising the transfer.
- h. Traffic control number.
- i. Estimate of damage to cargo or loss of property, and estimate of damage to carrier's equipment.
- j. Action taken by reporting activity.
- k. Name of reporting official and phone number.

The complete format for Report Symbol OPNAV 5102-4 is provided as follows:

SAMPLE MESSAGE

MOTOR VEHICLE MISHAP REPORT (REPORT SYMBOL OPNAV 5102-V (MV))

1. GENERAL.

THE FOLLOWING FORMAT AND CONTENT IS TO BE USED FOR REPORTING PERSONNEL INJURIES/DEATHS AND MATERIAL (PROPERTY) DAMAGE RESULTING FROM ANY TRANSPORTATION MISHAPS. SUBMIT AS MUCH INFORMATION AS AVAILABLE. SUBMIT SUPPLEMENTARY REPORTS AS NECESSARY TO SUPPLY THE MISSING INFORMATION WHEN AVAILABLE. WHERE REQUESTED DATA DOES NOT APPLY OR IS NOT RELEVANT TO ANALYSIS OF THE MISHAP, INSERT THE WORDS "NOT APPLICABLE".

2. CONTENT AND FORMAT.

FROM: ACTIVITY SUBMITTING REPORT

TO: NAVSAFECEN NORFOLK VA//40/42/43/00/02/054//

INFO: AS DESIRED

UNCLAS FOUO //N05102//

SUBJ: MOTOR VEHICLE MISHAP REPORT (REPORT SYMBOL OPNAV 5102-4 (MV))

MSGIC/GENADMIN/MSG ORIG/SER NO./MONTH//

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NARR/THIS IS A (LIMITED/GENERAL) USE SAFETY MISHAP REPORT TO BE USED ONLY FOR SAFETY PURPOSES PER OPNAVINST 5102.1 (SERIES).//

RMKS/1. NAME, PHONE NUMBER OF PREPARER.

2. UIC OF REPORTING ACTIVITY.

3. LOCAL DATE, TIME, AND DAY OF WEEK MISHAP OCCURRED.

4. GEOGRAPHIC LOCATION (INCLUDE CITY AND STATE, AND WHETHER ON- OR OFF-BASE. IF ON-BASE, GIVE NAME AND UIC OF INSTALLATION ON WHICH MISHAP OCCURRED.)

5. ENVIRONMENTAL CONDITIONS (WEATHER, ROAD CONDITIONS, ETC.)

6. IDENTIFY ALL VEHICLES (YEAR, MAKE, MODEL AND WHETHER GOVERNMENT-OWNED OR PRIVATELY-OWNED.)

7. IDENTIFY ALL OPERATORS (BY NAME, SEX, AGE, MARITAL STATUS, DUTY STATUS, SOCIAL SECURITY NUMBER (EXCEPT NON-DOD PERSONNEL), OFFICER DESIGNATOR, RANK, RATE, AND CIVIL SERVICE GRADE. INDICATE IF OPERATOR IS NON-DOD. INDICATE THE VEHICLE INVOLVEMENT (GMV/PMV) FOR EACH OPERATOR.

8. NAME AND UIC OF DUTY STATION OF DOD OPERATORS IF NOT SAME AS REPORTING ACTIVITY.

9. FOR DOD OPERATORS ONLY, INDICATE DATE AND TYPE OF OPERATOR TRAINING COMPLETED.

10. DRUG/ALCOHOL/FATIGUE INVOLVEMENT (INDICATE DRUG OR ALCOHOL BLOOD CONTENT FOR EACH OPERATOR.)

11. FOR THE OPERATOR INDICATE FATALITY, DAYS HOSPITALIZED, TOTAL LOST WORKDAYS (ACTUAL OR ESTIMATE), OR NO INJURY. INDICATE PERMANENT PARTIAL DISABILITY OR PERMANENT TOTAL DISABILITY, IF APPLICABLE. INCLUDE CAUSE OF DEATH, IF APPLICABLE. FOR LOST TIME INJURIES, IDENTIFY THE CAUSE.

12. INDICATE SAFETY DEVICES USED BY THE OPERATOR. WERE SAFETY BELT, HELMET, BOOTS, ETC. USED. FOR GMV OPERATORS, IF A PERSONAL INJURY RESULTS FROM THE NON-USE OF A NAVY MOTOR VEHICLE SAFETY BELT, EXPLAIN WHY SAFETY BELTS WERE NOT USED BY THE INJURED PERSON. IN CASES OF MALFUNCTION, WHAT CAUSED THE MALFUNCTION AND WHAT REMEDIAL ACTIONS HAVE BEEN TAKEN TO PREVENT RECURRENCE.

13. IDENTIFY ALL PASSENGERS, PEDESTRIANS, OR BICYCLISTS WHEN STRUCK BY A MOTOR VEHICLE, WHO ARE KILLED OR INJURED. IDENTIFY BY NAME, SEX, AGE, MARITAL STATUS, DUTY STATUS, SOCIAL SECURITY NUMBER (EXCEPT NON-DOD PERSONNEL), OFFICER DESIGNATOR, RANK, RATE, AND CIVIL SERVICE GRADE. ALSO, INDICATE IF PASSENGER, PEDESTRIAN OR BICYCLIST IS NON-DOD. INDICATE THE VEHICLE INVOLVEMENT (GMV/PMV) FOR EACH PERSON KILLED/INJURED. FOR PASSENGERS, IDENTIFY ACTUAL POSITION IN/ON VEHICLE, I.E. RIGHT FRONT PASSENGER, ETC. FOR PEDESTRIANS AND BICYCLISTS, IDENTIFY LOCATION WHERE STRUCK, I.E. ON SIDEWALK, ETC.

14. NAME AND UIC OF DUTY STATION OF DOD PASSENGERS, PEDESTRIANS, AND BICYCLISTS KILLED OR INJURED IF NOT SAME AS REPORTING FACILITY.

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15. DRUG/ALCOHOL/FATIGUE INVOLVEMENT. INDICATE DRUG OR ALCOHOL BLOOD CONTENT FOR EACH PASSENGER, PEDESTRIAN OR BICYCLIST KILLED OR INJURED.

16. A. GMV MISHAP. FOR EACH PASSENGER, PEDESTRIAN OR BICYCLIST INVOLVED IN A GMV MISHAP, INDICATE FATALITY, DAYS HOSPITALIZED, AND TOTAL LOST WORKDAYS (ACTUAL OR ESTIMATE). INDICATE PERMANENT PARTIAL DISABILITY OR PERMANENT TOTAL DISABILITY, IF APPLICABLE. INDICATE THE VEHICLE INVOLVEMENT (GMV/PMV) FOR EACH PERSON KILLED/INJURED. INCLUDE CAUSE OF DEATH, IF APPLICABLE. FOR LOST TIME INJURIES, IDENTIFY THE CAUSE.

B. PMV MISHAP. FOR EACH DOD PASSENGER, PEDESTRIAN, OR BICYCLIST INVOLVED IN A PMV MISHAP INDICATE FATALITY, DAYS HOSPITALIZED, AND TOTAL LOST WORKDAYS (ACTUAL OR ESTIMATE).INDICATE PERMANENT PARTIAL DISABILITY OR PERMANENT TOTAL DISABILITY, IF APPLICABLE. PROVIDE INFORMATION FOR NON-DOD PERSONNEL KILLED OR INJURED IF MISHAP OCCURRED ONBOARD A NAVAL INSTALLATION. INDICATE THE VEHICLE INVOLVEMENT (GMV/PMV) FOR EACH PERSON KILLED OR INJURED. INCLUDE CAUSE OF DEATH, IF APPLICABLE. FOR LOST TIME INJURIES, IDENTIFY THE CAUSE.

17. FOR EACH DOD PASSENGER KILLED OR INJURED, INDICATE SAFETY DEVICES USED. WERE SAFETY BELT, HELMET, ETC. USED. FOR EACH DOD PEDESTRIAN OR BICYCLIST KILLED OR INJURED, INDICATE IF CLOTHING WAS LIGHT OR DARK, IF REFLECTIVE VEST/TAPE WAS USED, ETC. FOR GMV PASSENGERS, IF A PERSONAL INJURY RESULTS FROM THE NON-USE OR MALFUNCTION OF A NAVY MOTOR VEHICLE SAFETY BELT, EXPLAIN WHY BELTS WERE NOT USED BY THE INJURED PERSON. IN THE CASE OF MALFUNCTION, WHAT CAUSED THE MALFUNCTION AND WHAT REMEDIATE ACTIONS HAVE BEEN TAKEN TO PREVENT RECURRENCE.

18. INDICATE DOD PROPERTY DAMAGE. COST TO REPAIR OR REPLACE, DOD MAN-HOURS TO REPAIR. IF COSTS ARE UNKNOWN, GIVE ESTIMATE.

19. INDICATE COST OF NON-DOD PROPERTY DAMAGE WHEN CAUSED BY A GMV MISHAP.

20. PROVIDE A BRIEF NARRATIVE OF THE MISHAP INCLUDING THE MAJOR CAUSE (PROVIDE ANY ADDITIONAL INFORMATION FOR CLARIFICATION IF CONSIDERED NECESSARY.)//

END OF SAMPLE MESSAGE

2-8.5.2. When advised of an accident involving a shipment of AA&E, the local commander or other cognizant Navy authority shall take every necessary action to ensure protection of life and property and to safeguard classified or explosive shipments. Every effort shall be made to assist local, state, or other authorities in the removal of the equipment and material from public areas in the safest, most efficient manner. If a carrier asks for assistance, arrangement shall be made for reimbursement of all services provided.

2-8.6. **REPORTING IMPROPER PACKAGING, PACKING AND/OR MARKING.** According to [SECNAVINST 4355.18](#) (series) and [NAVSUP P-723](#), shipping (item) discrepancies and packing/packaging/markings discrepancies attributable to the shipper are identified as supply discrepancies, and are reported as a Supply Discrepancy Report (SDR) using the Standard Form (SF) 364. The term "SDR" identifies all forms and formats of discrepancy reporting that has evolved from the SF 364. The term "packaging" includes preservation materials, inner and outer packaging/packing configurations, and

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marking. When practicable, technically competent hazardous materials packaging specialists should be consulted to aid in analyzing and reporting packaging deficiencies involving A&E.

2-8.6.1. Some of the conditions requiring preparation of a SDR are as follows:

- a. Any packaging deficiency that results in mission degradation.
- b. Any packaging deficiency, regardless of dollar amount, that could cause a potentially hazardous condition, even if no damage or other unsatisfactory condition has resulted.
- c. Any packaging deficiency for which the cost of correction is \$50.00 or more.
- d. Repeated packaging deficiencies by the same shipping activity.
- e. Excessive preservation, packaging or packing.
- f. Marking deficiencies such as incorrect address information; inadequate marking that requires opening of containers or results in improper handling or stowage; and improper identification marking of AA&E.
- g. Inadequate cushioning, blocking or bracing (within a container).
- h. Shortages or overages in excess of \$100 per line item and all shortages/overages involving classified and/or protected AA&E items regardless of dollar amount.
- i. Missing, incomplete or incorrect shipping documentation.

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## INSTRUCTIONS

DEPARTMENT OF DEFENSE: DLAR 4140.55/AR 735-11.2/NAVSUPINST 4440.127E/AFR 400-54/MCO 4430.3E, Reporting of Item and Packaging Discrepancies, and/or DLAR 4140.60/AR 12-12/NAVSUPINST 4920.9B/AFR 67-7/MCO 4140.1B, Processing Discrepancy Reports Against Foreign Military Sales Shipments. CIVILIAN AGENCIES: See FPMR handbook cited in 19(2)(a).

<b>REPORT OF DISCREPANCY (ROD)</b>				1. DATE OF PREPARATION	2. REPORT NUMBER			
<input type="checkbox"/> SHIPPING <input type="checkbox"/> PACKAGING								
3. TO (Name and address, include ZIP Code)				4. FROM (Name and address, include ZIP Code)				
5a. SHIPPER'S NAME				5b. NUMBER AND DATE OF INVOICE		6. TRANSPORTATION DOCUMENT NUMBER <i>(GBL, Waybill, TCN, etc.)</i>		
7a. SHIPPER'S NUMBER (Purchase Order/Shipmen, Contract, etc.)		7b. OFFICE ADMINISTERING CONTRACT			8. REQUISITIONER'S NUMBER (Requisition, Purchase Request, etc.)			
9. SHIPMENT, BILLING, AND RECEIPT DATA						10. DISCREPANCY DATA		11. ACTION CODE
NSN/PART NUMBER AND NOMENCLATURE <small>(a)</small>	UNIT OF ISSUE <small>(b)</small>	QUANTITY SHIPPED/BILLED <small>(c)</small>	QUANTITY RECEIVED <small>(d)</small>	QUANTITY <small>(a)</small>	UNIT PRICE <small>(b)</small>	TOTAL COST <small>(c)</small>	CODE <small>(d)</small>	AC-TION CODE
12. REMARKS (Continue on separate sheet of paper if necessary)								

1 DISCREPANCY CODES	2 ACTION CODES
<b>CONDITION OF MATERIAL</b> C1 - In condition other than that indicated on release/receipt document C2 - Expired shelf life C3 - Damaged parcel post shipment <b>SUPPLY DOCUMENTATION</b> D1 - Not received D2 - Illegible or mutilated D3 - Incomplete, improper or without authority <i>(Only when receipt cannot be properly processed)</i> <b>MISDIRECTED MATERIAL</b> M1 - Addressed to wrong activity <b>OVERAGE/DUPLICATE SHIPMENTS</b> O1 - Quantity in excess of that on receipt document O2 - Quantity in excess of that requested <i>(Other than unit of issue pack)</i> O3 - Quantity duplicates shipment <b>PACKING DISCREPANCY</b> P1 - Improper preservation P2 - Improper packing P3 - Improper marking P4 - Improper unitization	<b>PRODUCT QUALITY DEFICIENCIES</b> Q1 - Deficient material <i>(Applicable to Grant Aid and FMS shipments)</i> <b>SHORTAGE OF MATERIAL</b> S1 - Quantity less than that on receipt document S2 - Quantity less than that requested <i>(Other than unit of issue pack)</i> S3 - Non-receipt of parcel post shipments <b>ITEM TECHNICAL DATA MARKINGS (i.e., Name Plates, Log Books, Operating Handbooks, Special Instructions, etc.)</b> T1 - Missing T2 - Illegible or mutilated T3 - Precautionary operational markings missing T4 - Inspection data missing or incomplete T5 - Serviceability operating data missing or incomplete T6 - Warranty data missing <b>WRONG ITEM (Identify requested item as a separate copy in Item 9 above)</b> W1 - Incorrect item received W2 - Unacceptable substitute <b>OTHER DISCREPANCIES</b> Z1 - See remarks
1A - Disposition instructions requested <i>(Reply on reverse)</i> 1B - Material being retained <i>(See remarks)</i> 1C - Supporting supply documentation requested 1D - Material still required expedite shipment <i>(Not applicable to FMS)</i> 1E - Local purchase material to be returned at supplier's expense unless disposition instructions to the contrary are received within 15 days <i>(Reply on reverse) (Not applicable to FMS)</i> 1F - Replacement shipment requested <i>(Not applicable to FMS)</i> 1G - Reshipment not required. Item to be re-requisitioned 1H - No action required. Information only. 1Z - Other action requested <i>(See remarks)</i>	

13. FUNDING AND ACCOUNTING DATA	
14a. TYPED OR PRINTED NAME, TITLE, AND PHONE NUMBER OF PREPARING OFFICIAL	14b. SIGNATURE
15. DISTRIBUTION ADDRESSEES FOR COPIES	

**FIGURE 2-5. Standard Form 364, Supply Discrepancy Report (SDR) (Sheet 1 of 2)**

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16. FROM:		17. DISTRIBUTION ADDRESSEES FOR COPIES	
18. TO:		<p>Use window envelope to mail this document. Insert name and address, including ZIP Code, starting one typing space below the left dot. Each address line must NOT extend beyond right dot. Address must not exceed four single space typing lines.</p>	
19. IN ACCORDANCE WITH NOTICE OF DISCREPANCY ON FACE OF THIS FORM:			
Fold here	a. MATERIAL HAS BEEN <input type="checkbox"/> WILL BE <input type="checkbox"/> SHIPPED		b. <input type="checkbox"/> NO RECORD OF SHIPMENT. RESUBMIT REPORT TO PROPER OFFICE UNDER APPROPRIATE REGULATION.
	c. <input type="checkbox"/> AN ADJUSTMENT IN BILLING HAS BEEN/WILL BE PROCESSED AS A: <input type="checkbox"/> CREDIT <input type="checkbox"/> DEBIT		d. <input type="checkbox"/> INVOICE/BILL ATTACHED
e. <input type="checkbox"/> PROOF OF DELIVERY (Parcel Post Shipments) OR EVIDENCE OF SHIPMENT ENCLOSED.			
f. <input type="checkbox"/> AN ADJUSTMENT IN BILLING FOR THE REPORTED DISCREPANCY WILL NOT BE PROCESSED FOR THE FOLLOWING REASON WHICH IS CITED IN THE INDICATED REGULATION.			
(1) REASON FOR NOT PROCESSING		(2) PRESCRIBING REGULATION	
(a) DISCREPANCY WAS NOT REPORTED WITHIN THE TIME FRAMES ALLOWED AND/OR		(a) CHAPTER 5 OF THE GSA HANDBOOK, DISCREPANCIES OR DEFICIENCIES IN GSA OR DOD SHIPMENTS, MATERIAL, OR BILLINGS (FPMR 101-26.8)	
(b) DOLLAR VALUE DOES NOT MEET THE CRITERIA PRESCRIBED IN THE REGULATION OR AGREEMENT INDICATED IN 19f(2)		(b) CHAP. 2 AND/OR 7 OF DOD 4000.25-7-M, MILITARY STANDARD BILLING SYSTEM (MILSBILLS) AND/OR DD 1513, U.S. DOD OFFER AND ACCEPTANCE, AS APPLICABLE.	
20. THE FOLLOWING DISPOSITION IS TO BE MADE OF THE REFERENCED MATERIAL:			
a. <input type="checkbox"/> PROCESS FOR DISPOSAL IN ACCORDANCE WITH SERVICE/AGENCY DIRECTIVES		b. <input type="checkbox"/> REPRESENTATIVE WILL CALL FOR DISCUSSION CONCERNING DISPOSITION IN: _____	
c. <input type="checkbox"/> RETAIN MATERIAL AT NO CHARGE.		d. <input type="checkbox"/> MATERIAL WILL BE PICKED UP IN: _____	
e. <input type="checkbox"/> SHIP MATERIAL ( <i>Specify location</i> ):			
(1) <input type="checkbox"/> GBL APPROPRIATION CHARGEABLE:			
(2) <input type="checkbox"/> CHARGES COLLECT - VIA: <input type="checkbox"/> FREIGHT <input type="checkbox"/> EXPRESS <input type="checkbox"/> PARCEL POST			
(3) <input type="checkbox"/> PARCEL POST LABEL ATTACHED (4) <input type="checkbox"/> FREIGHT PREPAID			
(\$ _____ postage advanced herewith. NOTE: Please enclose postage. Material cannot be returned Parcel Post collect.)			
f. <input type="checkbox"/> OTHER ( <i>Specify</i> ) _____			
21. <input type="checkbox"/> IF MATERIAL IS STILL REQUIRED, SUBMIT NEW REQUISITION		22. <input type="checkbox"/> REPLACEMENT WITH SATISFACTORY MATERIAL WILL BE MADE ON OR BEFORE: _____	
23. REMARKS ( <i>Continue on separate sheet of paper if necessary</i> )			
24a. TYPED OR PRINTED NAME AND PHONE NUMBER OF PREPARING OFFICIAL		24b. SIGNATURE	
		24c. DATE	

STANDARD FORM 364 BACK (REV. 2-80)

**FIGURE 2-5. Standard Form 364, Supply Discrepancy Report (SDR) (Sheet 2 of 2)**

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2-8.6.2. The SF 364 shall not be used to report any of the following conditions:

- a. Transportation type discrepancies (i.e., shortages, losses, or damages) that occurred in-transit and were reported as transportation discrepancies on DD Form 361 according to [DTR 4500.9-R](#).
- b. Improper carrier facilities or handling by carriers.
- c. Damage resulting from fire, collision, wreck, or other catastrophes occurring to carrier facilities.
- d. Rejecting shipments, requesting surveys, or initiating claims against carriers for damages.

2-8.6.3. Packaging deficiencies that result in damages to material that may endanger life, impair combat or deployment operations or affect other material shall be reported immediately to the shipping activity by the most expeditious means. This notification will not nullify the requirement for initiating the SF 364. The reporting activity shall forward an SF 364 within 24 hours of the initial expedited communication. Detailed instructions for the preparation and distribution of the SF 364 are presented in [SECNAVINST 4355.18 \(series\)](#).

2-8.7. REPORTING OVER, SHORT, ASTRAY, LOST, OR DAMAGED SHIPMENTS. DD Form 361, Transportation Discrepancy Report, ([figure 2-6](#)), shall be used for reporting over, short, astray, loss of, or damage to shipments; improper loading, or blocking or bracing of the load; improper handling by carrier; improper placard; and other transportation discrepancies. The TDR shall not be used to report damages attributed solely to improper packaging. Such damages should be reported on SF 364.

2-8.7.1. Some of the conditions requiring preparation of a DD Form 361 (TDR) by the TO, or a designated agent, are as follows:

- a. The value of overages, shortages, or damages is not known or when it exceeds \$100.00. (Damage must be reported within 7 working days).
- b. The overages or shortage is not resolved within 30 days from date of detection.
- c. The discrepancy involves a shipment moving to or between commercial contractors.
- d. There is theft, pilferage, or partial loss of contents of containers while in transit.
- e. Astray freight is located in carrier's terminals or warehouses, or is delivered to a military installation by the carrier and there is not sufficient information to permit immediate disposition.
- f. Improper loading, handling, blocking, or bracing are detected, regardless of whether loss or damage has resulted.
- g. A shipment is misdirected.



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## PART II - (FOR CLAIMS PURPOSES)

---

32. TO:

---

33. EXCEPTION NOTED ON CARRIER'S DELIVERY RECEIPT? (If "NO," explain in Remarks)

YES       NO

---

34. INSPECTION DATA

CARRIER INSPECTED  
(Report attached)

INSPECTION WAIVED  
(Waiver attached)

ORAL WAIVER (Provide name,  
title, and date in Remarks)

GOVERNMENT INSPECTED  
(Report attached)

---

35. DISPOSITION DATA

REJECTED  
(Receipt attached)

REPAIRED AT GOVERNMENT  
EXPENSE (Bill attached)

OTHER (Explain in Remarks)

---

36. REMARKS (See preparation instructions of covering regulation for suggested information)

---

37. ATTACHMENTS

CY BOL

DD FORM 1348-1

CY CARRIER'S TENDER

CY DD FORM 250

CY CARRIER'S DELIVERY RECEIPT

ACTUAL REPAIR COST COMMODITY

PHOTOGRAPH

OTHER \_\_\_\_\_

CARRIER'S INSPECTION REPORT

OTHER \_\_\_\_\_

---

38. ACCOUNTING CLASSIFICATION

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DD FORM 361 (BACK), JUN 2006

**FIGURE 2-6. DD Form 361, Transportation Discrepancy Report (TDR) (Sheet 2 of 2)**

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h. Placarding, labeling, or certification of the conveyance transporting A&E is not in accordance with DOT or military regulations.

i. Improper or inadequate carrier services or equipment are involved.

j. Carrier tariff requirements or military regulations are not observed.

k. Violations of security regulations including broken or missing seals.

l. Significant or repetitive discrepancies are made by the same shipper in the preparation or distribution of Government or commercial bills of lading.

2-8.7.2. Data in Block 2 of the DD Form 361 (Report Number) must contain the reporting activity's DOD activity address code (DODAAC) followed by a four-digit number, beginning with 0001 and continuing sequentially through the calendar year, e.g., FB4809-0001.

2-8.7.3. When a discrepancy is discovered in a shipment from a carrier, the entire lading will be examined immediately. The nearest office of the last line haul carrier shall be advised immediately by telephone if the office is located within the vicinity, and the carrier shall be requested to inspect the lading. This communication shall be confirmed by a TDR. The carrier's loss or damage inspection will be given a period of time not exceeding seven days (Saturdays, Sundays and holidays excluded). Distribution of the TDR shall be in accordance with the instructions detailed in [DTR 4500.9-R, Chapter 210](#).

2-8.8. REPORTING OF MINOR IN-TRANSIT DAMAGES. [DTR 4500.9-R](#) requires the use of SF 1200, GBL Correction Notice, ([figure 2-7](#)) for reporting minor in-transit damages. Only damages of at least \$50.00 are required to be reported via SF 1200. Damages of more than \$100.00 require completion of a DD Form 361.

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<b>GOVERNMENT BILL OF LADING CORRECTION NOTICE</b>		DATE NOTICE PREPARED
1. GBL NUMBER	2. DATE GBL WAS ISSUED	3. TOTAL WEIGHT SHOWN ON GBL
4. ORIGIN <i>(As shown in "Origin" block on GBL.)</i>		5. DESTINATION <i>(As shown in "Destination" block on GBL.)</i>
6. ROUTE <i>(Complete routing shown on GBL.)</i>		7. ISSUING OFFICE <i>(As shown on GBL under "For use of Issuing Office.")</i>
8. TO: <i>(Name and address of carrier/activity to which directed, including ZIP Code.)</i>		9. <i>Complete Items 9a, b, and c only when correction is made after transportation charges have been paid.</i>
		a. D.O. VOUCHER NUMBER
		b. D.O. VOUCHER DATE
		c. D.O. SYMBOL
10. FROM:		
11. BILL OF LADING NOW READS <i>(Show the information as it reads prior to correction.)</i>		12. CORRECT BILL OF LADING TO READ <i>(Show how the corrected information should read.)</i>
13. AUTHORITY FOR CORRECTION <i>(Tariff and item numbers; classification and item number; or other authority for making the change.)</i>		
14. REMARKS <i>(Pertinent information not otherwise provided on the form. If more space is required, use reverse side of this form.)</i>		
15. INFORMATION COPY TO <i>(Name and address, including ZIP Code.)</i>		16. SIGNATURE AND TITLE OF INITIATING OFFICIAL
		17. CARRIER REPRESENTATIVE'S SIGNATURE <i>(Require when notice is initiated by shipper and transportation charges are affected.)</i>

NSN 7540-01-140-5524

**STANDARD FORM 1200** (8-82)  
Prescribed by GSA, FPMR (41 CFR) 101-41.3

**FIGURE 2-7. Standard Form 1200, Government Bill of Lading (GBL) Correction Notice**

**2-8.9. SECURITY VIOLATIONS REPORTING.** In addition to the reports previously described, a complete report shall be made of any shortage of AA&E or violation of security that apparently occurred in transit. Copies of such reports shall be submitted to [NOSSA \(N5\)](#) with a copy forwarded to the [SDDC](#). These reports shall be transmitted by the fastest means consistent with appropriate security regulations. The reporting activity shall also promptly notify [NOSSA \(N5\)](#) and [SDDC](#) when a shortage is subsequently recovered, indicating the condition of the material as received. In the event of loss of classified material or AA&E, or an in-transit incident in which the driver felt an attempted hijack might have occurred, the local office of the [Naval Criminal Investigative Service \(NCIS\)](#) shall also be notified. The [NCIS](#) will notify the [Federal Bureau of Investigation \(FBI\)](#) when necessary.

**2-8.10. SUMMARY OF FORMS.** The forms most commonly used in the transportation and shipment of AA&E are listed in [table 2-1](#). This table lists the forms by number and title, briefly describes the use of each form, identifies the prescribing document, and indicates the appropriate reference in this manual.

**2-8.11. SCALE CERTIFICATION.** Scales used by shipping activities for determining the weight of shipments will be inspected and certified accurate by the appropriate state authority at least once every 12 months. Any necessary adjustments will be made promptly. A record of the dates of the last inspection and any adjustments made will be kept on file.

## **2-9. CONVEYANCE STORAGE TIME**

Motor vehicles, railcars, containerized cargo vans (MILVANS), and barges shall not be used as storage facilities for AA&E. All such conveyances containing AA&E shall be unloaded as promptly as practical, not to exceed 90 days from time of arrival on station until it is stored in magazines or until prestaged material is outloaded. In the event these conveyances cannot be unloaded immediately, the guidelines presented in [NAVSEA OP 5 Volume 1](#) and related quantity-distance criteria shall be observed. Marine Corps activities shall comply with the additional requirements of [MCO 8020.10](#). Authorization to extend the 90-day limitation for holding explosive laden conveyances to 120 days can be granted by the activity CO. A memorandum explaining the circumstances for the extension is required with a copy to [NOSSA \(N5\)](#). Authorization to exceed 120 days must be obtained as an event waiver in accordance with [NAVSEA OP 5 Volume 1](#). Reasons for the extension, actions to mitigate the problem and time period needed must be addressed.

## **2-10. INSPECTION OF RETROGRADE AMMUNITION CARGO**

The condition of all explosive cargo and its stowage shall be inspected prior to offloading from commercial, USNS, or USS ships at Navy activities, and all instances where deficiencies are found reported to the proper authority. If possible, noncommissioned ships should be inspected before such ships arrive on berth. The purpose of this inspection is to visually check for conditions which might require unloading a ship at an explosive anchorage rather than at a pier, or deferring the offloading until no other explosive operations are taking place. Discrepancies in the stowage of ammunition (incompatible stow; inadequate or improper blocking, bracing, etc.) or in the packing, palletizing or marking which require correction prior to transshipment are to be documented as discussed in [paragraph 2-10.1](#).

**2-10.1. DOCUMENTING PROCEDURES.** Using the format illustrated by [figure 2-8](#), all defective stowage, packaging, palletizing, etc., is to be photographed, and photographs provided to all recipients of the document. As many discrepancy forms as are necessary to completely describe the shipment deficiencies shall be executed. Complete copies of the form with attachment shall be distributed to [Naval Safety Center](#), Norfolk, VA, and other applicable addressees listed for copies as shown in [figure 2-8](#).

## **2-11. AVAILABILITY OF TRAINED PERSONNEL**

Activities responsible for preparation, packaging, and marking of A&E should review the volume of shipments to determine the number of personnel required to accomplish certification. This ensures that adequate numbers of qualified personnel are available to receive the necessary training. Refer to [paragraphs 1-5](#) through [1-6](#) for guidance. Appointment of certifying officials should be withheld pending satisfactory completion of training. Marine Corps activities may contact the Marine Corps Combat Development Command, Training and Education Command, Quantico, VA.

**Table 2-1. Forms Used for Transportation or Handling of AA&E**

Form Number	Title	Use	Prescribing Document	SW020-AG-SAF-010 Reference
DD Form 250	Material Inspection and Receiving Report	For shipment of material from vendor to government installation. Provides for recording or inspection results, establishment of accountability and initiation of payment to vendor.	DLAM 4440.2	Para. 5-7.5.20 Figure 5-3
DD Form 626	Motor Vehicle Inspection Report	For reporting results of inspection of motor vehicles used, or to be used, for transportation of AA&E over public roads.	DTR 4500.9-R	Para. 3-7.1 Figure 3-3
DD Form 2890	DOD Multimodal Dangerous Goods Declaration	For issuing emergency response instructions on all surface AA&E shipments (highway, rail and vessel).	DTR 4500.9-R	Para. 3-7.2 Figure 3-4
DD Form 2781	Container Packing Certificate or Vehicle Packing Declaration	Provides packing certification for AA&E shipments destined for water movements.	DTR 4500.9-R	Para. 3-7.6 Figure 3-7
DD Form 1348-1A	Issue Release/Receipt Document	a. Release document from distribution point to consignee (as a result of requisition). b. Release document for retrograde material or interstation movements. c. Receipt document for consignee.	NAVSUP Pub 409 MIL-STD-129 (series) NAVSUP Pub 485	Para. 5-7.5.20 Figure 5-4

Table 2-1. Forms Used for Transportation or Handling of AA&amp;E (Continued)

Form Number	Title	Use	Prescribing Document	SW020-AG-SAF-010 Reference
DD Form 1384	Transportation Control and Movement Document	a. To provide advance notice of AA&E shipment to consignee and transshipment points. b. Basic control document for movement of AA&E within DOD transportation system.	DTR 4500.9-R	Para. 3-7.7 Figure 3-8
DD Form 1387	Military Shipment Label	a. For all shipments to be moved in DOD air transport system. b. For other than air shipments when: Total area of transport data side of container is less than 150 sq. in., or when stenciling of container is impossible.	DTR 4500.9-R	Para. 3-5.3 Figure 3-2
DD Form 1387-2	Special Handling Data Certification	To indicate TPS required for air shipment.	DTR 4500.9-R NAVSUP Pub 505	Para. 3-7.5 Figure 3-6
N/A	Shipper's Declaration for Dangerous Goods Form	To describe services to be used for air shipments of AA&E, biologicals or classified material.	NAVSUP Pub 505	Para. 3-7.3 Figure 3-5
DD Form 1907	Signature and Tally Record	Provides signature proof for shipments of classified and sensitive materials.	DTR 4500.9-R	Para. 8-8 Figure 8-8
DD Form 361 (TDR)	Transportation Discrepancy Report	For reporting over, short, astray, loss of, or damage to AA&E shipments; improper loading, or blocking and bracing of the load; improper handling by carrier; improper placarding; and transportation discrepancies.	NAVSEAINST 8023.5 (series) DTR 4500.9-R Chapter 210	Para. 2-8.7 Figure 2-6

**Table 2-1. Forms Used for Transportation or Handling of AA&E (Continued)**

Form Number	Title	Use	Prescribing Document	SW020-AG-SAF-010 Reference
Standard Form 364 (SDR)	Supply Discrepancy Report	For reporting shipping type (item) discrepancies, packaging discrepancies and discrepancies in parcel post shipments.	SECNAVINST 4355.18 (series) NAVSUP Pub P-723, NAVSUP Pub P-724	Para. 2-8.6 Figure 2-5
Standard Form 1103	U.S. Government Bill of Lading	For international freight/cargo shipments only.	DTR 4500.9-R	Para. 5-7.5.20(a)(1) Figure 5-1
N/A	Commercial Bill of Lading	For any freight/cargo shipment, regardless of quantity, size, valuation and weight.	DTR 4500.9-R	Para. 5-7.5.20(a)(2) Figure 5-2
NAVSEA Form 8023/1	Agreement for On-Station Relocation of Commercial Trailers	For legal agreement between a common carrier and a NAVSEA activity to move the commercial trailer with Government owned tractors.	SW020-AG-SAF-010	Figure 2-4
NAVSEA Form 8023/2	Disability Cost Data Recap	Provides SDDC Routing Office disability cost data; i.e., double handling, dunnage, etc.	SW020-AG-SAF-010	Para. 2-4 Figure 2-1
NAVSEA Form 8023/3	Railroad Car Inspection Checklist	For reporting results of inspection of railcars used, or to be used, for transporting Class/Division 1.1 through 1.3 A&E, and the inspection of the lading of such cars.	SW023-AK-SAF-010	N/A

Table 2-1. Forms Used for Transportation or Handling of AA&amp;E (Continued)

Form Number	Title	Use	Prescribing Document	SW020-AG-SAF-010 Reference
NAVSUP Form 407	Seal Notice (for Railcars or Motor Vehicles)	NOTE: Used only for SRC I, II, or SECRET shipments. Applied to sealed motor vehicles or railcars to instruct carrier in procedure to follow if it becomes necessary to break seals.	SW020-AG-SAF-010	Para. 8-4.2 Figure 8-2
N/A	Railroad Car Certificate	Issued by carrier and attached to each railcar used to transport Class/Division 1.1 and 1.2 A&E. Carrier certifies that physical condition of car is satisfactory and that lading meets DOT requirements.	Bureau of Explosives Tariff/49 CFR 174.104 (f) (latest issue) SW023-AK-SAF-010	N/A

**NAVSEA SW020-AG-SAF-010 TENTH REVISION**

**From:** Commanding Officer, \_\_\_\_\_  
**To:** Distribution List

**Subj:** Retrograde Material; report of deficiency in packaging, palletizing, blocking and bracing

**Ref:** (a) SF 364, Report Number \_\_\_\_\_, with photographs  
 (b) DD 361 ( TDR ), File Reference No. \_\_\_\_\_ with photographs

1. Basic data. The (Name of Ship) \_\_\_\_\_ was offloaded at \_\_\_\_\_ during the period (Date) \_\_\_\_\_ to (Date) \_\_\_\_\_. The ship was onloaded as follows:

<u>Port</u>	<u>Sponsor</u>	<u>M/Ton</u>
Guam	Navy, Air Force	580
Yokosuka	Navy	274
		854

2. Costs

a. Fixed price rate charged for this shipment was \$ \_\_\_\_\_ per M/T in accordance with the existing Inter-Service Support Agreement. Actual cost for this normal offloading and shipping was \$ \_\_\_\_\_ per M/T.

b. Cost of additional handling, packaging, palletizing to render material safe for transshipment was:

<u>Port</u>	<u>Sponsor</u>	<u>M/Ton</u>	<u>Actual Costs</u>
Guam	Navy, Air Force	580	\$ 20, 880
Yokosuka	Navy	274	9, 864
			\$ 30, 744

3. Documentation. References (a) and (b) document reasons for additional cost. Documents show some of the factor(s) which are presented because of safety or large cost factors of which cargo sponsors and/or shipping agencies should be apprised in order to preclude future occurrences. (Costs indicated in references are estimated by Planning and Estimating personnel, and no attempt is made to reconcile to the costs indicated in paragraph 2.b. above.)

4. Recommendations for Correction

Dist. List \_\_\_\_\_ Copy to: \_\_\_\_\_

SAMPLE

**FIGURE 2-8. Inspection Report, Retrograde Material (Sheet 1 of 2)**

Instructions for preparation

1. Enclosures: complete SF 364 or DD361 in the quantities required for full coverage of significant reportable conditions.

2. Paragraph 2: include only if pertinent

3. Distribution

NOSSA (N5)

NAVSAFECEN (Codes 40 & 43)

COMSC (For commercial shipping only)

SDDC (for commercial shipping only)

COMDR COGARD (for commercial shipping only)

If appropriate: FLT and SERVFOR CDR

4. Copy to: CNO (OP 41)

N.B.: For other Service involvement, provide CNO a complete extra copy for forwarding to concerned service.

SAMPLE

FIGURE 2-8. Inspection Report, Retrograde Material (Sheet 2 of 2)

## CHAPTER 3

## PREPARATION OF HAZARDOUS MATERIALS FOR SHIPMENT

## 3-1. INTRODUCTION

This chapter discusses the requirements for packing, marking, and labeling of arms, ammunition, explosives and related hazardous materials (AA&E), and the documents required for transportation. Regulations and procedures governing the identification and marking of explosives shipments are provided. References are made to specific documents and publications required by transportation officers (TOs) when making explosives shipments.

## 3-2. PACKING

3-2.1. REGULATIONS, SPECIFICATIONS AND DRAWINGS. AA&E shall be packed for shipment in accordance with Department of the Navy (DON) or Department of the Army drawings and specifications, as applicable. When such drawings and specifications are not available, [Department of Transportation \(DOT\)](#) packing specifications and Coast Guard regulations shall be observed. Requests for packing instructions of items not covered by these regulations shall be obtained from the Director, [Naval Packaging, Handling, Storage and Transportation \(PHST\) Center, Code G13](#). In all cases, the minimum packing requirements of the DOT must be satisfied. Detailed packaging data are presented in [NAVSEA SW020-AC-SAF-010](#).

3-2.1.1. Wood Packaging Material. Due to international concerns about invasive species of pests, there are restrictions on the use of Wood Packaging Material (WPM), previously Solid Wood Packaging Material (SWPM), on international shipments. Go to website <https://www.tarp.navicp.navy.mil/wpm> (Common Access Card (CAC) required), for guidance on the use and inspection of WPM. WPM is defined as wood pallets (including hard wood), skids, load boards, pallet collars, wooden boxes, crates, reels, dunnage, and the solid wood frames or solid wood cleats of any plywood boxes. Packaging materials exempt from these requirements include those that have been manufactured from wood, such as corrugated fiberboard, plywood, particleboard, veneer and oriented strand board (OSB).

3-2.2. MIXED PACKAGING REQUIREMENTS. Articles having different hazard classifications as specified in DOT regulations shall not be packed together in the same container unless authorized by [49 CFR 173.61](#); assignment of a hazard classification for the container in such instances shall also be in accordance with [49 CFR 173.61](#). Approval for packing articles of different hazard classifications in the same container, if not clearly defined by [49 CFR 173.61](#), must be authorized by the [Naval Ordnance Safety and Security Activity \(NOSSA\) \(N8\)](#).

3-2.3. REPACKING EN ROUTE. Containers used for shipment of ammunition, explosives and related hazardous materials (A&E) shall meet the requirements of [49 CFR 173.60](#). Questions regarding the adequacy of a shipping container should be directed to the [Naval PHST Center](#). In cases of packaging damaged in accidents or incidents, contact the nearest military activity's Explosive Ordnance Disposal (EOD) group, who will take charge of the clean-up. It is important to note that when repackaging ordnance, several concerns must be addressed including: Hazards of Electromagnetic Radiation to Ordnance (HERO) susceptibility, fragility of the item, compatible materials, moisture protection, etc.

## NAVSEA SW020-AG-SAF-010 TENTH REVISION

Procedures to be followed when it is necessary to break Navy seals en route are prescribed in [paragraph 5-7.8.4](#) of this publication.

**3-2.4. CERTIFICATION.** Packages of A&E prepared for military air shipment via Airlift Mobility Command (AMC) or commercial carrier shall be certified in accordance with [NAVSUP Pub 505](#), or [49 CFR 173.7\(a\)](#), [173.24](#), [173.60](#) and [173.62](#) as applicable. A&E materials developed, manufactured, and packaged for the Navy pursuant to approved Navy/DOD specifications are listed in [NAVSEA SW020-AC-SAF-010](#). Therefore, unless otherwise excepted by existing DOT special permits, Certificates of Equivalency (COE's), or [chapter 9](#) of this manual; [NAVSEA SW020-AC-SAF-010](#) may be cited as an official authority to certify A&E packages for military air movements. Certifications citing [NAVSEA SW020-AC-SAF-010](#) as authority shall be performed on an exception basis only; the normal method of certification shall cite the appropriate paragraph of [NAVSUP Pub 505](#). Details regarding the use of the Shipper's Declaration for Dangerous Goods Form ([figure 3-4](#)) is addressed in [paragraph 3-7.3](#). Specific instructions for completion of the form is provided in [NAVSUP Pub 505](#).

### 3-3. MARKING

Federal regulations require that all containers used in shipping A&E be conspicuously marked, and that the equipment used to transport such shipments be properly placarded. No unit of transportation equipment loaded with A&E shall be released unless the containers are properly marked and the equipment distinctly placarded in accordance with the requirements of the DOT. A&E offered for shipment on a common carrier by motor vehicle, rail, air or water shall be marked in accordance with the applicable DOT regulations, Coast Guard regulations, Army or Navy specifications and drawings, and the latest issue of [MIL-STD-129](#).

**3-3.1. CONTAINER MARKING.** An external container marking is required by the DOT to identify the hazardous nature of the contents for transportation and emergency response purposes. Activities are responsible for marking all containers to be shipped. When preparing A&E for shipment, shippers shall inspect to ensure all A&E packaging contains the appropriate hazard marking and where required, the proper destination markings. An example of the correct position for marking and labels is shown in [figure 2-1](#) of [NAVSEA SW020-AC-SAF-010](#). [MIL-STD-129 \(series\)](#) provides the methods for standard marking of shipments by and for the Department of Defense (DOD). Where the DOT has issued a special permit governing the shipment of an item, or a DOD COE pertains, the number of the special permit or the Certification Control Number (CCN) of the COE shall also appear on the exterior of the container. The number shall be placed near the proper shipping name and any other required cautionary markings.

#### NOTE

Do not mark the security classification or Transportation Protective Service (TPS) on the exterior surface of packages containing AA&E.

**3-3.2. PALLETIZED UNIT LOADS.** A palletized unit approved by [NOSSA](#) may be considered as a single container for carload or truckload shipments, provided that the markings and labels on each outside package are visible or the unit load is marked and labeled in accordance with applicable DOT requirements. Less-than-carload and less-than-truckload shipments of palletized loads must be prepared for transportation in complete compliance with DOT regulations, with each container and unit load properly marked and labeled.

3-3.3. **CLASSIFIED MATERIAL.** Non AA&E shipments containing classified matter, or which become classified because of destination, intended use, etc., shall be marked in accordance with [DOD 5200.1-R](#) and [SECNAVINST 5510.36 \(series\)](#).

3-3.4. **INSPECTION.** Prior to release for shipment, all containers of A&E shall be visually inspected to ensure that they bear the proper [DOT](#) hazard classification, label(s) and other appropriate markings.

3-3.5. **EMPTY CONTAINERS.** Refer to [paragraph 5-6](#) for details on empty container certification.

### 3-4. COAST GUARD (CG) CLASS

Coast Guard classification markings were established by the former [46 CFR 146](#) to classify A&E for shipments by water. DOT Docket HM-204A dated January 29, 1991, revokes [46 CFR 146](#) in its entirety. As a result, the Classification, Handling and Stowage Chart on which the CG stowage classification system was based has been removed from the regulations. The stowage and transport of military explosives on vessels will be based on their UN class/divisions and compatibility groups rather than on their CG stowage classes.

### 3-5. LABELING

Each package or container used for the shipment of A&E by motor vehicle, railcar or air transport must be conspicuously labeled by the shipper as required by [49 CFR 172.400](#) or [NAVSUP Pub 505](#). (Shipping labels for shipments of A&E are illustrated and described in [appendix B](#).) The labels, prescribed in [49 CFR 172.411 through 172.450](#), must be applied to packages unless the item is exempt as noted on the shipping documents. Normally, exempt palletized ammunition/unit loads in carload or truckload lots which are to be shipped to foreign countries shall have all four sides of the pallet/unit load labeled. If not palletized, individual packages must be labeled, even if that ammunition is loaded so as to constitute a carload or truckload. All ammunition shipments to foreign countries shall be closely monitored to ensure that ammunition transshipped through ocean terminals meets the labeling requirements. Ammunition received without proper labeling must be labeled prior to loading aboard ship. Instances of improper labeling should be reported to shipping activities in accordance with documents such as [NAVSEAINST 8023.5 \(series\)](#). Continued instances of noncompliance will be reported to the [Military Surface Deployment and Distribution Command \(SDDC\)](#). Labels are not required for packages transported by the shipper as a private carrier, except for packages that are to be reshipped or transferred from one carrier to another.

#### NOTE

Labels on individual containers in a palletized unit load must be visible from the outside of the pallet.

3-5.1. **EMERGENCY RESPONSE LABEL.** Large containers and canisters used to ship large weapons (i.e. guided missiles, rockets, torpedoes, underwater mines, and bombs), for which flatbed truckloads are authorized by [MIL-STD-1320 \(Navy\)](#), must have a standard "stick-on" decal on both sides on diagonally opposite corners showing the name, location and emergency response telephone number of the shipper. The standard "stick-on" decal is depicted in the sample shown in [figure 3-1](#), and shall be reproduced locally. The lettering shall be black on a white background. Dimensions are as follows: decal - 3-inch high x 8½-inch wide; telephone number - 1<sup>1</sup>/<sub>16</sub> inches; letters - approximately ¼-inch (30 point).



**FIGURE 3-1. Sample Emergency Response Telephone Number Label**

3-5.2. EXEMPTIONS FROM USE OF LABELS. Labeling of A&E packages is required for all shipments with the following exception: packages of military explosives shipped by or on behalf of the **DOD** when in freight container loads, car loads, or truck load shipments if loaded and unloaded by the shipper or **DOD**, are exempt from labeling requirements. Additionally, unitized or palletized breakbulk shipments by cargo ship under charter to **DOD** can be shipped with a single label per unit load. Packages coming from production should possess labels in all cases, since the life cycle of ordnance involves many logistical shipments and ultimate and secondary destinations are not always known. When the logistics flow of the material is unknown, the general labeling requirements shall be met.

3-5.3. MILITARY SHIPMENT LABEL. The Military Shipment Label (DD Form 1387) prescribed in **DTR 4500.9-R** shall be used for all shipments to be moved in the **DOD** air transportation system and for those instances in which stenciling is not feasible. See [figure 3-2](#).

MILITARY SHIPMENT LABEL		Form Approved. OMB No. 0704-0188
1. TRANSPORTATION CONTROL NUMBER		2. POSTAGE DATA
3. FROM		4. TYPE SERVICE
5. SHIP TO/POE		6. TRANS PRIORITY
7. POD		8. PROJECT
9. ULTIMATE CONSIGNEE OR MARK FOR	10. WT. (This piece)	11. RDD
	12. CUBE (This piece)	13. CHARGES
	14. DATE SHIPPED	15. FMS CASE NUMBER
	16. PIECE NUMBER	
		17. TOTAL PIECES

DD FORM 1387, JUL 1999 PREVIOUS EDITION IS OBSOLETE.

**FIGURE 3-2. Military Shipment Label**  
[CLICK HERE TO REPRODUCE AND ANNOTATE THIS FORM](#)

### 3-6. WATERPROOF SHIPPING TAG

The DD 1387-1, Waterproof Shipping Tag is no longer in use.

### 3-7. DOCUMENTS AND SHIPPING PAPERS

Guidelines and general procedures for the movement of AA&E are contained in [DTR 4500.9-R](#). When shipments of AA&E are to be made by air transportation, reference should also be made to [NAVSUP Pub 505](#). The following documents and shipping papers are required, as applicable, for the shipment of AA&E within the [DOD](#) transportation system. Many of these forms can be found by accessing the DOD Forms Program at <http://www.dtic.mil>. Shippers shall retain shipping papers for two years; carriers shall retain shipping papers for one year.

- a. Bill of Lading (BL) ([paragraph 5-7.5.20](#), [figures 5-1](#) and [5-2](#))
- b. Motor Vehicle Inspection Report, DD Form 626 ([paragraph 3-7.1](#)).
- c. DOD Multimodal Dangerous Goods Declaration, DD Form 2890 ([paragraph 3-7.2](#)).
- d. Railroad Car Inspection Report, NAVSEA 8023/3 ([refer to NAVSEA SW023-AK-SAF-010](#)).
- e. Transportation Control and Movement Document, DD Form 1384 ([paragraph 3-7.7](#)).
- f. Shipper's Declaration for Dangerous Goods Form ([paragraph 3-7.3](#)).
- g. Container Packing Certificate or Vehicle Packing Declaration, DD Form 2781 ([paragraph 3-7.6](#)).

Refer to [paragraph 5-7.5.20](#) for information required on shipping papers.

**3-7.1. MOTOR VEHICLE INSPECTION REPORT, DD FORM 626.** Motor vehicles to be used for the transportation of placarded amounts of Hazard Class/Divisions 1.1 through 1.4 A&E and other regulated material, 2.3 (RIH) poisonous gases or 6.1 (PIH) poisonous materials over public highways will be inspected by the shipping activity using DD Form 626 ([figure 3-3](#)) and [NAVSEA SW020-AF-HBK-010](#), [49 CFR](#) and [DOD](#) safety regulations. Vehicles for which unsatisfactory conditions are noted on DD Form 626 shall not be accepted for loading. Vehicles will not be rejected, however, if deficiencies are corrected before loading. The distribution of completed DD Form 626 by the shipping activity shall be as follows:

- a. One copy will be kept by the installation or activity making the inspection with (for commercial vehicles only) the appropriate BL attached.
- b. On truckload and less-than-truckload shipments, the original will be given to the driver at origin and will be surrendered by the driver to the consignee.
- c. When a commercial vehicle tendered for loading is rejected or the driver of the vehicle is found to be unsatisfactory, a copy of the completed form will be sent to each of the following:
  - (1) Original to be maintained in the carrier's file at the shipping activity.

- (2) Nearest field office of the [DOT](#).
- (3) Home office of the carrier concerned.
- (4) [SDDC](#) Operations Center.

(5) Commanding Officer, [NOSSA \(N5\)](#), Indian Head, MD 20640-5151. Marine Corps activities shall provide a copy to MARCORSYSCOM (EES).

3-7.1.1. Emergency Response Information for Commercial Drivers. The identical emergency response information provided on DD Form 2890 shall be provided to commercial drivers on the front page of the BL. Drivers shall be instructed to have this information available at all times while in transit.

3-7.1.2. It is the duty of each shipping activity to be fully informed concerning highway regulations of the states through which their vehicles move, and to ensure compliance with such (see [appendix C](#)). TOs should be particularly aware of restrictions and regulations pertaining to the movement of AA&E over state highways and bridges. When questions arise, guidance may be obtained from [NOSSA \(N5\)](#). The TO must provide military drivers with detailed clearance instructions when dispatching them over controlled bridges or certain controlled highways. Advance clearance should be made and the driver provided with the name of the person granting the clearance.

3-7.2. DOD MULTIMODAL DANGEROUS GOODS DECLARATION, DD FORM 2890. DD Form DD Form 2890, [figure 3-4](#), is originated by the shipping activity and is used to provide emergency response instructions for all surface shipments of A&E (highway, rail or vessel). Note: This form replaces the DD Form 836 for this purpose, via [SDDC](#) and [United States Transportation Command \(USTRANSCOM\)](#) guidance. The information on this form is specifically applicable to the cargo being transported, and provides safety precautions and emergency measures to be exercised in the event of accident, incident, breakdown or fire. The appropriate North American Emergency Response Guidebook (ERG) guide(s) must be attached to the DD Form 2890. The origin government or military personnel transporting the load must keep the DD Form 2890 in the transport vehicle at all times while moving A&E, and must transfer this form to any successive transport personnel prior to delivery to the consignee. When a Security Escort Vehicle (SEV) is used, personnel performing this service will be provided with a duplicate copy of the DD Form 2890.

#### NOTE

When a wire twist is applied to the doors of a motor vehicle loaded with A&E, Block 19 "Additional Handling Information" of DD Form 2890 shall be annotated to read "Wire twist applied to doors. Do not use explosive-actuated, flame-or heat-producing cutters to remove."

**NAVSEA SW020-AG-SAF-010 TENTH REVISION**

[CLICK HERE TO REPRODUCE AND ANNOTATE THIS FORM](#)

<b>MOTOR VEHICLE INSPECTION (TRANSPORTING HAZARDOUS MATERIALS)</b>													
<i>(Read Instructions before completing this form.)</i>													
This form applies to all vehicles which must be marked or placarded in accordance with Title 49 CFR.						1. BILL OF LADING/TRANSPORTATION CONTROL NUMBER							
SECTION 1 - DOCUMENTATION				ORIGIN a.				DESTINATION b.					
2. CARRIER/GOVERNMENT ORGANIZATION													
3. DATE/TIME OF INSPECTION													
4. LOCATION OF INSPECTION													
5. OPERATOR(S) NAME(S)													
6. OPERATOR(S) LICENSE NUMBER(S)													
7. MEDICAL EXAMINER'S CERTIFICATE*													
8. <i>(X if satisfactory at origin)</i>								9. CVSA DECAL DISPLAYED ON COMMERCIAL EQUIPMENT*					
a. MILITARY HAZMAT ENDORSEMENT				d. ERG OR EQUIVALENT COMMERCIAL:		YES		NO					
b. VALID LEASE*				e. DRIVER'S VEHICLE INSPECTION REPORT*						a. TRUCK/TRACTOR			
c. ROUTE PLAN				f. COPY OF 49 CFR PART 397						b. TRAILER			
SECTION II - MECHANICAL INSPECTION <i>All items shall be checked on empty equipment prior to loading. Items with an asterisk shall be checked on all incoming loaded equipment.</i>													
10. TYPE OF VEHICLE(S)						11. VEHICLE NUMBER(S)							
12. PART INSPECTED <i>(X as applicable)</i>		ORIGIN (1)		DESTINATION (2)				ORIGIN (1)		DESTINATION (2)		COMMENTS (3)	
		SAT	UNSAT	SAT	UNSAT			SAT	UNSAT	SAT	UNSAT		
a. SPARE ELECTRICAL FUSES						k. EXHAUST SYSTEM							
b. HORN OPERATIVE						l. BRAKE SYSTEM*							
c. STEERING SYSTEM						m. SUSPENSION							
d. WINDSHIELD/WIPERS						n. COUPLING DEVICES							
e. MIRRORS						o. CARGO SPACE							
f. WARNING EQUIPMENT						p. LANDING GEAR*							
g. FIRE EXTINGUISHER*						q. TIRES, WHEELS, RIMS							
h. ELECTRICAL WIRING						r. TAILGATE/DOORS*							
i. LIGHTS AND REFLECTORS						s. TARPULIN*							
j. FUEL SYSTEM*						t. OTHER <i>(Specify)</i>							
13. INSPECTION RESULTS <i>(X one)</i> ACCEPTED						REJECTED							
<i>(If rejected give reason under "Remarks". Equipment will be approved if deficiencies are corrected prior to loading.)</i>													
14. SATELLITE MOTOR SURVEILLANCE SYSTEM: <i>(X one)</i> ACCEPTED						REJECTED							
15. REMARKS													
16. INSPECTOR SIGNATURE <i>(Origin)</i>						17. INSPECTOR SIGNATURE <i>(Destination)</i>							
SECTION III - POST LOADING INSPECTION This section applies to Commercial and Government/Military vehicles. All items will be checked prior to release of loaded equipment and shall be checked on all incoming loaded equipment.													
								ORIGIN (1)		DESTINATION (2)		COMMENTS (3)	
								SAT	UNSAT	SAT	UNSAT		
18. LOADED IAW APPLICABLE SEGREGATION/COMPATIBILITY TABLE OF 49 CFR													
19. LOAD PROPERLY SECURED TO PREVENT MOVEMENT													
20. SEALS APPLIED TO CLOSED VEHICLE; TARPULIN APPLIED ON OPEN EQUIPMENT													
21. PROPER PLACARDS APPLIED													
22. SHIPPING PAPERS/DD FORM 836 FOR GOVERNMENT VEHICLE SHIPMENTS													
23. COPY OF DD FORM 626 FOR DRIVER													
24. SHIPPED UNDER DOT SPECIAL PERMIT 868													
25. INSPECTOR SIGNATURE <i>(Origin)</i>						26. DRIVER(S) SIGNATURE <i>(Origin)</i>							
27. INSPECTOR SIGNATURE <i>(Destination)</i>						28. DRIVER(S) SIGNATURE <i>(Destination)</i>							

**FIGURE 3-3. Motor Vehicle Inspection Report (Transporting Hazardous Materials), DD Form 626 (Sheet 1 of 3)**

[CLICK HERE TO REPRODUCE AND ANNOTATE THIS FORM](#)

**INSTRUCTIONS**

**SECTION I - DOCUMENTATION**

**General Instructions.**

All items (2 through 9) will be checked at origin prior to loading. Items with an asterisk (\*) apply to commercial operators or equipment only. Only Items 2 through 7 are required to be checked at destination.

Items 1 through 5. Self explanatory.

Item 6. Enter operator's Commercial Driver's License (CDL) number or Military OF-346 License Number. CDL and OF-346 must have the HAZMAT and other appropriate endorsements IAW 49 CFR 383.

Item 7. \*Enter the expiration date listed on the Medical Examiner's Certificate.

Item 8.a. APPLIES TO MILITARY OPERATORS ONLY. Military Hazardous Materials Certification. In accordance with applicable service regulations, ensure operator has been certified to transport hazardous materials.

b. \*Valid Lease. Shipper will ensure a copy of the appropriate contract or lease is carried in all leased vehicles and is available for inspection. (49 CFR 376.12 and 376.11(c)(2)).

c. Route Plan. Prior to loading any Hazard Class/Division 1.1, 1.2, or 1.3 (Explosives) for shipment, ensure that the operator possesses a written route plan in accordance with 49 CFR Part 397. Route Plan requirements for Hazard Class 7 (Radioactive) materials are found in 49 CFR 397.101.

d. Emergency Response Guidebook (ERG) or Equivalent. Commercial operators must be in possession of an ERG or equivalent document. Shipper will provide applicable ERG page(s) to military operators.

e. \*Driver's Vehicle Inspection Report. Review the operator's Vehicle Inspection Report. Ensure that there are no defects listed on the report that would affect the safe operation of the vehicle.

f. Copy of 49 CFR Part 397. Operators are required by regulation to have in their possession a copy of 49 CFR Part 397 (Transportation of Hazardous Materials Driving and Parking Rules). If military operators do not possess this document, shipper will provide a copy to operator.

Item 9. \*Commercial Vehicle Safety Alliance (CVSA) Decal. Check to see if equipment has a current CVSA decal and mark applicable box. Vehicles without CVSA, check documentation of the last vehicle periodic inspection and perform DD Form 626 inspection.

**SECTION II - MECHANICAL INSPECTION**

**General Instructions.**

All items (12.a. through 12.t.) will be checked on all incoming empty equipment prior to loading. All UNSATISFACTORY conditions must be corrected prior to loading. Items with an asterisk (\*) shall be checked on all incoming loaded equipment. Unsatisfactory conditions that would affect the safe off-loading of the equipment must be corrected prior to unloading.

**SECTION II (Continued)**

Item 12.a. Spare Electrical Fuses. Check to ensure that at least one spare fuse for each type of installed fuse is carried on the vehicle as a spare or vehicle is equipped with an overload protection device (circuit breaker). (49 CFR 393.95)

b. Horn Operative. Ensure that horn is securely mounted and of sufficient volume to serve purpose. (49 CFR 393.81)

c. Steering System. The steering wheel shall be secure and must not have any spokes cracked through or missing. The steering column must be securely fastened. Universal joints shall not be worn, faulty or repaired by welding. The steering gear box shall not have loose or missing mounting bolts or cracks in the gear box mounting brackets. The pitman arm on the steering gear output shaft shall not be loose. Steering wheel shall turn freely through the limit of travel in both directions. All components of a power steering system must be in operating condition. No parts shall be loose or broken. Belts shall not be frayed, cracked or slipping. The power steering system shall not be leaking. (49 CFR 396 Appendix G)

d. Windshield/Wipers. Inspect to ensure that windshield is free from breaks, cracks or defects that would make operation of the vehicle unsafe; that the view of the driver is not obscured and that the windshield wipers are operational and wiper blades are in serviceable condition. Defroster must be operative when conditions require. (49 CFR 393.60, 393.78 and 393.79)

e. Mirrors. Every vehicle must be equipped with two rear vision mirrors located so as to reflect to the driver a view of the highway to the rear along both sides of the vehicle. Mirrors shall not be cracked or dirty. (49 CFR 393.80)

f. Warning Equipment. Equipment must include three bidirectional emergency reflective triangles that conform to the requirements of FMVSS No. 125. FLAME PRODUCING DEVICES ARE PROHIBITED. (49 CFR 393.95)

g. Fire Extinguisher. Military vehicles must be equipped with two serviceable fire extinguishers with an Underwriters Laboratories rating of 10 BC or more. (Commercial motor vehicles must be equipped with one serviceable 10 BC Fire Extinguisher). Fire extinguisher(s) must be located so that it is readily accessible for use and securely mounted on the vehicle. The fire extinguisher must be designed, constructed and maintained to permit visual determination of whether it is fully charged. (49 CFR 393.95)

h. Electrical Wiring: Electrical wiring must be clean and properly secured. Insulation must not be frayed, cracked or otherwise in poor condition. There shall be no uninsulated wires, improper splices or connections. Wires and electrical fixtures inside the cargo area must be protected from the lading. (49 CFR 393.28, 393.32, 393.33)

**FIGURE 3-3. Motor Vehicle Inspection Report (Transporting Hazardous Materials), DD Form 626 (Sheet 2 of 3)**

**INSTRUCTIONS**

**SECTION II (Continued)**

i. Lights/Reflectors. (Head, tail, turn signal, brake, clearance, marker and identification lights, Emergency Flashers). Inspect to see that all lighting devices and reflectors required are operable, of proper color and properly mounted. Ensure that lights and reflectors are not obscured by dirt or grease or have broken lenses. High/Low beam switch must be operative. Emergency Flashers must be operative on both the front and rear of vehicle. (49 CFR 393.24, 25, and 26)

j. Fuel System. Inspect fuel tank and lines to ensure that they are in serviceable condition, free from leaks, or evidence of leakage and securely mounted. Ensure that fuel tank filler cap is not missing. Examine cap for defective gasket or plugged vent. Inspect filler necks to see that they are in completely serviceable condition and not leaking at joints. (49 CFR 393.83)

k. Exhaust System. Exhaust system shall discharge to the atmosphere at a location to the rear of the cab or if the exhaust projects above the cab, at a location near the rear of the cab. Exhaust system shall not be leaking at a point forward of or directly below the driver compartment. No part of the exhaust system shall be located where it will burn, char or damage electrical wiring, fuel system or any other part of the vehicle. No part of the exhaust system shall be temporarily repaired with wrap or patches. (49 CFR 393.83)

l. Brake System (to include hand brakes, parking brakes and Low Air Warning devices). Check to ensure that brakes are operational and properly adjusted. Check for audible air leaks around air brake components and air lines. Check for fluid leaks, cracked or damaged lines in hydraulic brake systems. Ensure that parking brake is operational and properly adjusted. Low Air Warning devices must be operative. (49 CFR 393.40, 41, 42, 43, 44, 45, 47, 48, 49, 50, 51, 52, 53, and 55)

m. Suspension. Inspect for indications of misaligned, shifted or cracked springs, loosened shackles, missing bolts, spring hangers unsecured at frame and cracked or loose U-bolts. Inspect for any unsecured axle positioning parts, and sign of axle misalignment, broken torsion bar springs (if so equipped). (49 CFR 393.207)

n. Coupling Devices (Inspect without uncoupling). Fifth Wheels: Inspect for unsecured mounting to frame or any missing or damaged parts. Inspect for any visible space between upper and lower fifth wheel plates. Ensure that the locking jaws are around the shank and not the head of the kingpin. Ensure that the release lever is seated properly and safety latch is engaged. Pintle Hook, Drawbar, Towbar Eye and Tongue and Safety Devices: Inspect for unsecured mounting, cracks, missing or ineffective fasteners (welded repairs to pintle hook is prohibited). Ensure safety devices (chains, hooks, cables) are in serviceable condition and properly attached. (49 CFR 393.70 and 71)

o. Cargo Space. Inspect to ensure that cargo space is clean and free from exposed bolts, nuts, screws, nails or inwardly projecting parts that could damage the lading. Check floor to ensure it is tight and free from holes. Floor shall not be permeated with oil or other substances. (49 CFR 393.84)

p. Landing Gear. Inspect to ensure that landing gear and assembly are in serviceable condition, correctly assembled, adequately lubricated and properly mounted.

**SECTION II (Continued)**

q. Tires, Wheels and Rims: Inspect to ensure that tires are properly inflated. Flat or leaking tires are unacceptable. Inspect tires for cuts, bruises, breaks and blisters. Tires with cuts that extend into the cord body are unacceptable. Thread depth shall not be less than: 4/32 inches for tires on a steering axle of a power unit, and 2/32 inches for all other tires. Mixing bias and radial on the steering axle is prohibited. Inspect wheels and rims for cracks, unseated locking rings, broken, loose, damaged or missing lug nuts or elongated stud holes. (49 CFR 393.75)

r. Tailgate/Doors. Inspect to see that all hinges are tight in body. Check for broken latches and safety chains. Doors must close securely. (49 CFR 177.835(h))

s. Tarpaulin. If shipment is made on open equipment, ensure that lading is properly covered with fire and water resistant tarpaulin. (49 CFR 177.835(h))

t. Other Unsatisfactory Condition. Note any other condition which would prohibit the vehicle from being loaded with hazardous materials.

Item 14. For AA&E and other shipments requiring satellite surveillance, ensure that the Satellite Motor Surveillance System is operable. The DTTS Message Display Unit, when operative, will display the signal "DTTS ON". The munitions carrier driver, when practical, will position the DTTS message display unit in a manner that allows the shipping inspector or other designated shipping personnel to observe the "DTTS ON" message without climbing aboard the cab of the motor vehicle.

**SECTION III - POST LOADING INSPECTION**

**General Instructions.**

All items will be checked prior to the release of loaded equipment. Shipment will not be released until deficiencies are corrected. All items will be checked on incoming loaded equipment. Deficiencies will be reported in accordance with applicable service regulations.

Item 18. Check to ensure shipment is loaded in accordance with 49 CFR Part 177.848 and the applicable Segregation or Compatibility Table of 49 CFR 177.848.

Item 19. Check to ensure the load is secured from movement in accordance with applicable service outload drawings.

Item 20. Check to ensure seal(s) have been applied to closed equipment; fire and water resistant tarpaulin applied on open equipment.

Item 21. Check to ensure each transport vehicle has been properly placarded in accordance with 49 CFR 172.504.

Item 22. Check to ensure operator has been provided shipping papers that comply with 49 CFR 172.201 and 202. For shipments transported by Government vehicle, shipping paper will be DD Form 836.

Item 23. Ensure operator(s) sign DD Form 626, are given a copy and understand the hazards associated with the shipment.

Item 24. Applies to Commercial Shipments Only. If shipment is made under DOT Special Permit 868, ensure that shipping papers are properly annotated and copy of Special Permit 868 is with shipping papers.

**FIGURE 3-3. Motor Vehicle Inspection Report (Transporting Hazardous Materials), DD Form 626 (Sheet 3 of 3)**

3-7.3. SHIPPER'S DECLARATION FOR DANGEROUS GOODS FORM. The Shipper's Declaration for Dangerous Goods Form ([figure 3-5](#)) is used on air shipments of dangerous A&E, biologicals, classified material, or any other material requiring special handling as determined by the shipping activity. This form, which replaces DD Form 1387-2 for certification purposes, is affixed to the other applicable shipping documents. It describes services to be used. It shall be completed per [NAVSUP Pub 505](#) and [DTR 4500.9-R](#).

3-7.4. BRIEFING FOR AIRCRAFT COMMANDERS (NOTIFICATION OF PILOT IN COMMAND). Whenever articles subject to regulation by [NAVSUP Pub 505](#) are carried on military aircraft, the air terminal or base operations shall provide the aircraft commander notification and briefing of hazardous items aboard the aircraft. In the absence of an established air terminal or base operations, the activity responsible for delivering the cargo to the aircraft must provide notification of hazardous items.

3-7.4.1. The appropriate briefing agency must advise the aircraft commander (pilot in command) of the following information:

- a. The proper shipping name and hazard classification of each hazardous item prescribed in this regulation that is aboard the aircraft.
- b. The quantity in terms of weight or volume.
- c. The location of the hazardous item in the aircraft.
- d. Net Explosive Weight (NEW) of Class/Division 1.1 through 1.3 A&E.
- e. Requirement for escorts, couriers and protective equipment.
- f. Passengers permitted or not permitted.
- g. Special information for use during emergency.

# NAVSEA SW020-AG-SAF-010 TENTH REVISION

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DOD MULTIMODAL DANGEROUS GOODS DECLARATION				
This form may be used as a dangerous goods declaration as it meets the requirements of SOLAS 74, Chapter VII, regulation 54; MARPOL 79/78, Annex III, Regulation 4.				
1. SHIPPER/CONSIGNOR/SENDER		2. TRANSPORT DOCUMENT NUMBER	3. PAGE 1 OF PAGES	4. SHIPPER'S REFERENCE (TCN)
5. FREIGHT FORWARDER'S REFERENCE	6. CONSIGNEE		7. CARRIER <i>(To be completed by the carrier)</i>	
<b>24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS:</b>				
DOD NON-EXPLOSIVE HAZMAT: 1-800-851-8061 AT SEA: COLLECT: 1-804-279-3131	DOD HAZ CLASS 1 (EXPLOSIVES) ONLY: COLLECT: (703) 697-0218/0219 or DSN: 227-0218 (Watch Officer)	CHEMICAL/BIOLOGICAL WARFARE MATERIAL: DUTY HOURS: DSN: 584-3044, 584-7211, 584-6455 Comm: (410) 436-3044, (410) 436-7211, (410) 436-6455 AFTER DUTY HOURS: DSN: 584-2148 Comm: (410) 436-2148 - Ask for TEU S3	DOD SECURE HOLDING: Non-AA&E: 1-800-524-0331 AA&E: 1-800-826-0794 OIL/CHEMICAL SPILLS: NRC & TERRORIST HOTLINE: 1-800-424-8802 AT SEA: COLLECT: (202) 267-2675	DOD RADIOACTIVE MATERIALS: COLLECT ARMY: (703) 697-0218 USAF: (202) 767-4011 DLA: 1-800-851-8061 AT SEA: COLLECT: 1-804-279-3131 USN/MC: Use 24-hour emergency response number provided by activity.
8. THIS SHIPMENT IS WITHIN THE LIMITATIONS PRESCRIBED FOR: <i>(X as applicable)</i>			9. CONTAINER PACKING CERTIFICATE OR VEHICLE PACKING DECLARATION, DD FORM 2781, IS ATTACHED <i>(X if applicable)</i>	
<input type="checkbox"/> MILITARY VESSEL	<input type="checkbox"/> COMMERCIAL VESSEL	<input type="checkbox"/> HIGHWAY/RAIL		
10. VOYAGE DOCUMENT NUMBER AND SAILING DATE <i>(To be completed by the carrier)</i>		11. PORT/PLACE OF LOADING		
12. PORT/PLACE OF DISCHARGE		13. DESTINATION		
14. SHIPPING MARKS	DESCRIPTION OF GOODS <i>(UN No., PSN, HC, SHC, PG, number and kind of package, and additional information as required by regulation)</i>		NET MASS/QTY <i>(kg/l)</i>	GROSS MASS <i>(kg)</i>
15. CONTAINER IDENTIFICATION NO./VEHICLE REGISTRATION NO.	16. SEAL NUMBER(S)	17. CONTAINER/VEHICLE AND TYPE		18. TARE MASS <i>(kg)</i>
19. ADDITIONAL HANDLING INFORMATION				
20. RECEIVING ORGANIZATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition, unless stated hereon:				
a. RECEIVING ORGANIZATION REMARKS				
b. HAULER'S NAME	c. VEHICLE REGISTRATION NO.	d. SIGNATURE AND DATE	e. DRIVER'S SIGNATURE	
21. SHIPPER PREPARING THIS FORM				
SHIPPER'S DECLARATION. 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 labeled/placarded and are in all respects in proper condition for transport according to the international and national government regulations.				
a. NAME OF COMPANY/MILITARY UNIT		b. NAME/STATUS OF DECLARANT/CERTIFIER		
c. PLACE AND DATE		d. SIGNATURE OF DECLARANT/CERTIFIER		

DD FORM 2890, DEC 2007

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**FIGURE 3-4. DOD Multimodal Dangerous Goods Declaration, DD Form 2890**

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SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least two copies to the airline.)

Shipper					Air Waybill No.		
					Page of Pages		
					Shipper's Reference Number <i>(optional)</i>		
Consignee							
<i>Two completed and signed copies of this Declaration must be handed to the operator</i>					<b>WARNING</b>  Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent.		
<b>TRANSPORT DETAILS</b>							
This shipment is within the limitations prescribed for <i>(delete non-applicable)</i>		Airport of Departure					
<input type="checkbox"/> PASSENGER AND CARGO AIRCRAFT <input type="checkbox"/> CARGO AIRCRAFT ONLY							
Airport of Destination					Shipment type <i>(delete non-applicable)</i>		
					<input type="checkbox"/> NON-RADIOACTIVE <input type="checkbox"/> RADIOACTIVE		
<b>NATURE AND QUANTITY OF DANGEROUS GOODS</b>							
Dangerous Goods Identification					Quantity and type of packing	Packing Inst.	Authorization
Proper Shipping Name	Class or Division	UN or ID No.	Packing Group	Subsidiary Risk			
Additional Handling Information							
This shipment prepared according to: <input type="checkbox"/> 49CFR <input type="checkbox"/> IATA Regulations <input type="checkbox"/> ICAO Regulations							
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.					Name/Title of Signatory		
					Place and Date		
					Signature <i>(see warning above)</i>		

SD-1

DG SUPPLIES, INC. P.O. BOX 400 DAYTON, N.J. 08810 1 800 347-7879

FIGURE 3-5. Shipper's Declaration for Dangerous Goods Form

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3-7.4.2. The hazardous items information required by [paragraph 3-7.4.1](#) must be summarized in the air cargo manifest by legible means. The Shipper's Declaration for Dangerous Goods Form shall be attached to the manifest. This information must be kept current and must be provided to the aircraft commander. Retain a copy at each air terminal or briefing station. The preceding information must be updated when there is a change in hazardous cargo manifesting. A new manifest must be completed by the activity making the change and must consider all cargo on the aircraft.

3-7.4.3. After receiving the briefing, the aircraft commander shall sign the air terminal file copy of the cargo manifest as evidence of being properly and completely briefed. The signed copy of the manifest with the Shipper's Declaration for Dangerous Goods Form must be returned to the terminal records function for filing. When a crew change occurs, the oncoming aircraft commander shall receive a briefing from the air terminal or base operations or the outgoing aircraft commander. The oncoming aircraft commander shall sign the manifest and return a copy to the appropriate base recordkeeping activity.

3-7.4.4. The manifest reflecting the certification for hazardous cargo briefing shall be retained in accordance with current files, maintenance, and disposition instructions.

3-7.5. SPECIAL HANDLING DATA CERTIFICATION, DD FORM 1387-2. DD Form 1387-2 ([figure 3-6](#)) is used on air shipments of classified material to request a Transportation Protective Service (i.e. DOD Constant Surveillance Service, Satellite Motor Surveillance, Dual Driving, etc.).

3-7.6. CONTAINER PACKING CERTIFICATE OR VEHICLE PACKING DECLARATION. The International Maritime Dangerous Goods (IMDG) code provisions require packing certification for water movements. The shipping activity may use DD Form 2781 ([figure 3-7](#)) to accompany the shipping papers for movements of A&E via commercial conveyances destined for water movement. However, it is permissible to affix a certification statement on the shipping paper or separate sheet instead of using this form. The statement should read: "This is to certify that the cargo inside this unit (vehicle or container no.\_\_\_\_) has been properly packed and secured, and that all applicable transport requirements have been met in accordance with the provisions of 12.3.7 (container) or 17.7.7 (vehicle), as applicable, of the general introduction to the [International Maritime Dangerous Goods \(IMDG\) Code](#)." The form shall be originated, signed and dated by the individual responsible for packing the container or vehicle.

3-7.7. TRANSPORTATION CONTROL AND MOVEMENT DOCUMENT (TCMD), DD FORM 1384. DD Form 1384 ([figure 3-8](#)) is the basic document for the movement of AA&E within the DOD transportation system. This form identifies the material in the shipment and indicates necessary transportation data; it is used to obtain clearance and provide advance notice to intermediate transshipment points. When a shipment of AA&E is made by commercial carrier to a military transshipment point, the shipment of AA&E may be documented on both a BL and a TCMD. The BL is for the carrier's use as a movement and revenue document to the transshipment point, while the TCMD becomes the basic movement and control document. For detailed information on the use and distribution of DD Form 1384, refer to [DTR 4500.9-R](#).

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**SPECIAL HANDLING DATA/CERTIFICATION**

1. ITEM NOMENCLATURE	2. NET QUANTITY PER PACKAGE	3. TRANSPORTATION CONTROL NO.
	4. CONSIGNMENT GROSS WEIGHT	5. DESTINATION
6. SUPPLEMENTAL INFORMATION		
This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and in proper condition for transportation according to the applicable regulations of the Dept of Transportation. <b>THIS IS A U.S. DEPARTMENT OF DEFENSE SHIPMENT!</b> <i>(Complete applicable blocks below)</i>		
7. DTR REFERENCE		
8. HANDLING INSTRUCTIONS		
9. ADDRESS OF SHIPPER	10. TYPED NAME, SIGNATURE AND DATE	

DD FORM 1387-2, NOV 2004

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Form Approved/OMB No. 0704-0188

**FIGURE 3-6. Special Handling Data Certification, DD Form 1387-2.**

# NAVSEA SW020-AG-SAF-010 TENTH REVISION

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CONTAINER PACKING CERTIFICATE OR VEHICLE PACKING DECLARATION			
Person responsible for packing the cargo transport unit (vehicle/container) will complete the checklist. Cross out "vehicle" or "container", as applicable. After completion, sign the certificate.			
1. It is declared that the undersigned has visually inspected (Container/Vehicle) Number: _____ (cross out whichever item does <b>NOT</b> apply) and it has been loaded/packed in accordance with the provisions of 5.4.2.1 (IMDGC) and CFR 49 and that (indicate "N/A" for all items that do <b>NOT</b> apply):			
	a. The cargo transport unit (container/vehicle) was clean, dry, and apparently fit to receive the goods.		
	b. If the consignment includes goods of class 1, other than 1.4, the cargo transport unit (container/vehicle) is structurally serviceable in conformity with 7.4.6 (IMDGC).		
	c. Goods that should be segregated, have not been packed together onto or in the cargo transport unit (container/ vehicle) (unless approved by the competent authority concerned in accordance with 7.2.2.3 (IMDGC)).		
	d. All packages have been externally inspected for damage, leakage, or sifting, and only sound packages have been packed.		
	e. Drums have been stowed in an upright position, unless otherwise authorized by the competent authority.		
	f. All packages have been properly packed onto or in the cargo transport unit (container/vehicle) and secured.		
	g. When dangerous goods are transported in bulk packagings, the cargo has been evenly distributed.		
	h. The cargo transport unit (container/vehicle) and packagings therein are properly marked, labeled, and placarded.		
	i. When solid carbon dioxide (CO <sup>2</sup> - dry ice) is used for cooling purposes, the cargo transport unit (container/vehicle) is externally marked or labeled in a conspicuous place, such as the door, and with the words: " <b>DANGEROUS CO<sup>2</sup> - GAS (DRY ICE) INSIDE. VENTILATE THOROUGHLY BEFORE ENTERING</b> ".		
	j. The dangerous goods transport document required in 5.4.1 (IMDGC) has been received for each dangerous goods consignment packed in the cargo transport unit (container/vehicle).		
	k. If container is stowed with a vehicle and/or mechanical equipment with fuel in the tank, a warning label has been affixed to access doors legibly reading: " <b>WARNING - MAY CONTAIN EXPLOSIVE MIXTURES WITH AIR - KEEP IGNITION SOURCES AWAY WHEN OPENING</b> " in accordance with §176.905(a)(5), 49 CFR.		
<b>2. PERSON RESPONSIBLE FOR PACKING</b>			
a. PRINTED NAME ( <i>Last, First, Middle Initial</i> )	b. RANK/GRADE	c. TITLE	d. ORGANIZATION
e. PLACE PACKED	f. SIGNATURE		g. DATE (YYYYMMDD)

DD FORM 2781, JUN 2005

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**FIGURE 3-7. Container Packing Certificate or Vehicle Packing Declaration, DD Form 2781.**



### 3-8. WEIGHT CERTIFICATION FOR INTERMODAL CONTAINER SHIPMENTS

The Intermodal Safe Container Transportation Amendment Act of 1996 became effective on 7 April 1997. Highlights of this act are as follows:

a. Jurisdictional of weight threshold was raised from 10,000 to 29,000 pounds. This means if an intermodal container whose actual gross cargo weight is less than 29,000 pounds, the shipper is not required to present an intermodal weight certificate to the motor carrier.

b. Allowed BL's or other shipping documents, such as the DD Form 1384 to be used as the intermodal weight certificate if these papers contain the following data:

- (1) Actual gross cargo weight (includes packing material, pallets and dunnage).
- (2) Reasonable description of contents of container or trailers. Use of freight of all kinds was prohibited after 31 December 2000 if the weight of any one commodity is 20 percent or more of the total cargo weight:
- (3) Identification of certifying party.
- (4) Container or trailer number.
- (5) Date of certification, or transfer of data to another document for forwarding to the next carrier.

c. If a BL or other shipping document is not used as the intermodal certification, then the document must be conspicuously marked: "INTERMODAL CERTIFICATION."

d. Any person who inaccurately converts a paper certificate into an electronic format or fails to forward the certification is indirectly liable for any fine or other costs incurred by the motor carrier.

e. A copy of the certification is not required to accompany the loaded container or trailer during intermodal transportation.

f. Allows motor carriers to place liens against container contents equal to the fine (including costs) or bond. The lien remains in effect until the motor carrier is reimbursed by the responsible party. If the responsible party fails to reimburse the carrier in a reasonable time; the motor carrier may sell the cargo to recover his costs. This penalty applies to DOD shipments. Consequently, shippers must be vigilant in presenting accurate shipping documents to motor carriers.

### 3-9. ANNOTATION OF LOADING DOCUMENTS

The applicable MIL-STD slash sheet or approved NAVSEA drawing used in loading conveyances with AA&E shall be annotated on shipping documents (BL, 1348-1A, etc.) in accordance with [paragraph 5-7.5.20](#).

**3-10. BILLING OF PALLETS AND ADAPTERS**

AA&E are unitized to provide easier and safer handling and greater efficiency and economy in storing and transporting. The majority of Navy and Marine Corps munitions are boxed in individual containers which permit easier palletizing. Certain munitions which are not boxed; i.e., bombs, projectiles, rockets, etc. require special adapters to permit the items to be held together as a unit load. Allowances for the free shipment of adapters and pallets are as follows.

**3-10.1. PALLETS/SKIDS.** Rail and motor carrier's tariffs or Interstate Commerce Commission Section 22 quotations usually permit allowance for the free shipment of pallets and for certain amounts of dunnage. The pallet weight allowance is for the pallet only, unless otherwise specified, and does not include banding or other devices; i.e., adapters, spacers, frames, etc. as shown in [figure 3-9](#). Skids and platforms are usually considered in the same category as pallets, for weight allowances.

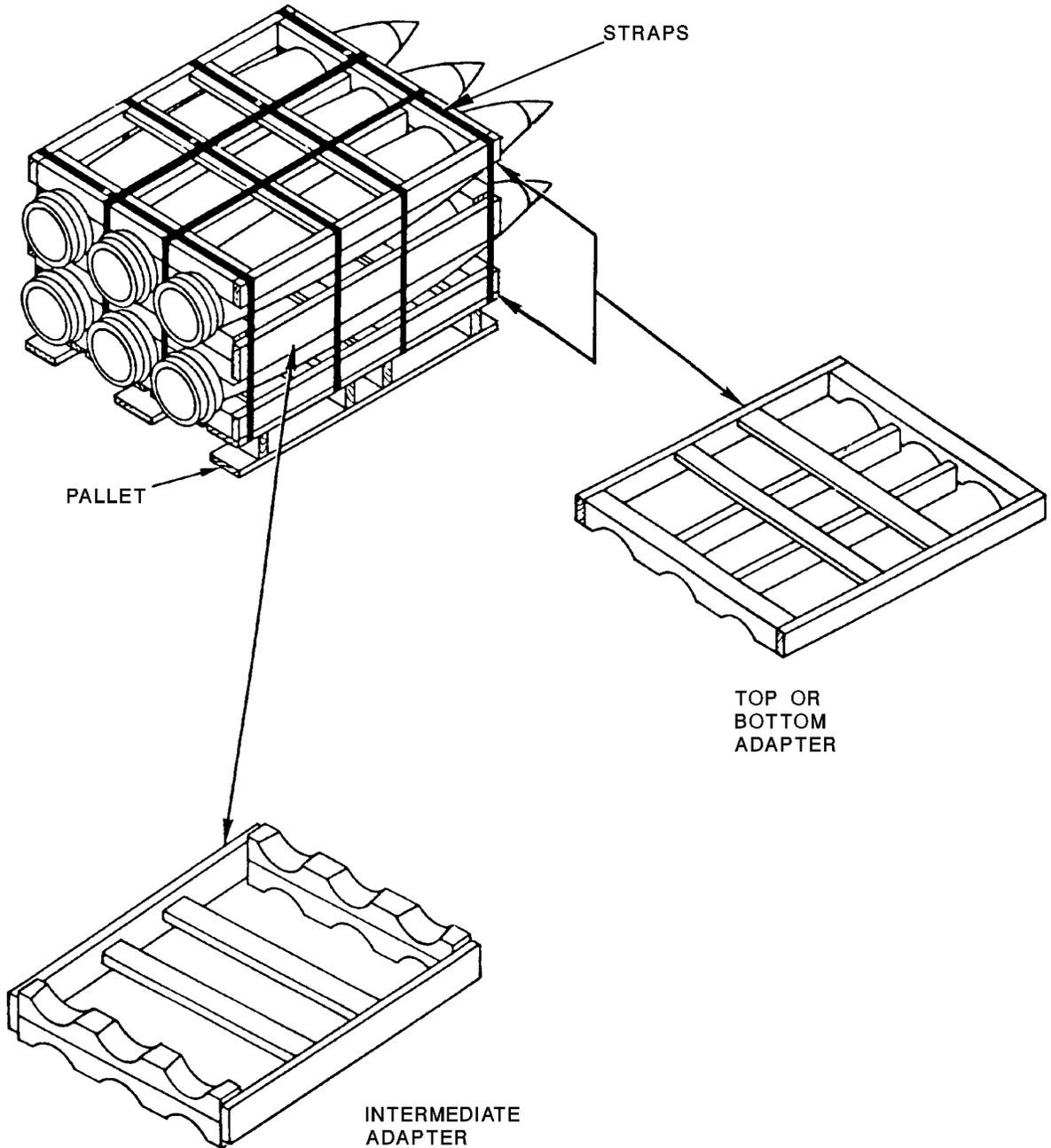
**3-10.1.1.** Carrier's tariffs usually read as follows: "When material not a part of the pallet, platform or skid, is used to protect top of lading, or to secure the load to the pallet, platform or skid, allowance will be made for the weight of the pallet, platform or skid, but not for the weight of such material."

**3-10.1.2.** Many freight tariffs make allowance for the free shipment of pallets, platforms or skids used, provided their weights are shown separately on the BL. The importance of showing this information on the BL cannot be overemphasized. The Government cannot take advantage of the tariff provisions for the free movement of these devices unless the route order issued by [SDDC](#) indicates such allowance is permitted. The BL shall show weight provisions (in pounds) as follows:

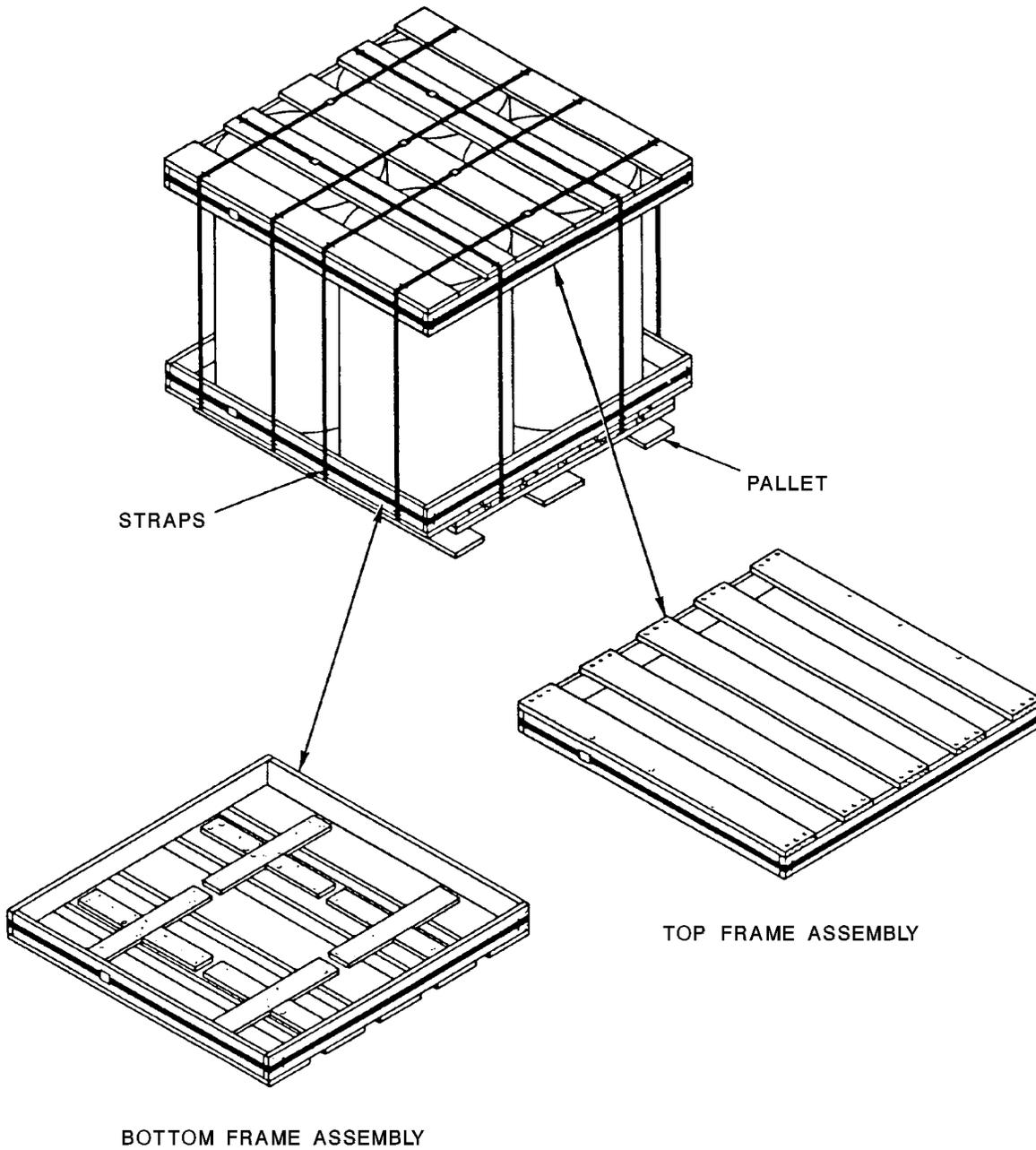
Freight	62,000
Adapters	3,620
Pallets	12,000
Dunnage	1,000
Banding	620

**3-10.1.3.** Certain allowances are made for dunnage and are deductible from the weight of the contents of the railcar or motor vehicle. In cases where no dunnage is used, such as with some loading patterns in vehicles or containers equipped with dunnage free (DF) equipment, the BL shall be annotated "No dunnage or other material used." DF gear is considered an integral part of the railcar and its weight is included in the empty weight of the railcar.

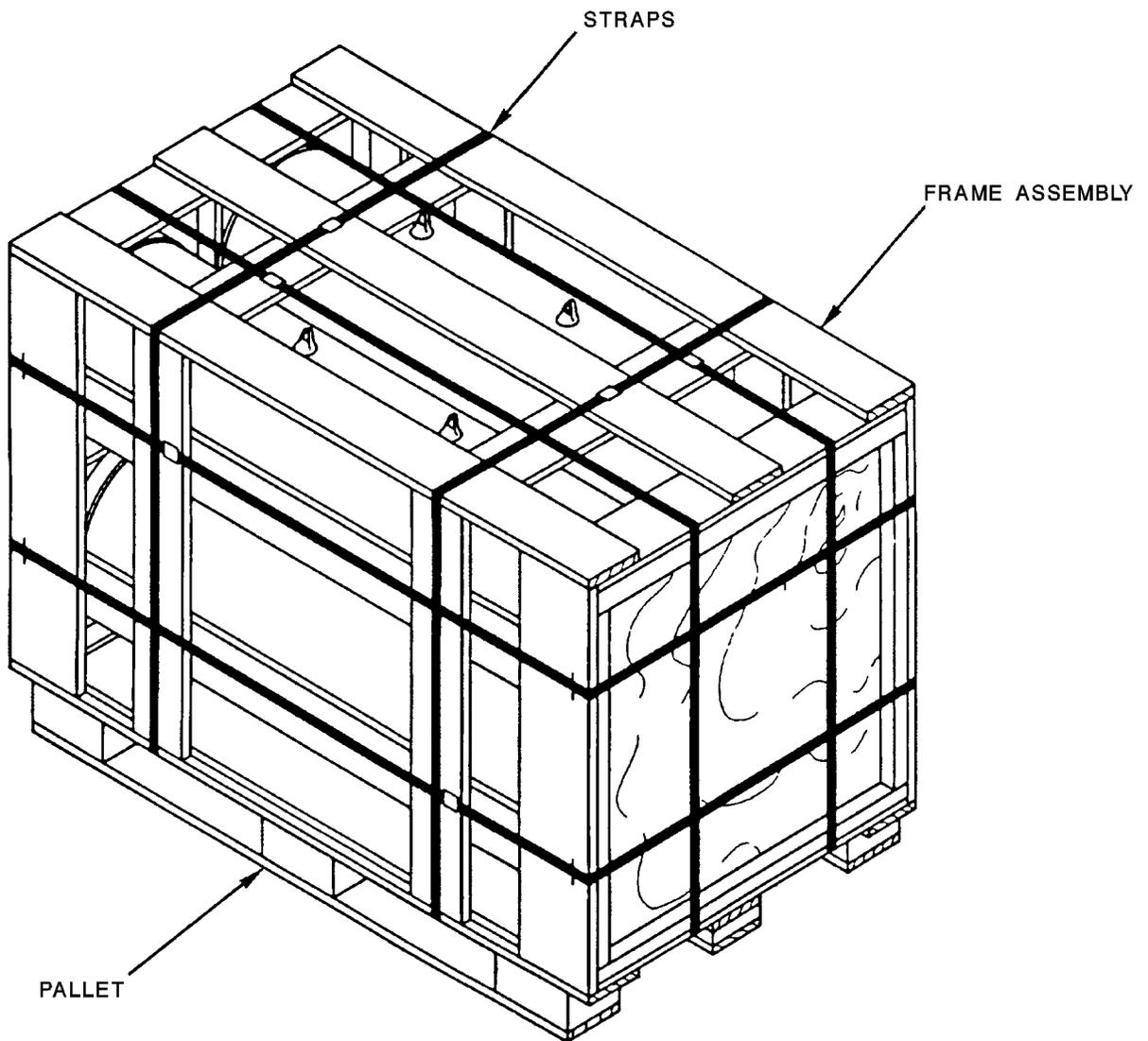
**3-10.1.4.** Applicable MIL-STD slash sheets and approved NAVSEA drawings provide a breakdown of the weight of the pallet, adapter, frame, etc. The Shipper's Declaration for Dangerous Goods Form shall be completed according to [NAVSUP Pub 505](#) and [DTR 4500.9-R](#).



**FIGURE 3-9. Sample Unit Load Configurations and Components with Pallet Weight Allowance (Sheet 1 of 3)**



**FIGURE 3-9. Sample Unit Load Configurations and Components with Pallet Weight Allowance (Sheet 2 of 3)**



**FIGURE 3-9. Sample Unit Load Configurations and Components with Pallet Weight Allowance (Sheet 3 of 3)**

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## CHAPTER 4

# UNITED NATIONS RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS - PERFORMANCE ORIENTED PACKAGING

### 4-1. INTRODUCTION

International shipments of ammunition, explosives and related hazardous materials (A&E) shall conform with the [United Nations \(UN\)](#) Recommendations on the Transport of Dangerous Goods including Performance Oriented Packaging (POP) requirements. The regulatory requirements are provided in the following enforced regulations: [International Civil Aviation Organization \(ICAO\)](#) Technical Instructions, the [International Air Transport Association \(IATA\)](#) Dangerous Goods Regulation, the [International Maritime Organization's \(IMO\)](#) International Maritime Dangerous Goods (IMDG) Code, and [Department of Transportation \(DOT\)](#) Code of Federal Regulations (CFR) Title 49.

### 4-2. INCLUSION OF INTERNATIONAL REGULATIONS

The [DOT](#) has converted to the [UN](#) system of hazardous material regulations. This includes the adoption of POP, which relies on performance testing criteria vice detailed packaging specifications as well as classification of materials, hazard communication (e.g., package marking, labeling, placarding, and shipping documentation descriptions), transportation and handling. [49 CFR](#) has been amended to reflect changes which align the CFR with international regulatory documents; e.g., [IMDG Code](#) and the [ICAO](#) Technical Instruction. This has aligned the U.S. regulations with the international A&E shipping regulations which went into effect for international shipments on 1 January 1991. A timeline of the transitional period for shipment compliance is documented in [table 4-1](#).

#### NOTE

It is advisable to retain old issues of [49 CFR](#), since the regulations contained in them are still referenced when applying grandfather provisions.

#### NOTE

Hazard Class 1 materials owned by DOD and packaged prior to January 1, 1990 do not require POP test certification markings for highway, rail, and military air shipments within the continental United States (CONUS). Shipments can be made under IMDG using this clause.

**NAVSEA SW020-AG-SAF-010 TENTH REVISION**

**Table 4-1. CONUS, International and Military Air Effective Dates for Compliance with UN Hazardous Material Regulations**

DATE	REQUIREMENT
1 January 1991	Full compliance with the UN packaging performance requirements and UN marking for international shipments of hazardous materials according to specific modal provisions of the IMDG, the ICAO Technical Instructions, and the IATA becomes mandatory.
1 October 1991	Compliance with the revised classification and hazard communication requirements except placarding applying to new explosives becomes mandatory.
1 December 1991	The Airlift Mobility Command (AMC), [formerly the Military Airlift Command (MAC)], adopts the UN packaging performance and communication requirements for all OCONUS shipments.
1 October 1992	Compliance with the revised hazard communication requirements for hazardous materials poisonous by inhalation (PIH) and hazard communication and classification requirements for infectious substances becomes mandatory.
1 January 1993	Compliance with 1992-93 revised edition of the ICAO Technical Instructions becomes mandatory. Compliance with the 26th amendment to the IMDG becomes mandatory.
1 October 1993	Compliance with the revised classification and hazard communication requirements except placarding becomes mandatory for all CONUS shipments of materials other than those for which an earlier compliance date was established; i.e., new explosives, infectious substances, PIH materials. Compliance with the revised packaging requirements for PIH materials becomes mandatory. Compliance with revised modal requirements, including stowage compatibility, and segregation within motor vehicles, rail cars, and freight containers becomes mandatory.
1 January 1994	Compliance with revised classification, hazard communication, and packaging requirements for Division 6.2 materials, e.g., infectious substances, including medical waste, becomes effective.
1 October 1994	DOT specification packagings that were eliminated under the new regulations may no longer be manufactured and marked as of this date: see note 1. Newly manufactured and marked packagings must conform to the revised 49 CFR 173, 178 and 179. Conversion to the new placarding system is required for all materials other than PIH materials (for which conversion was required by October 1, 1992.)
1 October 1999	Marks the end of transition period for use of packagings manufactured under the old 49 CFR 173 and 178 requirements. Compliance with UN standard packaging becomes mandatory.*
1 October 2001	Packages conforming to the old 49 CFR requirements in effect on September 30, 1991 may be offered for transportation and transported by rail or highway up until this date. Also, packages filled with hazardous materials prior to October 1, 1991, or marked "Inhalation Hazard" if appropriate, or packages which have not been emptied and refilled on or after October 1, 1991 may be offered for transportation or transported by rail or highway prior to this date. Transitional placarding provisions per 49 CFR 171.14. **
1 October 2004	Compliance with the amendments to 49 CFR 171-180 that align it with updates and revisions to the UN Recommendations, the IMDG Code, and the ICAO Technical Instructions with respect to hazard communication, classification, and packaging requirements.

\*UN POP test certification marking is required on all packages shipped within CONUS (refer to paragraph 4-2). This transitional date was extended to 1 October 1999 by the DOD. Before this change,

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DOD was required to package and transport all A&E domestically in POP-certified packages starting 1 October 1996, the end of the 5-year transition period for POP implementation in the U.S. As a result of this change, DOD continued to transport A&E domestically in non-POP approved packages until 1 October 1999, provided that: (1) the package was filled prior to 1 October 1996, and (2) the package was in compliance with the regulations in effect prior to 1 October 1996.

\*\*Palletized packages meeting this exception can be offered for shipment by military air under certain conditions specified in note 2.

### NOTES:

1. From 1 October 1994 through 1 October 1996, packagings manufactured and marked prior to 1 October 1994 in accordance with 49 CFR requirements were authorized out of inventory for depletion purposes.
2. All packages on each pallet must have identical hazard classifications and proper shipping names; the UN proper shipping name, UN identification number, and the UN hazard label must be marked on two opposite sides of the palletized load using marking panels; shipping documents must reflect the UN proper shipping name, hazard classification and UN identification number, and shall declare that the packages are being shipped under this exception.

**4-2.1. GRANDFATHER PROVISIONS.** Grandfather provisions have been established because many items being transported will require shippers to use pre-UN DOT markings and packaging using old and new hazard communication and transportation descriptions. Two grandfather provisions have been established. The first domestic grandfather provision applies to A&E packaged prior to 1 October 1991. It allows A&E shippers to transport packages conforming to the DOT requirements in effect prior to 30 September 1991 as long as they are not emptied or repacked after 1 October 1991. The second applies to both domestic and international shipments. DOD hazard Class 1 materials which were packaged prior to 1 January 1990 (see note below) do not require POP test certification markings. This exception is permitted under 49 CFR 173.62(d) and applies to vessel, highway, rail, and military air shipments only. Packages offered for military air shipment must be marked with all other UN markings. Shipping documents must reflect the UN proper shipping name, hazard classification, UN identification number, and declare that the packages are being shipped under this exception. It does not apply to international and domestic commercial air shipments. The grandfather date applies to the date the item was physically packaged and not the manufactured date of the container. Under the grandfather provision, a shipper can remove the item from the package without voiding the grandfather as long as the package is resealed to the same degree as it was prior to being opened.

### NOTE

The 1 January 1990 date was updated from 1 January 1988 by HM-215 Revision A, published in Federal Register/Volume 59, No. 249, dated 29 December 1994.

### **4-3. UN EXPLOSIVES HAZARD CLASSIFICATION**

Hazard classification codes are assigned by the Associate Administrator for Hazardous Materials Safety per 49 CFR 173.52, and consist of the hazard class/division number followed by the compatibility group letter. The following paragraphs will address these provisions.

4-3.1. **HAZARD CLASS/DIVISIONS.** Nine hazard classes for A&E, including a non-regulated category, have been established by the UN Committee of Experts on the Transport of Dangerous Goods. A hazard classification is based on the chemical and physical characteristics of the material and its reaction under various test conditions. Items or articles possessing more than one A&E or hazard are classed based on the highest hazard presented by the materials or combination of materials. Class 1, which contains ammunition, explosives substances, and explosive articles, is subdivided into divisions 1 through 6 based on the character and predominance of the associated hazards and of the potential for causing personnel casualties or property damage. Explosives articles which differ in minor respects may be assigned to different divisions if their predominant hazards differ. 49 CFR provides a hierarchy of hazard assignments that are used when multiple hazards are contained in a given item. Some items possess subsidiary hazard designators. The hazard classes, divisions, and designators are presented in [NAVSEA SW020-AC-SAF-010](#).

4-3.1.1. **Transportation and Storage Rule.** Transportation compatibility requirements for Class 1 material are based on the compatibility group, not the division. Therefore, items within the same division cannot be transported or stored together unless they are assigned the same compatibility group, or are members of compatibility groups which are shown to be compatible.

4-3.1.2. **Minimum Fragment Distance.** A numerical figure in parentheses shown to the left of a class/division designator, indicating the minimum separation distance, in hundreds of feet, is required for protection from debris, fragments, and firebrands when distance alone is relied on for protection. Refer to [NAVSEA SW020-AC-SAF-010](#).

4-3.1.3. **Relationship Between UN and Old DOT Hazard Classifications.** The relationship between DOD hazard class 1 items and the DOT explosives classification system in effect prior to January 1, 1991 is shown in table 2-2 of [NAVSEA SW020-AC-SAF-010](#).

4-3.2. **COMPATIBILITY GROUPS.** A compatibility group accompanies the hazard class to complete the hazard classification designation. A&E are assigned to a common compatibility group when they can be stored and transported together without significantly increasing either the probability of an accident or, for a given quantity, the magnitude of the effects of such an accident. Considerations which are used in developing the compatibility groups include, but are not limited to:

- a. Chemical and physical properties.
- b. Design characteristics.
- c. Inner and outer packaging configuration.
- d. Hazard classification.
- e. Net explosive weight.
- f. Rate of deterioration.
- g. Sensitivity to initiation.

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h. Effects of deflagration, explosion, or detonation.

4-3.2.1. **Description of Compatibility Groups.** A&E are assigned Compatibility Group A thru L, N and S. Refer to [NAVSEA SW020-AC-SAF-010](#) for the corresponding definitions of each group.

4-3.3. **CLASSIFICATION CODES.** A classification code consists of the three parts of a classification including class, division, and compatibility group. Altogether, there are 35 possible classification codes for explosives. See [table 4-2](#) below.

**Table 4-2. Classification Codes**

Hazard Division	Compatibility Group													
	A	B	C	D	E	F	G	H	J	K	L	N	S	A-S
1.1	1.1A	1.1B	1.1C	1.1D	1.1E	1.1F	1.1G	....	1.1J	....	1.1L	....	....	9
1.2	....	1.2B	1.2C	1.2D	1.2E	1.2F	1.2G	1.2H	1.2J	1.2K	1.2L	....	....	10
1.3	....	....	1.3C	....	....	1.3F	1.3G	1.3H	1.3J	1.3K	1.3L	....	....	7
1.4	....	1.4B	1.4C	1.4D	1.4E	1.4F	1.4G	....	....	....	....	....	1.4S	7
1.5	....	....	....	1.5D	....	....	....	....	....	....	....	....	....	1
1.6	....	....	....	....	....	....	....	....	....	....	....	1.6N	....	1
1.1-1.6	1	3	4	4	3	4	4	2	3	2	3	1	1	35

4-3.4. **SEGREGATION DURING TRANSPORT.** A&E may not be transported together by motor vehicle, ship, or rail unless appropriate segregation requirements are met. [Tables 5-1](#) and [5-2](#) describe the compatibility requirements for loading and transporting A&E by motor vehicle over public highway or by rail. Compatibility groups are addressed in [NAVSEA SW020-AC-SAF-010](#).

4-3.5. **DOT SPECIAL PERMITS.** Refer to [paragraph 2-5.1](#).

4-3.6. **IDENTIFYING EXPLOSIVES USING AN EX-NUMBER.** EX-numbers are assigned by the Pipeline and Hazardous Materials Safety Administration, [DOT](#), to identify an ammunition or explosive item which has been approved and properly classified. Refer to [NAVSEA SW020-AC-SAF-010](#).

### 4-4. PERFORMANCE ORIENTED PACKAGING (POP)

Under the UN system, all packagings containing A&E must be certified to meet specific performance standards through performance testing. Containers meeting these standards are issued a standardized POP marking, which is required to be marked and labeled by the manufacturer or packager on the exterior container. Containers of international surface shipments that were packaged prior to 1 January 1988 shall be marked in accordance with [49 CFR](#). Those containers packaged after 1 January 1988 shall be marked and documented in accordance with the appropriate modal regulations.

4-4.1. GENERAL PACKAGING REQUIREMENTS. A&E shipped by, for, or to the [DOD](#), including commercial shipments prepared under U.S. contract, must be packaged and tested in accordance with the regulations of [49 CFR 173](#) and [178](#). The packaging used for Class 1 material must meet Packing Group II requirements as defined in [49 CFR 172.101\(f\)](#).

4-4.1.1. Certificates of Equivalency (COEs). Refer to [paragraph 2-5.2](#).

4-4.2. TESTING OF POP CONTAINERS. The UN has instituted POP requirements for transporting A&E by prescribing five design qualification tests; the drop test, hydraulic pressure test, leakproofness test, stacking test and cooperage test. Each package must also be capable of withstanding a vibration test. Tests must be performed periodically as specified in [49 CFR 178.601](#). The criteria for each test becomes progressively more stringent for materials in packing group III to I. For example, the height for the drop test in packing group II is 1.2 meters and 1.8 meters for packing group I.

4-4.2.1. Hypothetical POP Container Test. [Tables 4-3](#) through [4-6](#) represent a hypothetical POP testing and marking of a steel shipping and storage drum, containing 96 pounds of sand, simulating a solid A&E item. The overall weight of the container is 126 pounds. The POP test was conducted to ascertain whether this standard container would meet Packing Group II requirements. The leakproofness, hydrostatic pressure and cooperage tests are not required for a solid A&E item. When applicable, these tests must be conducted in accordance with [49 CFR 178.604](#), [178.605](#), and [178.607](#).

4-4.2.2. Coordination of Test Reports. All Navy container testing, certifications and package design information will be coordinated through the [Naval Packaging, Handling, Storage and Transportation \(PHST\) Center](#), Naval Surface Warfare Center Indian Head Division (NSWC IHD) Detachment Picatinny, Picatinny Arsenal, NJ 07806-5000. A record of all pertinent data regarding CAA's and test reports will be maintained. NSWC IHD Detachment Picatinny will assign serial numbers to reduce the probability of test redundancy and forward test reports and CAAs to the [Defense Technical Information Services \(DTIC\)](#), Alexandria, VA, DLA Depot Operations Support Office, Richmond, VA and the [Naval Surface Warfare Center \(NSWC\), Crane, IN](#).

4-4.3. APPROVED CONTAINERS. All international Class 1 shipments must move in a container certified to UN POP standards. Approved containers are either tested, exempt, or CAA containers.

4-4.3.1. PC-POP III Retrieval System. All POP tested containers have been compiled and entered into a easy to use PC-program operated and maintained by the DLA. The system will produce the proper container and marking requirements for a "POP" certified shipment of A&E. The retrieval system, PC-POP III, may be accessed by modem by dialing (804) 279-5445.

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**Table 4-3. Sample of Drop Test and Results**

<b>DROP TEST (49 CFR 178.603)</b>	
<b>Samples</b>	<b>6 (3 for each drop)</b>
Drop Orientation	First drop: the packagings should strike the target diagonally on the chime or, if the packaging has no chime, on a circumferential seam or an edge. Second drop: the packaging should strike the target on the weakest part not tested by the first drop for example a closure or, for some cylindrical drums, the welded longitudinal seam of the drum body.
Drop Height	1.2 m (3.9 feet) (Packing Group II)- If the test is performed with a solid or liquid to be transported the drop height must be determined according to the packaging group.
Criteria for Passing	Where the packaging for solids undergoes a drop test and its upper face strikes the target, the test sample passes the test if the entire contents are retained by an inner packaging or inner receptacle; e.g., a plastic bag, even if the closure is no longer sift-proof. A slight discharge from the closure(s) upon impact should not be considered to be a failure of the packaging provided that no further leakage occurs.
Results	Satisfactory. After each drop, the containers were inspected for any damage which would be a cause for rejection. Final inspection indicated damage was minimal with only minor denting noted. The containers remained intact and functional upon completion of the tests.

**Table 4-4. Sample of Vibration Test and Results**

<b>VIBRATION TEST (49 CFR 178.608)</b>	
<b>Samples</b>	<b>3 packages filled and closed as for shipment.</b>
Test Method	The test samples must be placed on a vibrating platform that has vertical or rotary double-amplitude of one inch. The packages should be constrained horizontally to prevent them from falling off the platform, but must be free to move vertically, bounce and rotate.
Time/Frequency	The test must last 1 hour at a frequency that causes the container to leave the platform approximately 1.6 mm (1/16 of an inch); to such a degree that a material (such as steel strapping) can pass between the container and the platform.
Criteria for Passing	Immediately following the test, each package shall be removed from the platform, turned on its side and observed for any evidence of leakage. Rupture or leakage from any of the packages constitutes failure of the test.
Results	Satisfactory. Each container was removed from the platform, turned on its side and observed for any evidence of leakage. There was no leakage to the containers as a result of the test.

**Table 4-5. Sample of Stacking Test and Results**

<b>STACKING TEST (49 CFR 178.606)</b>	
<b>Samples</b>	<b>3 for each different package.</b>
Test Method	The test sample should be subjected to a force applied to the top surface of the test sample equivalent to the total weight of identical packages which might be stacked on it during transport.
Drop Height	The minimum height of the stack, including the sample, must be 3.0 m (10 feet). The duration of the test must be 24 hours.
Criteria for Passing	No test sample should leak. In composite packagings or combination packagings, there should be no leakage of the filling substance from the inner receptacle or inner packaging. No test sample should show any deterioration which could adversely affect transport safety or any distortion liable to reduce its strength or cause instability in stacks of packages.
Results	Satisfactory. Each package was visibly checked after the 24-hour period was over. There was no leakage, distortion, or deterioration to any of the containers as a result of this test.

**Table 4-6. Example of UN Packaging Specification Markings (for a Steel Drum)**

 <b>1A2/Y57/S/**/USA/DOD</b>	
	Certifies that the package complies with UN requirements. The size of the circle shall be relative to the size of the packaging, and shall be readily visible. For metal receptacles, the capital letters "UN" may be applied in place of the symbol.
1A2	Designates the type of packaging the material of construction (i.e., steel removable head drum), and when appropriate, the category of packaging under <a href="#">49 CFR 178.504 through 178.523</a> .
Y	Designates the packing group(s) for which the container configuration has been successfully tested: X is used for Packing Group I; Y is used for Packing group II; and Z is Packing Group III. Items of a lesser packing group may be packaged in a container, marked and tested to a higher packing group provided the tested weight is not exceeded.
57	Signifies the maximum authorized gross weight, expressed in kilograms, for which the packaging has been tested.
S	Indicates packaging inner contents are either solids or other inner containers (i.e, cans or bottles). In the case of liquids, the hydrostatic test pressure in kilopascals (kPa) rounded down to the nearest 10 kPa of which the package has successfully passed is used.
**	Indicates the last two digits of the year during which the container was manufactured or packed.
USA	Indicates the state (country) authorizing allocation of the mark.
DOD	Represents the technical authority responsible for ensuring the UN recommendations have been met. The symbol must be registered with the U.S. DOT, Office of Hazardous Materials Transportation. The appropriate symbol shall be the contractor's authorized symbol or as stated in the contract, order, purchase agreement, specification, special packaging instruction. <a href="#">NAVSUPINST 4030.55</a> identifies UN POP certification symbols.

4-4.3.2. Exempt Containers. Containers which are exempt from the UN regulations must meet the following criteria:

a. Grandfather Clause. A&E packaged for transport by the surface mode and AMC are exempt from the UN regulations requiring container testing if the items were packaged prior to 1 January 1990 in accordance with [49 CFR](#) requirements.

b. Net Mass Exceeds 400 kg. A&E containers whose net mass exceeds 400 kg (882 lbs) are exempt from the UN regulations calling for container testing.

4-4.3.3. Competent Authority Approval (CAA). Refer to [paragraph 2-5.3](#).

4-4.3.4. Packaging CAAs. CAAs which are issued for packaging authorize the use of containers which differ from those specified (e.g., aluminum instead of steel or wood), or containers which have been approved by different methods of POP testing. Packaging CAAs are also required for Class 1 explosives assigned the packing instruction 101 in [49 CFR](#), [ICAO](#) and [IMDG](#). CAAs are not required for class 1 items with a net item weight greater than 882 pounds (400kg) or volume greater than 119 gallons (450 liters). It will be equally as important to prepare CAA requests for affected items as to perform POP testing. Items which require a CAA cannot be shipped overseas until the DOT (the U.S. Competent Authority) grants the CAA. The commodity classification, along with the type of packaging, determines whether a CAA is required. CAAs must be attached to the shipping papers. The point of contact for CAAs is the [Naval PHST Center](#), Code G13, NSWC IHD Detachment Picatinny, Picatinny Arsenal, NJ 07806-5000, [robert.dress@navy.mil](mailto:robert.dress@navy.mil).

4-4.3.5. Containers Designed for Multiple Units of Inner Receptacles. These containers will be tested and certified to their maximum capacity. This testing will suffice for the containers when loaded to less than their maximum capacity. Interior container space voids created as a result of shipping less than the designed number of inner receptacles will be filled with a suitable material to restrict inner receptacle movement during transport. The receptacles and dunnaging will be strategically located to enhance uniform loading and to centralize the center of gravity.

4-4.3.6. Fiberboard Containers Designed for Reuse. Such containers are authorized subject to the conditions contained in [49 CFR 173.28](#) for domestic and international air shipment. Though [IMO IMDG](#) regulations preclude reuse for international surface shipments, DOD shippers may reuse such containers that are free of damage and otherwise conform to the [49 CFR](#) requirements and are to be shipped overseas in ocean containers.

## 4-5. MARKINGS

An exterior container marking is required by the DOT to identify the hazardous nature of the contents for transportation and emergency response purposes. Shipping activities are responsible for the marking of all containers. When preparing A&E for shipment, shippers shall inspect and ensure all packagings contain the appropriate hazard marking and where required, the proper destination markings. [MIL-STD-129](#) implements the DOT regulations set forth in [49 CFR 172.300](#) and provides the methods for standard marking of containers and inner packagings for shipment by and for the DOD.

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4-5.1. GENERAL MARKING REQUIREMENTS FOR NON-BULK PACKAGING. Non-bulk packaging offered for transportation must be marked with the following:

- a. Proper shipping name as defined in [49 CFR 172.101](#) in Roman print (not italics);
- b. Identification number which is assigned to a proper shipping name (this number consists of a four digit serial number preceded by the letter “UN” or “NA”);
- c. Technical names marked in parentheses in association with the proper shipping name (technical name is defined as a recognized chemical name or microbiological name used in scientific and technical handbooks);
- d. Special permit number durably marked “DOT-E” or "DOT-SP" followed by the special permit number assigned (see [paragraph 3-3.1](#));
- e. Consignee's or consignor's name and address when required.

4-5.2. GENERAL MARKING REQUIREMENTS FOR BULK PACKAGING. Bulk packagings offered for transportation must be marked with the following:

- a. Identification number must be marked on each side and each end, if the packaging contains 3,785 L (1,000 gallons) or more, or on two opposing sides if the packaging contains less than 3,785 L;
- b. Width of markings must be at least 6.0 mm (0.24 inch) and a height of 3.9 inches for railcars, 1 inch for portable tanks, or 20 inches for cargo tanks and other bulk packagings;
- c. Special permit number durably marked “DOT-E” or "DOT-SP" followed by the special permit number assigned (see [paragraph 3-3.1](#)).

4-5.3. EX-NUMBER. Shipping containers shall be marked with the EX-number (defined in [paragraph 4-3.6](#)), unless the EX-number can be traced to a National Stock Number (NSN) through DOD-approved data file systems, such as the Joint Hazard Classification System (JHCS). In other words, if the packaging has the applicable NSN marking per [MIL-STD-129](#), an EX marking is not required on the package.

4-5.4. COAST GUARD (CG) CLASS. Refer to [paragraph 3-4](#).

4-5.5. MARKING OF POP APPROVED CONTAINERS. Containers must be marked with the UN symbol, identification code, packing group, gross weight, descriptor, year, state, manufacturer, and Certifying Authority as prescribed in [table 4-5](#). These markings indicate that the packaging successfully passed the UN standards and the provisions of [49 CFR 173](#) and [178](#). These markings are the responsibility of the manufacturer as defined in [49 CFR 171](#).

4-5.5.1. The UN specification markings shall be placed on the opposite side of the container from the side containing the identification markings.

4-5.5.2. The symbol “UN” shall be encircled. Letters and numbers must be a minimum of 12.0 mm (0.47 inches) in height or at least 6.0 (0.2 inches) for packagings containing more than 66 pounds of solid A&E. However, for very small packages, the size of the lettering shall be equivalent to the size of the package.

4-5.6. DOT SPECIAL PERMITS. Refer to [paragraph 3-3.1](#).

#### **4-6. LABELS/PLACARDS**

Each A&E shipment must be labeled and placarded in accordance with the requirements of [49 CFR 172.400](#) and [172.500](#).

4-6.1. LABELS. Hazard labels are required to be printed or affixed to a surface other than the bottom of a package. They are required to be located on the same surface and as close as possible to the proper shipping name and UN identification number. When primary and subsidiary hazard labels are required, they shall be affixed adjacent to one another. Packages over 64 cubic feet (1.8m<sup>3</sup>) require two labels displayed on at least two sides other than the bottom. All labels must be clearly visible and may not be obscured by markings, other labels, or attachments. Labeling of A&E packages is required for all shipments with the following exception: packages of military explosives shipped by or on behalf of the DOD when in freight container loads, carloads, or truckload shipments if loaded and unloaded by the shipper or DOD. Additionally, unitized or palletized breakbulk shipments by cargo ship under charter to DOD can be shipped with a single label per unit load. Packages coming from production should possess labels in all cases, since the life cycle of ordnance involves many logistical shipments and ultimate and secondary destinations are not always known. When the logistics flow of the material is unknown, the general labeling requirements shall be met.

4-6.2. PLACARDS. Tables 1 and 2 of [49 CFR 172.504](#) provide guidance for determining placarding requirements. For the purposes of transportation, each freight container, transport vehicle, or railcar containing A&E must be placarded on each side and each end. [NAVSUP Pub 505/MCO P4030.19](#) details the requirements for military cargo aircraft placarding.

#### **4-7. POP PROCESS FLOW CHART**

[Figure 4-1](#) defines the process for determining when a POP tested container is required for a shipment of A&E.

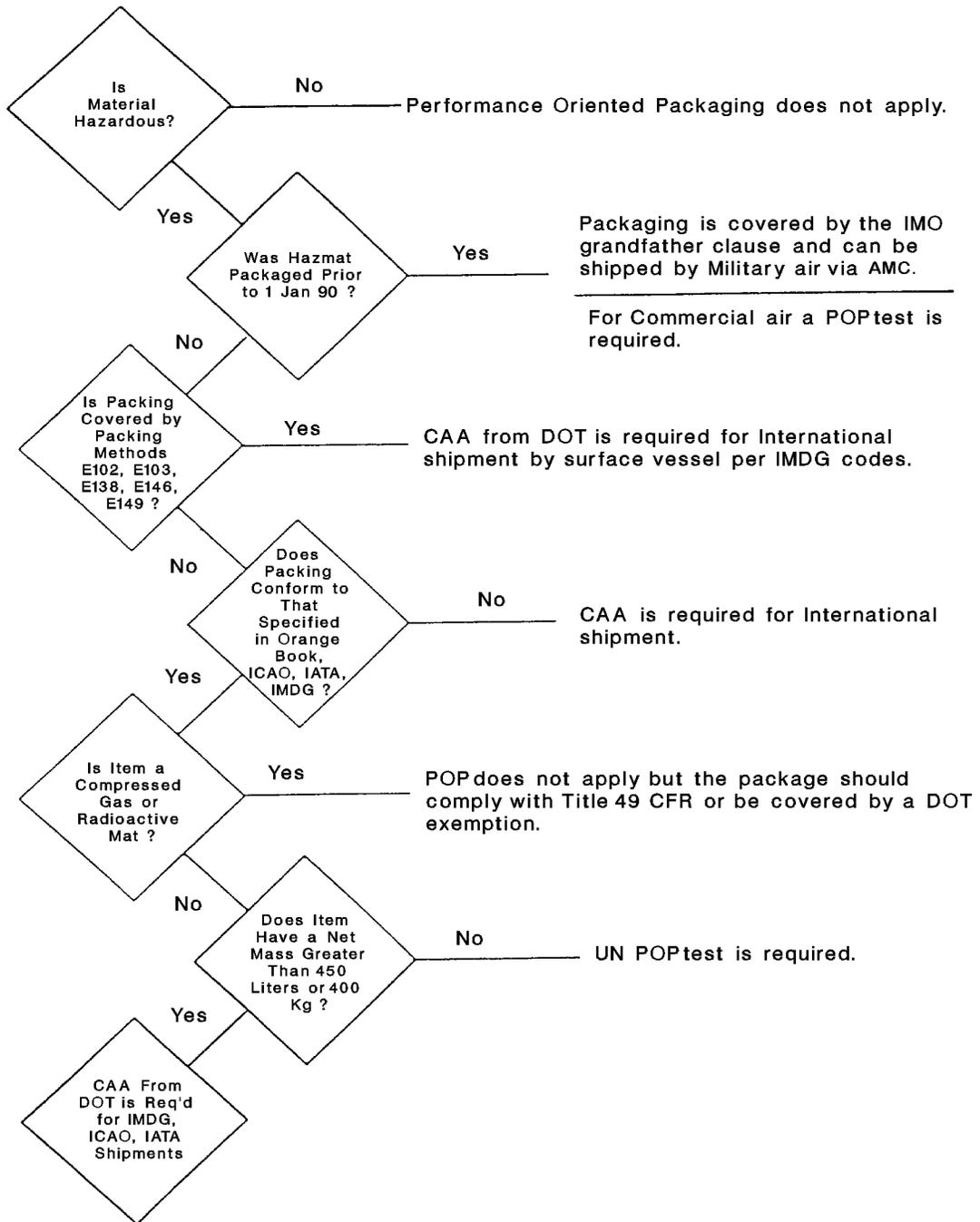
4-8. POP POINTS OF CONTACT

The Navy and Marine Corps points of contact for questions concerning POP are as follows:

**POINTS OF CONTACT FOR POP**

<p><b>AMMUNITION AND EXPLOSIVE ITEMS, NAVY AND MARINE CORPS</b></p>	<p>Commanding Officer                      Naval Ordnance Safety and Security Activity                      3817 Strauss Avenue, Suite 108 (Bldg. D-323)                      Attn: Code N55                      Indian Head, MD 20640-5151                      DSN 354-6066, Commercial (301) 744-6066</p> <p>Naval PHST Center                      Naval Surface Warfare Center Indian Head Division                      Detachment Picatinny (Code G13)                      Bldg 458, Whittemore Avenue                      Picatinny Arsenal, NJ 07806-5000                      robert.dress@navy.mil</p>
<p><b>NON-EXPLOSIVE ITEMS, NAVY</b></p>	<p>Naval PHST Center                      Naval Surface Warfare Center Indian Head Division                      Detachment Picatinny (Code G13)                      Bldg 458, Whittemore Avenue                      Picatinny Arsenal, NJ 07806-5000                      robert.dress@navy.mil</p>
<p><b>NON-EXPLOSIVE ITEMS, MARINE CORPS</b></p>	<p>Commandant of the Marine Corps                      HQ U.S. Marine Corps                      Attn: Code LPP-2                      Washington, D.C. 20380-1775                      DSN 426-1061, Commercial (703) 696-1061</p>

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CAA - Competent Authority Approval  
 IMO - International Maritime Organization  
 IMDG - International Maritime Dangerous Goods Code  
 ICAO - International Civil Aviation Organization  
 IATA - International Aviation Transportation Association

FIGURE 4-1. POP Process Flow Chart

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## CHAPTER 5

### PROCEDURES AND INSPECTIONS

#### 5-1. INTRODUCTION

This chapter describes inspections and procedures required by the [Department of Defense \(DOD\)](#) and the [Department of the Navy \(DON\)](#), and amplifies requirements of the various regulatory agencies concerning the shipment of arms, ammunition, explosives and related hazardous materials (AA&E). Detailed instructions concerning the various inspections are contained in other documents (see [paragraph 1-10](#)). The instructions presented herein supplement, but do not supersede, the requirements specified in these other documents. All matters requiring interpretation or clarification of regulations, or involving conflicts between regulations, should be referred to the Commanding Officer, [Naval Ordnance Safety and Security Activity \(NOSSA\) \(N5\)](#); Marine Corps activities shall refer such issues via MARCORSSYSCOM (EES).

**5-1.1. INSPECTIONS REQUIREMENTS.** The type of inspection required is determined by the nature of the cargo to be transported. For inert material, each shipping activity follows local rules and regulations and uses local inspection forms. DD Form 626 may be used for such shipments, if desired. Such inspections assure that the carrier's equipment is capable of transporting government property with minimum risk of breakdown, cargo loss or damage, or danger to the public. The transportation of Class/ Divisions 1.1 through 1.4 ammunition, explosives and related hazardous materials (A&E) requires more stringent regulations, and special requirements are imposed on the carrier by the [Department of Transportation \(DOT\)](#), [DOD](#) and [DON](#).

#### 5-2. SUPERVISION

Whenever A&E are being received, transferred, stored, or prepared for shipment; the work shall be supervised by an individual(s) qualified and certified in accordance with the regulations governing the safe handling, and proper loading of A&E. The supervisor shall ensure that all persons engaged in the work exercise the greatest degree of care and observe all the necessary safety precautions.

#### 5-3. AUTHORIZED LOADING/UNLOADING LOCATIONS

Any conveyance being used for the transport of AA&E shall be loaded or unloaded only at authorized locations. Such locations shall be cleared of all debris and/or other combustible vegetation and materials for a distance of 50 feet beyond the designated area. Firefighting equipment applicable to the material being handled should be readily available.

#### 5-4. LOADING/UNLOADING RECORDS

Loading activities are responsible for keeping permanent records of the following: the name of each vessel or the number of each motor vehicle, railcar, or aircraft; seal numbers; types and quantities of AA&E being shipped; routing information; and any other information pertinent to the transportation of the AA&E. Offloading activities shall maintain records of the following: the name of each vessel or the number of each motor vehicle, railcar or aircraft; seal numbers; types and quantities of AA&E received;

disposition information; and any other information pertinent to further handling or transportation of the AA&E. These records shall be maintained for two years after the material has been shipped and/or received.

## 5-5. INSPECTION OF CONTAINERS PRIOR TO LOADING

Prior to loading, containers of A&E shall be inspected to ensure that they are properly packed, marked and labeled in accordance with [DOT](#), [DOD](#) and overseas shipping requirements. Any container that is found to be improperly packed, incorrectly marked, or damaged shall not be loaded until the discrepancy has been corrected.

## 5-6. EMPTY CONTAINER CERTIFICATION.

Empty ordnance containers require inspection and must meet the requirements of NAVSUP P-805. Upon receipt, all empty containers, regardless of their origin, must be inspected for markings and seals certifying their empty condition. In addition, containers must have accompanying Material Documented as Safe (MDAS) certification documentation. Containers which do not meet both of these requirements must be opened, inspected, and marked and sealed to certify their empty condition unless they are specifically excepted by [NAVSEA OP 5 Volume 1](#). During this inspection, the containers must be certified as MDAS in accordance with [NAVSEA OP 5 Volume 1](#) and managed accordingly. At the time of release for shipment or issue, an inspection must be performed to assure that empty container and MDAS certification remains valid. An Explosive Event Report (EER) shall be used in accordance with [OPNAVINST 5102.1/MCO 5102.1 \(series\)](#) to report a container received as EMPTY by an activity, but found to contain live ammunition or explosives during inspection. The container shall be treated as recovered material in accordance with NAVSUP P-724. Refer to [NAVSEA OP 5 Volume 1](#) for further guidance on certification and for the criteria pertaining to exceptions to the requirements for inspection and empty container identification.

5-6.1. MARKING AND SEALING EMPTY CONTAINERS. Empty hazardous materials containers must be marked as empty, sealed with traceable seals, and have a properly certified material condition tag or label attached, annotating EMPTY. To comply with [MIL-STD-129 \(series\)](#), all contents markings indicating the presence of hazardous materials such as loading dates, lot numbers, serial numbers, maintenance due dates (MDD), and Department of Transportation (DOT) markings/labels, etc. must be removed/obliterated.

### NOTE

Serviceable, emptied containers are intended for re-use. To prevent increased maintenance costs, stenciling shall be accomplished neatly and in a reasonable size. Avoid stenciling or marking over permanent markings. Also, take care to ensure permanent markings are not removed/obliterated.

Empty markings must be applied by any one of the following methods:

- a. Stencil EMPTY in approximately 1-inch high letters on both ends and both sides of the container.

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b. Apply an EMPTY label on both ends and both sides of the container. Adhesive-backed EMPTY labels may be locally procured or manufactured. The label shall have 1-inch high black lettering on a white vinyl background. The recommended label dimension is 6 x 6 inches (15.2 x 15.2 cm) for purposes of visibility. However, variations in label dimensions are permitted to support use of standard size label materials with commercial label printers and for containers which are too small for 6 x 6 inch labels.

c. Annotate EMPTY on the container as required in the container-specific section of NAVSUP P-805.

d. For localized control in addition to the markings required in sub-paragraphs a, b, and c above, fluorescent red tape may be used to indicate an empty weapon container. A durable, colorfast material such as Scotchguard Herculite is suited for such application. This method involves positioning a ribbon across the center of an open container with approximately twelve inches extending past each side when the lid is replaced (see [NAVSEA SW020-AF-HBK-010](#) for illustration). Any container which is not marked EMPTY as described above, or which does not display a red ribbon, would be treated as containing a weapon. Use of red ribbons is intended for localized control only and shall be in conjunction with one of the marking methods described in a, b, and c above prior to shipment.

e. Marine Corps activities issuing excess empty containers to Defense Logistics Agency (DLA) Disposition Services (formerly Defense Reutilization Marketing Office) for disposal must comply with the certification and preparation requirements of [MCO P8020.10 \(series\)](#).

**5-6.2. PALLETIZING OF LARGE CONTAINERS.** If the size and configuration of the empty containers permits, they should be palletized using [MIL-STD-147](#) and the WR-53 series as guides. Large containers may be handled separately or unitized by strapping them together, but long narrow containers which tend to be unstable when stacked two or more high should not be unitized. Empty containers shall be loaded, blocked and braced in railcars, motor vehicles, and ships applying the general principles for loaded containers outlined in [MIL-STD-1325](#), [MIL-STD-1320](#), NAVSEA OP 3221, and [MSC TW023-AB-WHS-010](#) (formerly NAVSEA OP 3206). However, it should not be erroneously assumed that empty containers must be blocked and braced to the same degree as that required for loaded containers. Weighing only a fraction of loaded containers, empty containers require less blocking and bracing to achieve the mechanical protection adequate for safe, economical transit of the load.

**5-6.3. TRANSPORTATION OF EMPTY CONTAINERS.** All shipments of empty ammunition containers loaded aboard both flatbed trailers and enclosed vans shall follow best commercial practices and be in accordance with [49 CFR 393.100 through 393.108](#). Flatbed trailers shall be covered with a tarpaulin. Tautliner (curtain-sided) trailers are suitable substitutes for tarpaulin covered flatbed trailers. Local movements of empty ammunition containers loaded aboard flatbed trailers, not to exceed a distance of 10-miles one-way, may proceed without tarpaulin cover provided the following conditions are met:

a. The movements are made using organic vehicles with qualified Navy/Marine Corps military or civilian drivers.

b. The movements are conducted under the strict control of the Navy/Marine Corps installation and per written station procedures.

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c. The movements are direct point-to-point evolutions between two Navy/Marine Corps installations; no stopping is permitted en route except for emergencies.

5-6.4. ACCIDENTAL SHIPMENTS OF LIVE A&E ITEMS WITH SPENT ITEMS. All spent, reusable A&E items shall be subjected to 100 percent inspection by the using, shipping, or receiving activity to ensure that no live item was accidentally shipped with the used items. The containers of inert components must be marked "INERT". EOD personnel shall be notified of any disposal actions that may be required if live ammunition is found with spent items or in a container marked "empty".

### 5-7. MOTOR VEHICLE SHIPMENTS

The regulations of the [DOT](#) apply to all motor vehicle carriers transporting AA&E in interstate or foreign commerce. Many states have adopted [DOT](#) regulations for intrastate shipments. Additional safety requirements governing intrastate shipments may be imposed by the individual states and by municipalities through which shipments will move. Navy vehicles transporting AA&E are subject to all the safety regulations applicable to commercial carriers, as well as to the regulations of the [DON](#). Refer to [paragraph 2-6.1](#) for guidance on the use of government-owned vehicles to move DOD cargo one-way distances greater than 100 miles.

5-7.1. REQUIREMENTS FOR MOTOR VEHICLES. The requirements and prohibitions outlined in the following paragraphs shall be observed when accepting or assigning motor vehicles for use as carriers of A&E off-station. Every motor vehicle transporting A&E off-station must either have a closed body or have the load covered with a fire and water resistant tarpaulin(s). The requirements for the use of a tarpaulin will be annotated on the bill of lading (BL). The tarpaulin will be securely fastened to the vehicle by rope or wire tiedown so as to fully protect the vehicle from sparks, fire and moisture. Refer to [NAVSEA SW023-AG-WHM-010](#) for on-station tarpaulin requirements.

#### **CAUTION**

No motor vehicle with a glass window molded into the cargo area or bed cover may be used to transport AA&E in the public domain.

5-7.1.1. Use of Compressed Natural Gas (CNG) Powered Vehicles. Motor vehicles using compressed natural gas (CNG) for propulsion fuel may be used to transport AA&E both on-station and off-station providing the following safety requirements are met:

a. The design and installation of CNG engine fuel systems shall comply with the [National Fire Protection Association \(NFPA\)](#) Standard 52 "Vehicular Gaseous Fuel Systems Code".

b. All CNG fuel system components shall be approved by the [American Gas Association \(AGA\)](#), [Compressed Gas Association \(CGA\)](#) or equivalent.

c. Fittings used in the plumbing of CNG dual fuel vehicle systems shall be in accordance with the following documents:

- (1) NFPA National Electric Code (latest edition)

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- (2) NFPA 52 "Vehicular Gaseous Fuel Systems Code (National Fire Codes, Volume 2)".
- (3) ANSI/ASME B31.1 "Power Piping"
- (4) ANSI/AGA NGV2 "Basic Requirements for Compressed Natural Gas Vehicle (NGV) Fuel Containers, (latest edition)".
- (5) CSA/AM NGV3.1 "Fuel System Components for Natural Gas Powered Vehicles (latest edition) (CGA12.3-M95)".
- (6) DOT Federal Motor Vehicle Safety Standard 304, "Compressed Natural Gas Fuel Container Integrity".

d. Cylinders/storage tanks shall be inspected in accordance with the following CGA guidelines and maintained per the manufacturer's recommendations:

- (1) CGA C-6 "Standards for Visual Inspection of Steel Compressed Gas Cylinders"
- (2) CGA C-6.1 "Standards for Visual Inspection of High Pressure Aluminum Compressed Gas Cylinders"
- (3) CGA C-6.2 "Guidelines for Visual Inspection and Re-qualification of Fiber Reinforced High Pressure Cylinders".

e. A CNG peculiar fuel systems inspection checklist shall be developed and inserted as an addendum to existing motor vehicle inspection checklists.

f. A pre- and post-operational safety inspection shall be performed using a detailed inspection sheet covering the following areas:

- (1) All pipe hold down straps/brackets, hardware, guides and clamps
- (2) Fittings/hose clamps
- (3) Loose and/or missing hardware
- (4) Cracked or worn hoses and pipes
- (5) Leaking hoses, pipes and fittings
- (6) Rust and corrosion

Personnel shall start the aforementioned safety inspection at the CNG fuel tank, and then continue the inspection until the entire system has been inspected. Any defects found during the inspection shall be reported in accordance with local instructions.

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g. CNG powered vehicles shall not be refueled within 100 feet of A&E.

h. A&E shall be separated from the CNG tank by a steel bulkhead that is reinforced to prevent accidental cargo impact against CNG tank or fuel lines.

i. All CNG fuel tank covers on both enclosed and open vehicles shall remain open to the public atmosphere at all times to prevent methane gas build-up in the CNG tank storage area.

j. Heavy-duty plastic casing must be tested for electrostatic discharge (ESD) propensity. In the event that test results indicate a positive ESD propensity, measures must be adopted to alleviate the potential hazard.

5-7.1.1.1. Fuel Type Restriction. Liquefied petroleum gas (LPG), propane or butane may not be in the same cargo space with A&E during transport. LPG, propane or butane may be used as a vehicle fuel source when it is in fuel tanks that are external to the cargo space and it complies with the vehicle safety requirements of [NAVSEA OP 5 Volume 1](#) and [NAVFAC P-300](#).

### **WARNING**

Plastic bedliners generate static electricity and are not authorized for use in the transport of scrap or bulk explosives in any container, or for the transport of any ammunition or explosive that is not packaged in its approved shipping container. Special care shall be taken to secure all cargo in vehicles with plastic bedliners because of the slippery nature of the liner surface. In addition, the filling of gas cans with flammable liquids while sitting on a liner in a truck bed is prohibited, as it has been identified as a cause of inadvertent ignition.

5-7.1.2. Cargo Space. The cargo space shall be constructed of fire-resistant or fireproof materials, and there shall be no exposed ferrous metal or sharply protruding metal (e.g., nails, screws, bolts, or any other object) that could endanger or damage the cargo. Floors shall not be permeated with oil, gasoline, or other combustible or corrosive material. If the vehicle is used to transport scrap or bulk explosives, the cargo space shall be covered in wood or other material which will not produce sparks or static electricity. If drop-in or sprayed-on plastic bedliners are used, A&E items shall be packaged in approved shipping containers that will prevent the escape of dust, material, etc. and protect from initiation by static electric discharge. Special care shall be taken to secure all cargo in vehicles with plastic bedliners because of the slippery nature of the liner surface. The doors of truck and trailer bodies shall be tightfitting, securely affixed to the hinges, and equipped with suitable latches and locks. The use of roll-up doors is permitted when rear blocking and bracing does not bear against the rear doors. The use of lights within van trailers hauling Navy explosive ordnance is authorized provided the following conditions are met:

a. Power to the van or dromedary is controlled by a switch within the trailer cab that displays a visual signal when power to the separate lighting circuit is energized.

b. A separate light switch is included in the van or dromedary. The switch must be recessed into the wall paneling of the van. Connections to the switch must be soldered and insulated to prevent potential shorts.

c. Wiring to the switch and lights must be contained within the van walls and can only be exposed where the wires leave the walls to connect with the lights.

Refer to [NAVSEA SW020-AF-HBK-010](#) for further details on cargo space inspection.

5-7.1.2.1. Temperature control devices. Conveyances which are to be used in the transport of A&E and are equipped with temperature control devices capable of heating and/or cooling the cargo area must be inspected according to the requirements of [49 CFR 177.834](#). The following criteria must be met when Class 1 A&E are to be transported in a conveyance with a temperature control device:

a. The temperature control device must be rendered inoperable by draining or removing the fuel tank and disconnecting the power source prior to loading. The transportation officer (TO) must inspect the vehicle to ensure compliance with this regulation, unless the load is transported under a DOT Special Permit or Competent Authority Approval (CAA).

b. If the above criteria are not met before loading, the shipment shall be rejected and the DD Form 626 shall be so annotated and specified as "heating unit" under item 12(t) "Other".

5-7.1.3. Stake-Side Trucks, Open-Top Semi-Trailers, and Soft-Side Trailers. Stake-side trucks and open-top semi-trailers shall have side and end members or gates of such strength and design as to securely contain all units or portions of the cargo under existing road conditions. Soft-side trailers (trailers with a permanent top, front and back with curtains constructed around the perimeters), stake-side trucks or open-top semi-trailers are suitable substitutes for standard flatbed trailers when used to load and transport large and long ordnance items, such as torpedoes and guided missiles. Consult the appropriate load drawing to verify the need for a flatbed trailer for each planned shipment of a large and long piece of ordnance. Soft-side trailers must meet the following conditions:

a. Trailers must have rubrails as prescribed in [MIL-STD-1320](#) (Navy).

b. Trailers must have forward bulkhead and nailable decks.

c. Trailer curtain must be fire and water resistant, and the curtain or its supports must not interfere with the proper positioning and tiedown of the load or be used in any manner as a method of load restraint.

d. The tarpaulins that are usually called out in the general notes of individual [MIL-STD-1320](#) slash sheets or approved NAVSEA drawings may be omitted when the soft-side curtain completely surrounds the load. However, any portion of the load that is still visible from the outside must be covered by fire and water resistant tarpaulins.

**CAUTION**

Stake-side trucks, open-top semi-trailers, or soft-side trailers shall not be substituted for enclosed trailers or vans when transporting palletized or non-palletized/unitized boxed ordnance (refer to [NAVSEA SW020-AF-HBK-010](#)). Soft-side trailer curtains and their supports are not designed to restrain cargo, as are the walls of enclosed trailers and vans, and do not provide the same level of security.

5-7.1.4. **Double Trailers.** Double trailers (doubles) may be used for the shipment of AA&E provided the following conditions are satisfied:

a. Delivery can be accomplished without transfer of the lading. TOs should refer to [table C-1](#) to ascertain that Military [Surface Deployment and Distribution Command \(SDDC\)](#) routings comply with state vehicle size and weight restrictions. In addition, the consignor will attach a statement to the carrier's copy of the BL or other shipping documents, declaring that transfer of the lading is prohibited unless required by reason of an emergency.

b. There is compliance with paragraphs 393.70 (a) through (c) of the [Federal Motor Carrier Safety Regulations](#).

c. The cargo in each trailer shall be compatible, but compatibility between the two trailers is not required except as indicated in [49 CFR 177.835\(c\)](#).

5-7.1.5. **Dromedaries.** Dromedaries are freight boxes carried on, and securely fastened to, the chassis of the tractor or on a flatbed trailer (see terms and abbreviations for a more complete definition). Some carriers provide the same service in small motor vehicles. All explosive items carried in the dromedary must be compatible, and in compliance with [49 CFR 177](#) or host nation regulations. However, non-compatible materials loaded on separate dromedaries are authorized. Refer to [NAVSEA SW020-AF-HBK-010](#) for further clarification.

5-7.1.6. **Motor Vehicle Precautions.** The following precautions pertain to motor vehicles used to transport AA&E:

a. Vehicles shall be operated with the same safety restrictions applicable to all motor vehicles with internal combustion engines.

b. In addition to daily pre-operational inspections, all motor vehicles shall be checked upon initial receipt and at intervals not to exceed 12 months or 12,000 miles, whichever occurs first. To avoid unnecessary downtime, the safety inspection shall be performed in accordance with [NAVFAC P-300](#) at the time of the manufacturer's recommended service and reliability inspection. This will ensure the engine is performing properly and meets the manufacturer's engine tune-up specifications.

c. Post the following statement on the dashboard of each Navy vehicle: "IF ENGINE IS RUNNING ROUGH (MISSING), RETURN THIS VEHICLE IMMEDIATELY TO VEHICLE

MAINTENANCE FACILITY FOR CORRECTIVE ACTION.” Ensure all motor vehicle operators are instructed to comply with this procedure.

d. Motor vehicles are prohibited from being operated within 100 feet of fuel storage areas and transfer operations, except service stations, where low-lying accumulations of flammable vapors or hazardous ignition-combustible-material sources are present. In addition, such vehicles will not be parked over any grassy area or unpaved surfaces which could be oil soaked.

5-7.2. **MECHANICAL CONDITION OF MOTOR VEHICLES.** The mechanical condition of vehicles to be used for transporting AA&E shall be inspected in accordance with the procedures outlined in [paragraph 3-7.1](#).

5-7.3. **SIZE AND WEIGHT LIMITS FOR LOADED MOTOR VEHICLES.** The size and weight limitations established by the various states for loaded motor vehicles and trailers are listed in [appendix C](#).

5-7.4. **DETENTION CHARGES.** Motor carriers frequently assess detention charges when their equipment is detained beyond a specified time at an installation. To prevent the accrual of such charges, the carrier's equipment must be loaded or unloaded and released promptly. For a detailed discussion of detention charges, refer to [DTR 4500.9-R](#).

5-7.5. **SHIPPER'S (CONSIGNOR) RESPONSIBILITIES.** The inspections and procedures that must be performed before, during, and after a vehicle is loaded with AA&E are described in this chapter and [NAVSEA SW020-AF-HBK-010 chapters 4 and 6](#). Motor vehicle drivers should participate in these inspections and must sign DD Form 626 whether the motor vehicle is accepted or rejected.

5-7.5.1. **Preloading Inspection.** Prior to loading, the shipping activity shall inspect all motor vehicles to be used for the transportation of placarded amounts of Class/Division 1.1 through 1.4 A&E. This inspection shall ensure compliance with safety regulations prescribed by the transportation regulatory agencies, [DOD](#) and [DON](#). The inspection shall be accomplished in accordance with items 1 through 17 of DD Form 626 ([figure 3-3](#)). Instructions concerning the preparation of DD Form 626 are given in [NAVSEA SW020-AF-HBK-010](#). Any item marked unsatisfactory shall be explained in the “remarks” column.

5-7.5.2. **Vehicles Previously Used for Poison.** A vehicle which has been used to transport material marked or known to be poison (Class/Division 1.1 through 1.3) must be inspected for contamination before reuse. A vehicle which has been contaminated must not be used until such contamination has been removed. This requirement does not apply to vehicles used solely for transporting poisons, provided they are used in that service.

5-7.5.3. **Unsatisfactory Vehicles.** If a vehicle is determined to be unsatisfactory, the vehicle shall not be accepted for loading, and the inspector shall appropriately mark the “rejected” block. (When the vehicle is rejected, additional copies of DD Form 626 must be made and distributed as described in [paragraph 3-7.1](#).) When available, photographs illustrating deficiencies on the equipment should be attached to the inspection report.

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5-7.5.4. Deficiencies Corrected. Vehicles shall not be rejected if deficiencies noted in the inspection are corrected before loading. In such cases, the deficiencies shall be entered in the “remarks” block of the report for the appropriate item.

5-7.5.5. Signatures. Before loading is started, the load inspector shall ensure that the first portion of DD Form 626 has been approved and signed by the shipping inspector.

5-7.5.6. Loading. During the loading operation, the work supervisor shall ensure that safe loading equipment and procedures are employed (see [NAVSEA SW020-AF-HBK-010](#)). The shipping activity shall ensure that incompatible items are not loaded together in the same shipment. [Table 5-1](#) presents the general compatibility requirements for loading and transporting A&E by motor vehicle or rail; [table 5-2](#) presents the compatibility requirements for Class 1 explosive materials. When A&E are loaded with inert commodities:

a. In a single vehicle consigned to a single destination, the shipping activity shall load the vehicle in such a manner that the A&E can be unloaded first at destination. The vehicle can then be moved to another area, if necessary, for unloading of the inert material.

b. In a single vehicle with shipments of compatible items consigned to two or more destinations, all of the A&E and inert material for each destination should be loaded so that each consignee may remove all of the material for that activity without having to handle materials consigned to other activities.

c. When A&E are loaded forward of inert material, a placard shall be placed on the inside of the van door which states “hazardous material forward.” In all cases, adherence to proper blocking and bracing procedures as required by the DOT, Navy MIL-STD's, WR's and approved NAVSEA drawings is mandatory.

**Table 5-1. General Compatibility Requirements for Hazardous Material Loaded on and Transported by Motor Vehicle Over Public Highway, or Loaded on and Transported by Rail**

Class or Division	Notes	1.1 1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3 gas zone A	2.3 gas zone B	3	4.1	4.2	4.3	5.1	5.2	6.1 liquids PG I zone A	7	8 liquids only
Explosives . . . . . 1.1 and 1.2	A	*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X
Explosives . . . . . 1.3		*	*	*	*	*	X		X	X	X		X	X	X	X	X		X
Explosives . . . . . 1.4		*	*	*	*	*	O		O	O	O		O				O		O
Very insensitive explosives . . . . . 1.5	A	*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X
Extremely insensitive explosives . . . . . 1.6		*	*	*	*	*													
Flammable gases . . . . . 2.1		X	X	O	X				X	O							O	O	
Non-toxic, non-flammable gases . . . . . 2.2		X			X														
Poisonous gas zone A . . . 2.3		X	X	O	X		X				X	X	X	X	X	X			X
Poisonous gas zone B . . . 2.3		X	X	O	X		O				O	O	O	O	O	O			O
Flammable liquids . . . . . 3		X	X	O	X				X	O					O		X		
Flammable solids . . . . . 4.1		X			X				X	O							X		O
Spontaneously combustible materials . . . 4.2		X	X	O	X				X	O							X		X
Dangerous when wet materials . . . . . 4.3		X	X		X				X	O							X		O
Oxidizers . . . . . 5.1	A	X	X		X				X	O	O						X		O
Organic peroxides . . . . . 5.2		X	X		X				X	O							X		O
Poisonous liquids PG 1 zone A . . . . . 6.1		X	X	O	X		O				X	X	X	X	X	X			X
Radioactive materials . . . . 7		X			X		O												
Corrosive liquids . . . . . 8		X	X	O	X				X	O		O	X	O	O	O	X		

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**Numbers and symbols shown in this table are defined as follows:**

The absence of any hazard class or division or a blank space indicates that no restrictions apply.

The letter "X" in the table indicates that these materials may not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation.

O - indicates that these materials may not be loaded, transported, or stored together in the same motor vehicle, railcar, or storage facility during the course of transportation, unless separated in a manner that, in the event of leakage from packages under conditions normally incident to transportation, commingling of hazardous materials would not occur. Notwithstanding the methods of separation employed, Class 8 (corrosive) liquid materials may not be loaded above Class 4 (flammable solid) materials or Class 5 (oxidizing) materials, except that shippers may truckload shipments of such materials together when it is known that the mixture of contents would not cause a fire or a dangerous evolution of heat or gas.

\* - indicates that segregation among different Class 1 (explosive) materials is governed by [table 5-2](#).

A - means that, notwithstanding the requirements of the letter "X," ammonium nitrate (UN 1942) (on public highway) and ammonium nitrate fertilizer (on public highway or rail) may be loaded or stored with Division 1.1 (Class A explosive) or Division 1.5 (blasting agents) materials.

When [49 CFR 172.101 table or 172.402](#) requires a package to bear a subsidiary hazard label, segregation appropriate to the subsidiary hazard must be applied when that segregation is more restrictive than that required by the primary hazard. However, hazardous materials of the same class may be stowed, loaded, and transported together without regard to segregation required for any secondary hazard if the materials are not capable of reacting dangerously with each other and causing combustion or dangerous evolution of heat, evolution of flammable, poisonous, or asphyxiant gases, or formation of corrosive or unstable materials.

**Table 5-2. Compatibility Requirements for Class 1 (Explosive) Materials Loaded on and Transported by Motor Vehicle Over Public Highway or by Railcar**

Compatibility Group	A	B	C	D	E	F	G	H	J	K	L	N	S
A		X	X	X	X	X	X	X	X	X	X	X	X
B	X		X	X <sub>(4)</sub>	X	X	X	X	X	X	X	X	4/5
C	X	X		2	2	X	6	X	X	X	X	3	4/5
D	X	X <sub>(4)</sub>	2		2	X	6	X	X	X	X	3	4/5
E	X	X	2	2		X	6	X	X	X	X	3	4/5
F	X	X	X	X	X		X	X	X	X	X	X	4/5
G	X	X	6	6	6	X		X	X	X	X	X	4/5
H	X	X	X	X	X	X	X		X	X	X	X	4/5
J	X	X	X	X	X	X	X	X		X	X	X	4/5
K	X	X	X	X	X	X	X	X	X		X	X	4/5
L	X	X	X	X	X	X	X	X	X	X	1	X	X
N	X	X	3	3	3	X	X	X	X	X	X		4/5
S	X	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	X	4/5	

(continued on next page)

## Numbers and symbols shown in this table are as follows:

A blank space in the table indicates that no restrictions apply.

For motor vehicles the letter "X" in the table indicates that explosives of different compatibility groups may not be carried on the same transport vehicle. For railcars the letter "X" indicates that explosives of different compatibility groups may not be carried on the same railcar unless packed in separate freight containers (e.g., two or more freight containers mounted upon the same railcar).

- 1 - means explosives from compatibility group L may only be carried on the same motor vehicle or railcar with an identical explosive.
- 2 - means any combination of explosives from compatibility group C, D, or E is assigned to compatibility group E.
- 3 - means any combination of explosives from compatibility group C, D, or E with those in compatibility group N is assigned to compatibility group D.
- 4 - means detonators and detonating primers, Division 1.4S (Class C explosives), may not be loaded in the same railcar with Division 1.1 and 1.2 (Class A explosive) materials as described in [49 CFR 174.819\(g\)\(3\)\(iv\)](#). Also, see [49 CFR 177.835 \(g\)](#) for restrictions of detonator assemblies, boosters with detonators, and detonators when transported on public highway.
- 5 - means Division 1.4S fireworks may not be loaded in the same motor vehicle or railcar with Division 1.1 or 1.2 (Class A explosive) materials.
- 6 - means explosive articles in compatibility group G, other than fireworks and those requiring special handling or stowage, may be loaded, transported, and stored with other explosive articles of compatibility groups C, D, and E, provided that no explosive substances (such as those not contained in articles) are carried in the same vehicle or railcar. See the Explosive Safety Terms and Definitions for definitions of "[article](#)" and "[substance](#)".

**5-7.5.7. Blocking and Bracing.** Personnel assigned to blocking and bracing tasks shall adhere to proper blocking and bracing procedures as required by DOT regulations, Navy MIL-STDs, Weapons Requirements (WRs), and approved NAVSEA drawings. Consult [MIL-STD-1320 \(series\)](#) for details concerning general procedures and practices applicable to truckload blocking and bracing of AA&E cargo. Consult [MIL-STD-1320 \(WR-51\)](#) and associated dash sheets for truckloading of specific kinds of AA&E. All training and dummy rounds, handling shapes, and other inert ordnance items which simulate tactical weapons shall be loaded, blocked and braced on motor vehicles according to the instructions applicable to the all-up tactical weapon. The complete index of [truckloading standards](#) is posted on the Explosives Safety Technical Manuals DVD. AA&E truckloading and cargo securement operations will be subject to customary outbound shipment inspection procedures according to [NAVSEA SW020-AF-HBK-010](#).

**5-7.5.7.1. Web Strapping.** Use of web strapping as a cargo tie-down option for A&E flatbed movements is permitted for approved truckloads only. Use of web strapping must comply with [NAVSEA Drawing 6214037](#). A&E loads authorized for web strapping are posted on the Explosives Safety Technical Manuals DVD along with the complete index of truckloading standards. Web strap criteria will be added as old truckload drawings are updated or new drawings are created. Additional detail regarding the use and inspection of web strap tie-down apparatus can be found in [NAVSEA SW023-AG-WHM-010](#).

5-7.5.7.2. Dromedary Loads. Loading and bracing of A&E in dromedary type containers shall be accomplished using the procedures specified in [U. S. Army Material Command Drawing No. 19-48-4252-11Q1000](#).

5-7.5.8. Placarding. All conveyances transporting A&E must be placarded in accordance with the requirements of [table 5-3](#) and [paragraphs 5-7.5.9 through 5-7.5.14](#) of this manual. [Title 49 CFR 172.504](#) presents additional placarding requirements and exceptions. A placarded conveyance must be transporting A&E and the placard must represent the hazard of the material being transported. Vehicles engaged in towing explosive-loaded bomb trailers shall display appropriate placards or a red flag.

5-7.5.9. Size and Shape of Placard. Each placard shall be diamond shaped with the overall dimensions, colors, height and stroke for the letters and necessary symbols as specified in [49 CFR 172.519 through 172.560](#). The placards required for each type of A&E shipment are listed in [table 5-3](#).

5-7.5.10. Location of Placards. The placards shall be in areas on the motor vehicle which have no other marking, lettering, or graphic display for at least 3 inches in each direction. The areas of display shall be at the front, rear, and on each side of the vehicle while it contains A&E. The front placard for a motor vehicle may be displayed on the front of either the truck, truck body, truck tractor or the trailer, but must be clearly visible when approaching the vehicle from the front. Each placard on a motor vehicle, portable tank or cargo container must:

- a. Be securely attached, affixed to, or placed in a holder which is made as recommended in [49 CFR 172](#). However, the holding device shall not obscure any part of the placard other than its border.
- b. Be located clear of any devices such as ladders, pipes, doors and tarpaulins.
- c. So far as practicable, be located so that dirt or water is not directed to it from the wheels of the transport vehicle.
- d. Have its print displayed horizontally, reading from left to right.
- e. Be maintained by the carrier so that the format, legibility, color and visibility of the placard will not be substantially reduced due to damage, deterioration, or obscurement by dirt or other matter.

No sign or other device that by its color, design, shape or content could be confused with any prescribed placard (DOT or IMO) may be attached or displayed on an A&E loaded vehicle, portable tank or freight container.

5-7.5.11. Placarding Loads Containing One Type of A&E. The A&E listed in section 1 of [table 5-3](#) requires the placards specified when transporting any quantity of that type of cargo. The A&E listed in section 2 requires the placards specified when transporting 1,001 pounds or more of that type of cargo, except when it is transported in portable tanks, cargo tanks or tank cars or when transported by air or water.

5-7.5.12. Placarding Combination Loads. A motor vehicle or cargo container loaded with two or more classes of materials requiring different placards specified in section 2 of [table 5-3](#) may be placarded DANGEROUS in place of the separate placarding specified for each of those classes of materials. When 2,205 pounds or more of one class of material is loaded at one loading activity, the placard specified in [table 5-3](#) for that material must be applied. No placard is required on a motor vehicle or cargo container transported by highway only, and containing less than 1,001 pounds (aggregate gross weight), of one or more of the materials listed in section 2 of [table 5-3](#). Shipments of Class/Division 1.1 through 1.3 explosives in the same vehicle containing any quantity and combination of A&E listed in section 1 of [table 5-3](#), such as Class/Division 1.1 and 1.2 explosives, Class/Division 1.2 and 1.3 explosives, poison 6.1 and/or radioactive yellow III labeled material, shall display all the appropriate placards as specified in [table 5-3](#). When two or more vehicles in tandem are transporting A&E, each shall be placarded according to its contents.

5-7.5.13. Placarding of Tank Motor Vehicles and Trailers. These vehicles shall be placarded in the same manner as described above, with the following additions:

- a. The placard shall not be displayed unless the vehicle is carrying a commodity classified as A&E.
- b. Tank motor vehicles transporting gasoline may be placarded GASOLINE instead of FLAMMABLE; however, a placard of the appropriate size, shape and color must be used.
- c. When flammable compressed gas is being carried, the tank motor vehicle shall be placarded FLAMMABLE GAS. When the gas is not flammable, the NONFLAMMABLE GAS placard shall be used. In each case the placard shall conform to [DOT](#) regulations.

5-7.5.14. Placarding Flatbeds. Appropriate placards shall be displayed on the vehicle on the front, rear and each side. The placards must not be applied directly to the material. If appropriate space is not available, placard holders must be used. Front placards must be visible when approaching the vehicle from the front.

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**Table 5-3. Placarding Requirements for Motor Vehicles and Railcars**

Category of material (Hazard class or division number and additional description, as appropriate)	Placard Name	Placard Design section reference (§)
<b>SECTION 1</b>		
1.1 .....	EXPLOSIVES 1.1.....	172.522
1.2 .....	EXPLOSIVES 1.2.....	172.522
1.3 .....	EXPLOSIVES 1.3.....	172.522
2.3 .....	POISON GAS.....	172.540
4.3 .....	DANGEROUS WHEN WET.....	172.548
5.2 Organic peroxide, Type B, liquid or solid, temperature controlled).	ORGANIC PEROXIDE.....	172.552
6.1 (inhalation hazard, Zone A or B) .....	POISON INHALATION HAZARD.....	172.555
7 (Radioactive Yellow III label only) .....	RADIOACTIVE <sup>1</sup> .....	172.556
<sup>1</sup> RADIOACTIVE placard also required for exclusive use shipments of low specific activity material and surface contaminated objects transported in accordance with para 173.427(a) of this subchapter.		
<b>SECTION 2</b>		
Category of material (Hazard class or division number and additional description, as appropriate)	Placard Name	Placard Design section reference (§)
1.4 .....	EXPLOSIVES 1.4.....	172.523
1.5 .....	EXPLOSIVES 1.5.....	172.524
1.6 .....	EXPLOSIVES 1.6.....	172.525
2.1 .....	FLAMMABLE GAS.....	172.532
2.2 .....	NON-FLAMMABLE GAS.....	172.528
3.....	FLAMMABLE.....	172.542
Combustible liquid .....	COMBUSTIBLE.....	172.544
4.1 .....	FLAMMABLE SOLID.....	172.546
4.2 .....	SPONTANEOUSLY COMBUSTIBLE...	172.547
5.1 .....	OXIDIZER.....	172.550
5.2 (Other than organic peroxide, Type B, liquid or solid, temperature controlled).	ORGANIC PEROXIDE.....	172.552
6.1 (Other than inhalation hazard, Zone A or B)	POISON.....	172.554
6.2 .....	(None).....	.....
8.....	CORROSIVE.....	172.558
9.....	Class 9 (see §172.504(f)(9).....	172.560
ORM-D.....	(None).....	.....

5-7.5.15. Inspection of Loaded Vehicle. Prior to releasing the shipment, the inspector shall complete DD Form 626, items 18 through 28, by checking the loaded vehicle in accordance with [NAVSEA SW020-AF-HBK-010](#). When DD Form 626 has been completed and signed by the shipping inspector and driver, sufficient copies shall be prepared to permit the following distribution:

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a. One copy shall be retained by the originating installation or activity making the inspection. This copy shall be filed with the appropriate BL covering the shipment.

b. The original shall be given to the vehicle driver at the originating installation and will be surrendered by the driver to the consignee.

c. When a commercial vehicle tendered for loading is rejected, or the driver of the vehicle is found to be unsatisfactory, a copy of the completed form shall be sent to each of the following:

(1) Nearest motor carrier safety field office of the DOT.

(2) Home office of the carrier concerned.

(3) SDDC Operations Center.

(4) Commanding Officer, NOSSA (N5). Marine Corps activities shall provide a copy to MARCORSSYSCOM (EES).

d. When deficiencies are discovered during the inspection but are corrected before loading, a copy of the inspection report shall be forwarded only to the home office of the carrier.

**5-7.5.16. Prohibiting Substitute Service.** Some tariffs provide for the use of “Substitute Service” whereby shipments may be diverted at carrier's option to another mode of transport without notice to the shipper. Use of substitute rail freight service [Trailer on Flat Car (TOFC)] by motor carriers is prohibited for shipments of Class/Division 1.1 through 1.3 A&E that are loaded, blocked and braced for movement by motor vehicle and that do not meet loading requirements prescribed for rail service. Transportation officers shall prevent such action by carriers by inserting in the “Via” space of the BL “Substitute service not to be used.” In case of emergency, such service may be used if approved by NOSSA (N5).

**5-7.5.17. Release of Loaded Vehicle.** Vehicles loaded with A&E shall not be released unless all containers are properly marked and labeled and the vehicle is correctly placarded, as described in [paragraph 5-7.5.8](#). In addition, the inspector shall verify that all required seals and seal notices have been applied as described in [chapter 8](#).

**5-7.5.18. Instructions to Drivers.** Written instructions must be furnished to drivers of Government vehicles that will be leaving the station with a cargo of A&E. These instructions shall be provided as described in [paragraphs 5-7.5.19](#) through [5-7.5.21](#). If a load comprises more than one type of A&E, the driver should be given the specific precautions applicable to the most dangerous class.

**5-7.5.19. Special Instructions.** DD Form 2890 ([figure 3-4](#)) contains general precautionary information and special instructions for military drivers in the event of accident, breakdown or fire. The same information is provided for commercial drivers on the front page of the BL. In addition, all drivers shall be instructed to observe the following precautions in the event of an accident:

a. The area around an accident site that contains unbroken or broken packages of A&E should be secured pending the arrival of competent authority.

b. Care shall be taken not to produce sparks.

c. In the event that a motor vehicle is entangled with another or with an object or structure, no attempt should be made to disentangle the vehicle until the load has been removed 200 feet from the vehicle or any habitation.

d. Inhabitants of other vehicles shall be warned of danger.

5-7.5.20. **Shipping Papers.** The shipping papers carried by the driver for delivery to the receiving activity may include one or more of the following forms (also refer to [paragraph 3-7](#)):

a. **BL.** The BL is the primary document used to procure freight transportation and related services from commercial carriers, including freight forwarders. For A&E shipments, the BL must contain a description of the hazardous material to include the proper shipping name, the item hazard class and division, the hazardous material identification number (UN number), the packing group, the net explosive weight of the material, the DOT special permit number (when applicable), emergency response instructions, and a shipper's hazardous material certification statement. See [49 CFR 172.200 thru 172.204](#) for detailed instructions. In addition, the BL shall have any applicable Security Risk Category (SRC) annotated in the "Marks and Annotations" block, and must include a description of the DOD mandated Transportation Protective Services (TPS) according to [DTR 4500.9-R, Chapter 205](#) (see also Chapter 8 of this manual). The two types of BLs used for DOD cargo shipments are the Government Bill of Lading (GBL) and the Commercial Bill of Lading (CBL).

(1) **GBL.** The GBL, SF Form 1103, ([figure 5-1](#)), is to be used for international freight/cargo shipments only. The pre-numbered forms are issued by the DOD. The SF 1103 will be used for a shipment into a foreign country that does not recognize DOD cargo that is documented on a CBL, or that requires a GBL for verification of DOD cargo. When appropriate, under certain shipping conditions, GBLs may be used for Foreign Military Sales (FMS) and Grant Aid shipments. Consult [DTR 4500.9-R, Chapter 206](#), for information on GBL applications, accountability, and for instructions on how to obtain copies of SF 1103 and SF 1109 (continuation sheet). Consult [DTR 4500.9-R, Appendix G](#) and Attachment G2 for GBL electronic data interchange (EDI) preparation and data requirements.

(2) **CBL.** The CBL, ([figure 5-2](#)), can be used for any freight/cargo shipment, regardless of quantity, size, valuation, and weight. CBL applications and accountability are addressed in [DTR 4500.9-R, Chapter 206](#). To date, no standard format has been assigned for the CBL. Consult [DTR 4500.9-R, Appendix G](#) and Attachment G4 for instructions on CBL preparation and data requirements in an electronic operating environment. A CBL can also be used for FMS and Grant Aid movements in accordance with [DTR 4500.9-R, Chapter 206](#) and Appendix E instructions.

b. Transportation Control and Movement Document, DD Form 1384. This form is used for shipments being moved within the DOD transportation system. See [figure 3-8](#) and [paragraph 3-7.7](#).

c. Material Inspection and Receiving Report, DD Form 250. This form is used for shipments from vendor to government installation. It provides for recording of inspection results, establishment of accountability and initiation of payment to vendor. See [figure 5-3](#).

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d. Issue Release/Receipt Document, DD Form 1348-1A. This form serves as a release document from distribution point to consignee, for retrograde material, for interstation movement of A&E, and as a receipt document for the consignee. See [figure 5-4](#).

Each motor vehicle loaded with Navy AA&E must have duplicate copies of all shipping papers, except DD Form 1907. These papers shall be placed in a waterproof envelope marked "shipping papers" and be nailed to the floor of the trailer at the rear end of the load, in a readily accessible location. These papers need only be placed at the rear end of trailers when it is known that the loaded trailer or dromedary will transport the material through to destination. This includes LTL shipments, which may move through to destination on the original trailer loaded by the shipper. For flatbed trucks, the envelope should be nailed to the floor. For closed vans or dromedaries, the envelope may be nailed to the floor, taped to the inside of the door, or placed in a document holder (if present) on the outside of the door. This requirement applies to truckload and dromedary shipments of Class/Division 1.1 through 1.4 A&E.

**5-7.5.20.1. Requirements for Shipping Papers.** The following information must be included in the shipping papers in accordance with the guidance provided in [49 CFR 172.202 thru 172.204](#) and [DTR 4500.9-R, Chapters 204 thru 206 and Appendix G, Attachments G1 through G4](#):

- a. The length of vehicle in feet and inches.
- b. The shipping description of the A&E as prescribed in [49 CFR 172.202](#). A further description, not inconsistent with the foregoing, may be added. Abbreviations shall not be used. When completing DD Form 1348-1(A), Block 16, the freight classification nomenclature shall consist of the proper shipping name and the UN identification number as specified in [49 CFR 172.101](#). This information is presented in table 3-1 of [NAVSEA SW020-AC-SAF-010](#).

### NOTE

When a hazardous material and a nonhazardous material are described on the same shipping paper, the hazardous material description must be entered first, or, in a color that clearly contrasts with any description of a nonhazardous material, or, must be identified by the entry of an "X" placed before the proper shipping name in the column captioned "HM".

- c. The total quantity of each kind of A&E by round count, weight, or volume.
- d. The number and type or kind of packages on the BL. For example: "6 Pallets (PLT), 2 Skids (SKD), 5 Containers (CNT), etc." Also, indicate the corresponding number of units per each type or kind of package. For example: "6 pallets of 24 boxes per each pallet; or 2 skids of 8 pieces per each skid."
- e. The item nomenclature. If the shipment is of limited quantity, the words "Limited Quantities" or "Ltd Qty" shall be added after the item nomenclature.

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U.S. GOVERNMENT BILL OF LADING INTERNATIONAL AND DOMESTIC OVERSEAS SHIPMENTS						B/L NUMBER	
TRANSPORTATION COMPANY TENDERED TO				SCAC	DATE B/L PREPARED		
DESTINATION NAME AND ADDRESS			SPLC (Dest.)	ORIGIN NAME AND ADDRESS			
			SPLC (Orig.)				
CONSIGNEE (Name and full address of installation)			GBLOC (Cons.)	SHIPPER NAME AND ADDRESS			
APPROPRIATION CHARGEABLE				BILL CHARGES TO (Dept./agency, bureau/office mailing address and ZIP code)		AGENCY LOC CODE	
VIA (Route shipment when advantageous to the Government)							
MARKS AND ANNOTATIONS							
PACKAGES		HM	DESCRIPTION OF ARTICLES (Use carrier's classification or tariff description if possible; otherwise use a clear nontechnical description.)	19. WEIGHTS* (Pounds only)	FOR USE OF BILLING CARRIER ONLY		
NO.	KIND				Services	Rate	Charges
			CLASSIFICATION ITEM NO.		TOTAL CHARGES		
TARIFF/SPECIAL RATE AUTHORITY				CARRIER WAY/FREIGHT BILL NO. AND DATE			
STOP THIS SHIPMENT AT		FURNISH INFORMATION ON CAR/TRUCKLOAD/CONTAINER SHIPMENTS					
FOR	SEAL NUMBERS		LENGTH/CUBE		MARKED CAPACITY		DATE FURNISHED
			ORDERED	FURNISHED	ORDERED	FURNISHED	
CARRIER'S PICKUP DATE (Year, month, and day)		APPLIED BY:					
MODE		ESTIMATE	NO. OF CLS/TLS	TYPE RATE	PSC	REASON	
This U.S. Government shipment is subject to terms and conditions of 41 CFR 102-117 and CFR 102-118.			CERTIFICATE OF CARRIER BILLING -- CONSIGNEE MUST NOT PAY ANY CHARGES				
			DELIVERED ON (Year, month, and day)				
FOR USE OF ISSUING OFFICE							
ISSUING OFFICE (Name and complete address)			GBLOC	ISSUING OFFICER			
			CONTRACT/PURCHASE ORDER NO. OR OTHER AUTHORITY			DATED	
FOB POINT NAMED IN CONTRACT							

\* Show also cubic measurements for shipments via air, truck or water carrier in cases where required.

AUTHORIZED FOR LOCAL REPRODUCTION

**STANDARD FORM 1103 (REV. 9/2003)**  
**Prescribed by GSA/FMR 102-118**

**FIGURE 5-1. SF 1103, U.S. Government Bill of Lading**



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[CLICK HERE TO REPRODUCE AND ANNOTATE THIS FORM](#)

MATERIAL INSPECTION AND RECEIVING REPORT						Form Approved OMB No. 0704-0248			
<p>The public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0248), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p style="text-align: center;"><b>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES. SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.</b></p>									
1. PROCUREMENT INSTRUMENT IDENTIFICATION (CONTRACT) NO.		ORDER NO.		6. INVOICE NO./DATE		7. PAGE OF	8. ACCEPTANCE POINT		
2. SHIPMENT NO.	3. DATE SHIPPED	4. B/L  TCN			5. DISCOUNT TERMS				
9. PRIME CONTRACTOR CODE		10. ADMINISTERED BY CODE							
11. SHIPPED FROM (If other than 9) CODE		FOB:		12. PAYMENT WILL BE MADE BY CODE					
13. SHIPPED TO CODE		14. MARKED FOR CODE							
15. ITEM NO.	16. STOCK/PART NO. (Indicate number of shipping containers - type of container - container number.)	DESCRIPTION	17. QUANTITY SHIP/REC'D*	18. UNIT	19. UNIT PRICE	20. AMOUNT			
						0 0.00 0.00 0.00 0.00 0.00 0.00			
<b>21. CONTRACT QUALITY ASSURANCE</b> a. ORIGIN <input type="checkbox"/> CQA <input type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.				b. DESTINATION <input type="checkbox"/> CQA <input type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.				<b>22. RECEIVER'S USE</b> Quantities shown in column 17 were received in apparent good condition except as noted.	
DATE _____ TYPED NAME: TITLE: MAILING ADDRESS:  COMMERCIAL TELEPHONE NUMBER:		DATE _____ TYPED NAME: TITLE: MAILING ADDRESS:  COMMERCIAL TELEPHONE NUMBER:		DATE RECEIVED _____ TYPED NAME: TITLE: MAILING ADDRESS:  COMMERCIAL TELEPHONE NUMBER:  * If quantity received by the Government is the same as quantity shipped, indicate by (X) mark; if different, enter actual quantity received below quantity shipped and encircle.					
<b>23. CONTRACTOR USE ONLY</b>   									

DD FORM 250, AUG 2000

PREVIOUS EDITION IS OBSOLETE.

**FIGURE 5-3. DD Form 250, Material Inspection and Receiving Report**



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i. The seal number(s) when DOD-approved seals are applied by the shipper. For SRC I, II or SECRET shipments, ensure RIN 347 is annotated on the BL. For shipments of SRC III, IV and CONFIDENTIAL, ensure RIN 348 is annotated on the BL. The following shall also be annotated:

“Shipper seal(s) applied. Carrier may remove seal(s) and replace with equivalent seal(s) on prior consent of consignor. If seals are broken in an emergency, notify consignor (name with duty and 24-hour non-duty telephone numbers) as soon as possible. Carrier must annotate seal changes on BL. Application of shipper seal(s) does not constitute a request for exclusive use of vehicle.”

Seals can be applied without prior consent of consignor for CONFIDENTIAL LTL shipments. In such cases, the words, “on prior consent of consignor” in the above annotation are not required.

j. A copy of the DOT special permit, attached to carrier’s copy of the BL, when a shipment is made under a DOT special permit. The BL shall be annotated with the permit number. The outside of each package must be plainly and durably marked with the special permit number assigned (see [paragraph 3-3.1](#)). When a shipment is made under a Certificate of Equivalency (COE), the COE number shall be shown on the BL. No copy of the COE is required to be provided by the carrier.

k. All commercial carrier vehicles intended for the transport of sensitive conventional AA&E will be inspected to ensure they are equipped with a functioning satellite transceiver for use in providing Satellite Motor Surveillance Service (see DD Form 626, item 14). The transceiver should have an attached or integral panic button that can be activated with a single stroke by the driver. The driver should be asked to confirm the above, and that the satellite display unit on the truck is currently registered with the Defense Transportation Tracking System (DTTS) and indicates "DTTS on". If any of the above are in question, DTTS can be contacted at 1-800-826-0794 for guidance/assistance. A DTTS monitoring system found to be defective must be corrected prior to loading. If the DTTS monitoring system cannot be repaired, the shipment will not be loaded on the vehicle.

l. The words “Dangerous When Wet” in association with the basic description when a package covered by such description is required to have DANGEROUS WHEN WET labels. These words shall also be entered on DD Form 2890, when required.

m. The consignor's and consignees' 24-hour emergency response telephone numbers and the telephone number of the Army Operations Center, the central point of contact to receive accident information.

n. The requirement for the use of a tarpaulin.

The driver of a motor vehicle containing AA&E and each carrier using such a vehicle shall have the shipping papers required by this manual readily available to authorities in the event of accident or inspection. The driver and carrier shall clearly distinguish the shipping papers (if they are carried with other papers of any kind), by either distinctively tabbing them or by having them appear first. When the driver is at the vehicle's controls, the shipping papers shall be within his/her immediate reach while restrained by a seat belt and either readily visible to a person entering the driver's compartment or in a

holder mounted to the inside of the door on the driver's side. When the driver is not at the vehicle's controls, the shipping papers shall be in the door holder or on the driver's seat.

5-7.5.21. Motor Vehicle on Vessel. If the loaded motor vehicle will require transportation by a passenger-carrying vessel, the driver shall be furnished a letter of identification signed by the commanding officer of the shipping activity. This letter, which is to be given to the master of the vessel, shall contain the carrier's name and motor vehicle license numbers (state and DOT) and shall be accompanied by a copy of the cargo document.

5-7.6. REGULATIONS APPLICABLE TO BOTH COMMERCIAL AND MILITARY SHIPMENTS. A motor vehicle which contains Class/Division 1.1 through 1.3 explosives, sensitive materials, or poison Class/Division 1.1 and 1.2 must be attended at all times by its driver or qualified representatives of the motor carriers that operate it. (Exception is made when the vehicles are barricaded on the carrier's property, which is enclosed by a security fence or when at a military activity under protection by the Government.)

5-7.6.1. A motor vehicle containing previously mentioned material must not be parked:

- a. On or within 5 feet of the traveled portion of a public street or highway.
- b. On private property (includes premises of a fueling or eating facility) without knowledge or consent of the person in charge of the property, who must be made aware of the A&E the vehicle contains; or
- c. Within 300 feet of a bridge, tunnel, dwelling, building, or place where people work, congregate or assemble.

5-7.6.2. According to [49 CFR 397.67\(a\) and \(b\)](#), a motor vehicle carrying a placarded load of A&E shall be operated over routes which do not go through or near heavily populated areas, places where crowds are assembled, tunnels, narrow streets or alleys, unless there are no practical alternatives. Refer to [NAVSEA SW020-AF-HBK-010](#) for further detail.

5-7.6.3. No person may smoke or carry a lighted cigarette, cigar or pipe on or within 25 feet of the following:

- a. A motor vehicle which contains Class 1 materials, Class 5 materials, or flammable materials classified as Division 2.1, Class 3, Divisions 4.1 and 4.2, or;
- b. An empty tank motor vehicle which has been used to transport Class 3, flammable materials, or Division 2.1 flammable gases, which when so used, was required to be marked or placarded according to [49 177.823 CFR](#).

5-7.6.4. The consignee or consignor must immediately report to [NOSSA \(N5\)](#) any of the following:

- a. Breaking of Navy seals and reason for such.
- b. AA&E shipments involved in accidents, regardless of dollar value.

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- c. Any delays in shipment which exceed 5 hours.

5-7.7. REGULATIONS FOR MILITARY VEHICLE SHIPMENTS ONLY. (Also refer to [NAVSEA SW020-AF-HBK-010](#).) In addition to the regulations that apply to all motor vehicle transportation of AA&E, certain regulations are applicable only to shipment by military vehicle. These regulations are discussed in the following paragraphs.

5-7.7.1. When transportation of AA&E or toxic gases are made by Government-operated motor vehicles, the commanding officer must assure the observance of all [DOD](#) and [DOT](#) regulations governing the shipment. Every reasonable precaution must be taken to ensure the safe movement of AA&E or toxic gases while in transit by motor vehicles on Government reservations and on public highways.

5-7.7.2. When approaching a railroad crossing, a full stop shall be made no less than 15 feet prior to the tracks.

5-7.7.3. Local civil authorities shall be consulted regarding the rules and regulations for the transportation of AA&E shipments through towns and cities prior to their release. These rules and regulations shall be strictly observed. Recommendations should be obtained regarding the best route to follow in order to avoid congested areas. If compliance with these laws is impractical, the matter shall be referred to [NOSSA \(N5\)](#) for decision. A moderate speed within posted limits shall be maintained and the vehicle kept under control at all times.

5-7.7.4. When AA&E is being transported by a convoy of vehicles, vehicles shall not become widely separated, but shall maintain a safe distance between them. Generally the safe distance is at least 300 feet, however, vehicles shall never be less than 50 feet apart.

5-7.7.5. Off-station shipments of AA&E using military vehicles will be made in accordance with [paragraph 1-7.3](#). No unauthorized person shall be permitted to ride on vehicles.

5-7.7.6. HERO SAFE ordnance may be transported in vehicles equipped with HERO certified electrical and electronic devices (to include cellular and satellite phones). The transmitting antenna must be 10 feet or more from the ordnance. Very low power hand-held devices may meet the exception criteria outlined in paragraph 2-2.2 of [NAVSEA OP 3565 Volume 2](#).

5-7.7.7. If a vehicle breaks down and cannot proceed to its destination, warning reflectors shall be posted. Both the shipping activity and the receiving activity should be notified immediately by the fastest available means. (Refer to [paragraph 2-8.5](#)) Vehicles containing AA&E shall never be taken into a garage or repair shop for repairs or storage.

5-7.7.8. Refuelings should be reduced to a minimum. The electric ignition system shall be turned off and the engine stopped during the refueling process. If the engine is equipped with a magneto, it should be grounded.

5-7.7.9. AA&E should be transported during daylight when possible.

5-7.7.10. Every shipment of AA&E shall be delivered to a person authorized to receive it, and a signed receipt for the cargo shall be obtained and returned to the shipper.

5-7.7.11. The various types of A&E and related fire safety precautions are presented in the North American Emergency Response Guidebook (ERG), DOT P5800.5. This document includes special firefighting instructions and minimum safe distances to be maintained by firefighters, firefighting apparatus, and the public in the event of a fire involving A&E. The applicable ERG guide numbers shall be provided with the DD Form 2890 for military drivers. For commercial drivers, the appropriate information shall be included on the front page of the shipping papers.

5-7.7.12. Motor vehicles used to transport A&E shall be equipped with fire extinguishers as specified in [NAVSEA SW020-AF-HBK-010](#). Safety procedures concerning the use of gasoline, diesel, or LPG-fueled motor vehicles near magazines or other buildings containing explosives are specified in [NAVSEA OP 5 Volume 1](#). Marine Corps activities shall comply with the additional requirements of [MCO 8020.10](#).

5-7.8. RECEIVER'S (CONSIGNEE) RESPONSIBILITIES. When a shipment of AA&E arrives at a military installation, the receiving activity is responsible for checking both the condition of the vehicle and the load, and for inspecting the vehicle prior to release. AA&E shipments arriving at DOD installation and activities during non-delivery hours shall be accepted by consignees and provided appropriate protection commensurate with the sensitivity category of the delivered items; refer to [paragraph 2-7.2\(a\)](#) for further guidance. The receiving activity must obtain the DD Form 2890 for military drivers or emergency response information and file it with incoming shipping papers. If a shipment of AA&E is delivered without a DD Form 2890 or emergency response information, the receiving activity shall report the fact under item 22 of DD Form 626. The inspection responsibilities of the receiving activity are discussed in detail in following paragraphs. General acceptance procedures are presented in [DTR 4500.9-R](#). Refer to paragraph 8-10 for additional security guidelines.

5-7.8.1. Vehicle Inspection. The inspections and procedures described in [paragraphs 5-7.8.2](#) through [5-7.8.7](#) shall be performed by the receiving activity when AA&E shipments are delivered to a naval installation.

5-7.8.2. Requirements. All vehicles containing Class/Division 1.1 through 1.4 A&E or poisons shall be inspected in accordance with DD Form 626 and [NAVSEA SW020-AF-HBK-010](#) before they are accepted for delivery. Refer to [NAVSEA SW020-AF-HBK-010](#) table 3-1 for inspection criteria for shipments consisting of Class/Division 1.4 A&E cargo. Any deficiencies noted in connection with items 12(g) through 12(t), and 18 through 24 of DD Form 626 must be corrected by the carrier before the vehicle is permitted to enter sensitive unloading areas. Vehicles shall be inspected in an area as close to the entry gate as possible, but sufficiently remote from station facilities to comply with the quantity-distance requirements of [NAVSEA OP 5 Volume 1](#). Marine Corps activities shall comply with the additional requirements of [MCO 8020.10](#). When unsatisfactory conditions are noted, the receiving activity shall prepare DD Form 626 and distribute it as indicated in [paragraph 5-7.5.15](#). However, if the deficiencies are corrected before unloading, a copy of the report shall be forwarded only to the home office of the carrier. Whenever possible, photographs illustrating major deficiencies of the unsatisfactory condition or equipment should accompany the inspection report.

5-7.8.3. Unsafe Loading. If the mechanical condition of a vehicle does not comply with all safety requirements and is considered unsafe, the vehicle shall be unloaded at a location designated by the station commander and the material transferred to a station vehicle to be delivered to its destination.

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5-7.8.4. Seal Procedures. Seals should be inspected in accordance with the instructions in [paragraph 8-10.1.1](#). If seals have been broken or replaced en route, the carrier shall be required to furnish a satisfactory explanation in writing. This information shall be transmitted to [NOSSA \(N5\)](#). Vehicles with broken or changed seals should be inspected with caution, since it must be assumed that there has been an opportunity for sabotage. In cases where sabotage or damage to the load or vehicle is suspected, the vehicle shall be moved to an isolated, approved location pending complete inspection of both the vehicle and the lading. If any suspicious items are found on the vehicle, the local security officer shall be notified immediately for appropriate action.

5-7.8.5. Load Inspection. The shipment shall be examined thoroughly for damage or impropriety in shipment. Preparation of SF 364 or DD Form 361 may be required as a result of inspection. These forms are discussed in [chapter 2](#). Procedures for the loss of classified or sensitive items en route are also presented in [chapter 2](#).

5-7.8.6. Removal of Placards. Placards shall be covered or removed when the vehicle no longer contains the article for which the placards are required, except in the case of tank motor vehicles used exclusively for transporting the hazardous material for which it is placarded.

5-7.8.7. Release of Unloaded Vehicle. Upon completion of unloading, all dunnage, placards, seals, seal notices and debris shall be removed from the carrier's equipment. The inspector shall verify by a detailed inspection that the carrier's equipment is free of all loose explosives, flammable materials, etc., in accordance with [NAVSEA SW020-AF-HBK-010](#).

### 5-8. RAILROAD SHIPMENT

The shipment of AA&E by rail is covered in [NAVSEA SW023-AK-SAF-010](#). Navy and Marine Corps TOs should also have access to current versions of [DOT](#) and the Federal Railroad Administration (FRA) regulations, [DTR 4500.9-R](#), and NAVFAC P-301, "Navy Railway Operating Handbook".

### 5-9. WATER SHIPMENTS

Shipments of A&E by water transportation shall comply with the following regulations:

- a. [49 CFR 176](#).
- b. Port and harbor regulations of the cities, states, or military installations affected.
- c. [Navy rules and regulations](#).

5-9.1. **SHIP SAFETY PRECAUTIONS**. NAVSEA OP 3221 shall be consulted regarding cargo handling of A&E when water transportation is involved. [NAVSEA OP 4](#) shall be consulted regarding shipment of A&E on board Navy vessels.

5-9.2. **SIGNALS**. A red (Bravo) flag shall be prominently displayed by all ships and craft engaged in A&E loading and unloading operations. Also, a Bravo flag shall be prominently displayed by all barges, lighters, and small boats while they are loaded with or are transporting A&E. At night, a red light shall be

used in place of a Bravo flag. Small boats engaged in operations (i.e. EOD, special warfare, amphibious landings) are exempt from this requirement during transit or while handling at training sites or operating areas.

5-9.3. **EXPLOSIVE ANCHORAGES.** Before Class/Divisions 1.1 and 1.2 A&E may be discharged from, loaded on, handled or restowed onboard a vessel at any place in the United States, the carrier must obtain a permit from the Captain of the Port (COTP) in accordance with the procedures in [33 CFR 126.01 thru 126.19](#). Exceptions to this requirement may be authorized by the COTP.

5-9.4. **STOWAGE ABOARD SHIPS, LIGHTERS AND BARGES.**

5-9.4.1. **Compatibility.** Segregation and stowage of Navy and Marine Corps Class 1 A&E aboard ships, lighters and barges shall be in accordance with the instructions and compatibility chart presented in [NAVSEA OP 4](#). A&E stowed as breakbulk cargo shall be separated according to the guidelines presented in [49 CFR 176.83\(c\)](#). Containerized A&E stowed onboard container vessels or on other types of vessels, provided these cargo spaces are properly fitted for permanent stowage of freight containers during transport, shall be separated as described in [49 CFR 176.83\(f\)](#).

5-9.4.2. **Forbidden Stowage.** Fuels or chemical ammunition shall not be stowed with rations or medical supplies. Fuels shall not be stowed with A&E. In addition, the following types of explosives shall not be shipped by water transportation:

- a. Fulminates or other detonating compounds in dry, bulk condition.
- b. Explosive compositions that may become self-reactive and/or may decompose when subjected, for a specified time, to a self-accelerating decomposition temperature, described in chapter 7.7 of the International Maritime Dangerous Goods Code, and determined by tests given in the United Nations Manual of Tests and Criteria, part II, chapter 28.
- c. Compositions containing an ammonium salt and chlorate.

5-9.4.3. **Approved Stowage.** Stowage of A&E aboard ships, lighters and barges shall be in accordance with the regulations listed in [paragraphs 5-9.4](#) and [5-9.5](#), and the requirements of NAVSEA OP 3221 and [NAVSEA OP 4](#). A&E cargo in lighters and barges shall be dunnaged, shored, braced, and stayed to eliminate any possibility of shift or movement. Other requirements pertaining to the stowage of A&E aboard lighters and barges are as follows:

- a. Unpalletized medium caliber and major caliber projectiles should be palletized using the proper pallet adapters whenever possible. Loose projectiles may be loaded on a lighter or barge using a pallet crate or projectile skipbox. Projectiles in the pallet crate or skipbox may be stowed vertically using “egg crate” type dunnage to separate and secure them, or they may be stowed horizontally base to base (or nose to nose) but separated and secured by wood dunnage.
- b. Major caliber powder charges in powder tanks shall be stowed horizontally in close contact and lashed or dunnaged to prevent damage and shifting.

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c. Boxes, tanks, drums, pallets, units, barrels, crates, and other containers of A&E shall be piled securely and orderly in the same manner prescribed for magazine stowage, and separated for the safest stowage compatibility.

d. Separate detonators shall not be carried in the lighter stowage space with other ammunition and explosives, but they may be carried in a small compartment, partitioned off from the cargo stowage space by steel bulkheads of not less than 3/8-inch plate, from the deck to the overhead (or separate plate ceiling), with an access door leading only from the outside of the lighter. Detonators shall be the last items stowed on a lighter and the first to be removed at ultimate delivery points. If stop-off is required, they are to be removed until other material is loaded or removed from the lighter.

e. Gasoline, flammable liquid, liquid oxidizers, liquid explosives, liquid hydrogen, compressed gases other than inert compressed gases, and concentrated liquid acids shall not be stowed or transported in or adjacent to the cargo space of lighters with A&E, except for prepackaged liquid missile and target propulsion units.

f. Containers of permitted liquids, including those in glass containers, shall be placed in leakproof pans containing noncombustible, absorbent material, such as clean, dry sand, to catch and hold any leakage or spillage of liquid. If the liquid is diluted acid or electrolyte, a layer of powdered limestone in a quantity sufficient to fully absorb the leakage shall be included to neutralize the acid.

g. Water-activated items of ammunition or chemicals must be transported in rubber-gasketed metal chests, located so that spray or moisture from leaking roofs, sides, or deck of the lighter, cannot cause ignition.

h. Gasoline and other fuel tanks of self-propelled lighters shall be isolated so that leakage to fuel into cargo spaces cannot occur, and the tanks cannot otherwise endanger the cargo.

i. Refer to [paragraph 5-9.5.6](#) for stowage of security sensitive items.

**5-9.5. REQUIREMENTS FOR LIGHTERS AND BARGES.** The following regulations apply to lighters and barges used in transporting or temporarily stowing A&E.

**5-9.5.1. Supervision.** A vessel loaded with A&E shall be under the supervision of competent persons who will constantly be on the alert to warn all approaching craft of danger.

**5-9.5.2. Maintenance Requirements.** Lighters for the transportation of A&E shall be covered, except as authorized below, and shall have doors, hatches, and strongbacks in place and in good repair. They shall be maintained at all times in a condition suitable for transporting A&E without exposure to sun, spray, or adverse weather conditions. When necessary, the commanding officer may approve the use of open lighters for the transportation of other types of ammunition (except water-activated types). However, fire-resistant and waterproof tarpaulins shall be provided to protect the ammunition from sun and spray, and ammunition shall be unloaded expeditiously on arrival at destination.

**5-9.5.3. Cleanliness.** Before loading A&E on lighters and barges, the craft shall be cleared of debris and flammable material and swept clean; exposed metal portions likely to damage ammunition or

containers shall be covered with wood. Bilges shall be inspected to ensure that they are reasonably free of water and flammables.

5-9.5.4. **Safety Instructions.** Lighters and barges shall be conspicuously posted with safety instructions for the handling of A&E aboard the craft.

5-9.5.5. **Emergency Equipment.** All lighters and barges loaded with explosive material shall conform to the international or inland rules of the road and to the civil and military regulations of the port. In addition, under conditions of unusual hazard or unusual security; these lighters shall be manned and additional equipment shall be supplied as necessary to provide maximum explosives safety. This equipment includes the following: a suitable anchor and ground tackle, a fog horn and bell, red "B" (Bravo) flags of the international code of signals, and all-round, fixed red lights, life jackets and life rings sufficient for the personnel embarked, firefighting equipment as appropriate, and any other equipment that special circumstances may dictate as necessary to reduce explosive and navigational hazards.

5-9.5.6. **Security.** Items that pose a security concern shall be loaded last onto barges or lighters and shall be the first to be unloaded. After the loading of a barge or lighter has been completed, and before departure, all doors and hatches shall be closed, strongbacks secured in place, and the lighters or barges sealed with car seals on doors, hatches, and other openings. Lighters and barges containing A&E shall be kept guarded or securely closed and locked except when required to be open for ventilation, cooling, inspection, or handling of the contents. During these situations a guard shall be posted to maintain security over the vessel's contents.

5-9.5.6.1. Vessels towing CONUS commercial barges that transport Navy AA&E in coastal waters shall be equipped with a HERO Safe satellite tracking device approved by the Defense Transportation Tracking System. These satellite transceivers will be programmed to provide automatic hourly self-positioning reports to DTTS as detailed in the [MFTURP-1](#). Additionally, each vessel will be equipped with satellite equipment to transmit coded messages to DTTS, as well as equipped with a panic button alert feature to provide emergency alerts to DTTS.

5-9.5.7. **Fire Safeguards.** On lighters or barges carrying A&E, cabins in which stoves are used must be protected in the following manner:

a. Wooden walls, partitions, floors, and ceilings must be covered with 3/4-inch fire retardant and water resistant plywood placed with joints staggered, and the exposed joints covered with No. 26 gage metal. This protection must also be applied to the doors.

b. The doors from the cabin into other areas must be self-closing, and must not lead directly into adjoining spaces containing A&E.

c. Heating units must be at least 18 inches from all partitions. A sheet-metal shield, 5-1/2 feet in height, must be positioned midway between the walls and the stove, and securely fastened to the floor and wall.

d. Heating units must be at least 6 inches from the floor of the cabin and should be supported either on legs, permanently and securely fastened to the stove and the floor, or on 6 inches of hollow tile securely fastened in place.

5-9.5.8. Approved Lighting. If artificial light is needed for examination or handling of A&E, only carefully placed electric floodlights, approved magazine electric lanterns, or Underwriters Laboratories' approved flashlights for specific hazardous locations may be used. Portable extension lights may be used. The lighting equipment must meet the standards of the National Electric Code NFPA Pamphlet No.70.

5-9.6. PASSENGER-CARRYING VESSELS. On commercial ships or other craft carrying passengers, transportation of AA&E as cargo, except small arms ammunition, is prohibited unless approved by the United States Coast Guard.

5-9.7. SHIPPER'S (CONSIGNOR) RESPONSIBILITIES. The shipping activity shall ensure compliance with the procedures in [paragraphs 5-9.7.1](#) through [5-9.7.7](#) when A&E are to be loaded on a vessel.

5-9.7.1. Preloading Inspection of Shipment. Shipments of military A&E shall be inspected before being offered for loading on vessels, barges, or lighters to ensure that they are properly packaged, marked and labeled in accordance with [DOT](#), [DOD](#) and overseas shipping requirements. (See [chapter 3](#) and [NAVSEA SW020-AC-SAF-010](#)). Any container in which military explosives or other A&E are packed for shipment by water shall be inspected by the person responsible for loading the vessel, lighter, or barge. Annotation of inspection shall be made on the Container Packing Certificate, DD Form 2781 ([figure 3-7](#)). The container shall be rejected if it shows evidence of failure, leaking of the explosive ingredient, mold, or dampness extensive enough to question the adequacy of the container. Questions regarding packaging of A&E should be directed to the Naval PHST Center, NSWC IHD Detachment Picatinny.

5-9.7.2. Preloading Inspection of Vessel. Any vessel to be loaded with military A&E at a naval shore installation must be inspected by a representative designated by the commanding officer of the installation prior to loading. This inspection shall ensure that the vessel is, in every respect, in safe condition for the receipt of the A&E as specified in applicable regulations. All magazines and holds must be clean and free of rubbish, discarded dunnage, and residue of previous cargo. Bilges, overhead deck beams, and strongbacks must be examined to ensure that they are free of previous cargo residue. Decks, gangways, and hatches that explosives must pass over or through shall be clean and free of all loose material or obstructions.

5-9.7.3. Segregation and Security of Cargo. Cargo that is being assembled ashore prior to the arrival of the vessel shall be segregated by points of destination if the available stowage space permits. A&E should not be left on a dock, pier, or similar structure, unless there is a proper guard or the material is under the cognizance of authorized persons, and then only for the minimum time necessary.

5-9.7.4. Cargo Working. Where ammunition handling operations are being conducted through a ship's hatch, the working of other cargo in the hold serviced by that hatch is prohibited.

5-9.7.5. **Discontinued Operations**. If the loading or unloading is not completed during the working day or if the operation is discontinued temporarily, precautions shall be taken to guard the A&E and to protect against fire. A crew of sufficient number shall be kept onboard ship in case of emergency.

5-9.7.6. **Night Operations**. A&E shall not be loaded on or discharged from a ship, lighter, barge or small boat at night except when required by the loading schedule or in an emergency. Approval from the activity commanding officer shall be obtained in these instances. When required at night, loading and/or discharging shall be conducted under safety supervision at an adequately lighted pier equipped with fire protection. Refer to [NAVSEA OP 5 Volume 1](#) for lighting, fire protection, and safety supervision requirements.

5-9.7.7. **Smoking Regulations**. Smoking is prohibited on or near any vessel at an explosives or ammunition loading pier where military explosives are being handled, loaded, or unloaded. Smoking areas may be designated upon arrival by competent authority, provided such areas are a safe distance from the vessel. "No Smoking" warning signs shall be posted during the handling, loading, or unloading of such cargo, and at least one such sign shall be located on the pier at a reasonable distance from the vessel.

5-9.7.8. **Lamps, Matches and Lights**. The following regulations apply to the use of the lamps, matches, lights, and similar material aboard vessels:

a. No flame-, heat-, or spark-producing devices shall be permitted where explosives or flammable materials, batteries, or battery charging lockers are located. Cigarette lighters, heaters, fires, welding tools, soldering irons, cutting torches and uncovered lights are included in this category.

b. On board vessels carrying explosives as cargo, the use of candles, kerosene lamps, or any other lamp or light with a flame is prohibited. A sufficient number of approved electric torches and electric lanterns will be provided for use in case of failure of normal ship's lighting.

5-9.8. **RECEIVER'S (CONSIGNEE) RESPONSIBILITIES**. The receiving activity shall comply with the requirements of NAVSEA OP 3221. In addition, the inspections described in the following paragraphs shall be performed before releasing the vessel.

5-9.8.1. Prior to unloading, the vessel and the cargo shall be inspected for evidence of sabotage and to ensure that no hazards exist that would interfere with the unloading of the cargo. The cargo should also be inspected to ensure that there are no missing or damaged packages. In the event a package is missing or damaged, a DD 361 shall be prepared.

5-9.8.2. When the cargo has been unloaded, the vessel shall be inspected to ensure that all debris, loose explosives, and flammable materials have been removed. If the inspection is satisfactory, the vessel can be released.

5-9.9. **FIREFIGHTING INSTRUCTIONS AND EQUIPMENT**. Fire prevention and firefighting procedures for vessels loading, unloading, or transporting A&E are set forth in [49 CFR 176.164](#).

## 5-10. AIR SHIPMENTS

The transport of hazardous materials by commercial air is governed by [49 CFR Parts 171-173 and 175](#). The [International Air Transport Association \(IATA\)](#) regulations echo the requirements of [49 CFR](#) for member commercial airlines. The regulations iterated in both [49 CFR](#) and [IATA](#) are in turn based on the [International Civil Aviation Organization's \(ICAO\)](#) Technical Instructions for the Safe Transport of Dangerous Goods by Air.

**5-10.1. AIR TAXI SHIPMENTS.** Air taxi service is performed by carriers certified by the Federal Aviation Administration (FAA) to engage in commercial air freight operations to transport AA&E. They operate light aircraft generally limited to shipments of 2,000 pounds and less. Only those operators who have been approved by [SDDC](#) to transport DOD material will be used. All incidents of unsatisfactory or unsafe operations involved in the movement of Class/Division 1.1 through 1.3 explosives and other dangerous articles must be reported immediately to the cognizant [SDDC](#) area commander as instructed in [DTR 4500.9-R](#). Copies of reports involving unsafe operations should also be forwarded to [NOSSA \(N5\)](#).

**5-10.2. USE OF COMMERCIAL PASSENGER AIRCRAFT.** Hazard Class 1 ammunition and explosive materials shipped by, for, or on behalf of the DON shall not be transported aboard commercial passenger aircraft. This standing rule includes those ammunition items classed as 1.4S, which, according to [IATA](#) and [ICAO](#) regulations, would otherwise be permitted for transport aboard commercial passenger aircraft.

**5-10.2.1. Exception criteria.** Exceptions to the commercial passenger aircraft restriction of [paragraph 5-10.2](#), for 1.4S materials only, may be granted on a case-by-case basis in response to circumstances that justify operational necessity. Each exception request must contain supporting justification and shall be submitted in writing to the Ammunition Director, NAVSUP Logistics Operations Center, formerly the Naval Operational Logistics Support Center (NOLSC) for review and approval. The following guidelines apply:

a. Component Command or Combatant Commander (COCOM) requirements for shipping 1.4S material via commercial passenger aircraft is necessary to support critical air operations. The urgency of the request will be confirmed by NAVSUP Logistics Operations Center.

b. NAVSUP Logistics Operations Center shall notify [NOSSA](#), via Email, prior to exercising the approval process to transport 1.4S items via commercial passenger aircraft.

c. NAVSUP Logistics Operations Center will evaluate all viable transportation options before approving transport of 1.4S items aboard commercial passenger aircraft. In the event that this is the only viable option, NAVSUP Logistics Operations Center will coordinate the use of the commercial aircraft.

d. All Class/Division 1.4S materials shall be in the approved packaging for the item being shipped. When shipping Class/Division 1.4S Cartridge Actuated Device/Propellant Actuated Device (CAD/PAD) material on commercial passenger aircraft under the NAVSUP Logistics Operations Center administrative approval process, any material that is normally packaged in a cardboard type box shall be placed in a metal, wood, or rigid plastic outer pack, with appropriate packing materials, to prevent damage to the cardboard box during shipment. If the normal outer packaging consists of wood, rigid

plastic, or metal, no additional outer pack is required. Similarly, if a wood, rigid plastic, or metal inner package is used inside the cardboard container, no additional outer pack is required. If a metal container is used, any standard metal ammunition can is sufficient for this purpose. If a wood container is used, the wood must be at least 3/8-inch thick plywood. Medium Density Fiberboard (MDF) is not an acceptable substitute for plywood and is not authorized for this purpose. If a rigid plastic container is used, its strength must be equivalent to 3/8-inch plywood.

- e. All applicable security provisions of [DTR 4500.9-R](#) will be followed.

Approval to ship Class/Division 1.4S material via commercial passenger aircraft shall be kept to an absolute minimum and used only when extremely time-sensitive delivery of the material is required.

**5-10.3. TRANSPORTATION TO AIR TERMINAL.** All motor vehicles used for transporting A&E to an air terminal shall be inspected, loaded, sealed and placarded in accordance with the regulations and procedures in [paragraph 5-7](#).

**5-10.4. SHIPPER'S (CONSIGNOR) RESPONSIBILITIES.** The responsibilities of the shipping activity with respect to inspections and release of the aircraft are described in the following paragraphs.

**5-10.4.1. Container Inspection.** Before release for air shipment, a shipping activity inspector shall inspect containers to ensure they are packaged, marked and labeled in accordance with [NAVSUP Pub 505](#).

**5-10.4.1.1. Air Eligibility Marking.** An additional "air eligibility" marking is required for A&E being transported by air in non-bulk packaging. The marking must include an aircraft within a circle and may include the words "air eligible" in conjunction with the mark. The marking must be placed adjacent to other required markings, and must be durable, legible and of a size relative to the package so as to be readily visible. Refer to [49 CFR 172.321](#) and [AFMAN 24-204/NAVSUP Pub 505](#) for "air eligible" guidance when prepping A&E for movement aboard military aircraft.

**5-10.4.2. Preloading Inspection of Aircraft.** The aircraft shall be inspected by the pilot or a designated crew member to ensure compliance with safety regulations prescribed by the [DOT](#). Discrepancies must be corrected before the aircraft will be accepted for loading. The inspection criteria is as follows:

- a. Aircraft shall be in a segregated or isolated area at a safe distance from inhabited buildings, aircraft movements, etc., as prescribed in [NAVSEA OP 5 Volume 1](#). Marine Corps activities shall comply with the additional requirements of [MCO P8020.10](#).

- b. During loading or downloading evolutions involving ordnance on rotary or fixed wing aircraft or arming/dearming (if required by the applicable aircraft ordnance handling manuals), the aircraft shall be grounded. Aircraft ground point resistance, testing and marking shall be in accordance with [MIL-HDBK-274\(AS\)](#).

- c. All switches in the aircraft shall be in the OFF position.

- d. Wheel chocks shall be in place.

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- e. Fire extinguishers of the appropriate type for the cargo shall be readily accessible.

5-10.4.3. **Loading Inspection.** During the loading, the inspector shall ensure safe loading equipment and procedures are employed.

5-10.4.4. **Inspection of Loaded Aircraft.** The inspector (if the aircraft is at the shipping activity) shall ensure that the load has been stowed according to the requirements of [NAVSUP Pub 505](#). He/she shall also check that the Shipper's Declaration for Dangerous Goods Form ([figure 3-5](#)) has been signed and affixed to the number one package in the shipment and that the certification portion of DD Form 1384 ([figure 3-8](#)) has been signed.

5-10.4.5. **Release of Loaded Aircraft.** Prior to release of aircraft, the commander shall receive and inspect shipping papers (TCMD, Shipper's Declaration for Dangerous Goods Form, and air cargo manifest), inspect load, and sign the air terminal file copy of the cargo manifest.

5-10.5. **RECEIVER'S (CONSIGNEE) RESPONSIBILITIES.** The responsibilities of the receiving activity with respect to inspections and the release of the aircraft are described in the following paragraphs.

5-10.5.1. **Inspection of Loaded Aircraft.** Before being accepted for offloading, aircraft carrying AA&E shall be inspected for compliance with the requirements specified in [paragraph 5-10.4.2](#).

5-10.5.2. **Load Inspection.** The shipment shall be examined thoroughly for damage or impropriety in shipment. Preparation of SF 364 or DD Form 361 may be required as a result of the inspection. (Refer to [chapter 2](#).)

5-10.5.3. **Release of Unloaded Aircraft.** The inspector shall verify that the aircraft is free of all loose explosives, flammable materials, or other debris prior to releasing the aircraft.

5-10.6. **FIREFIGHTING INSTRUCTIONS AND EQUIPMENT.** Air fields or terminals in which shipments of A&E are loaded, unloaded, or stored are responsible for fire and security protection. Applicable instructions and procedures are contained in [NAVSUP Pub 505](#). Specific firefighting instructions for commanders of aircraft containing A&E shall be provided on the air cargo manifest. This information shall be supplemented with the appropriate information from the DOT Emergency Response Guidebook (latest edition).

### 5-11. SHIPMENTS OF NON-DOD OWNED AA&E

Shipments of non-DOD owned AA&E through U.S. naval port facilities shall be coordinated through [NOSSA \(N5\)](#). The policy, responsibilities and requirements of this type of shipment are detailed in [NAVSEAINST 8023.2 \(series\)](#).

### 5-12. LOADING PROCEDURE FOR SHIPMENTS OF INERT COMMODITIES WITH A&E IN THE SAME RAILCAR OR MOTOR VEHICLE

Shipping activities making shipments of both explosive items and inert commodities in the same railcar or motor vehicle shall ensure the shipment is loaded to provide easy access for offloading of the

ammunition/explosives first. Adherence to proper blocking and bracing procedures, as required by [DOT regulations](#), Navy MIL-STD's (WR's), approved NAVSEA drawings, or the BOE Pamphlets is mandatory. The railcar or motor vehicle shall then be appropriately placarded as described in this manual.

### 5-13. LOADING AND UNLOADING OF LONG ORDNANCE ITEMS IN MOTOR VEHICLES AND RAILCARS

[MIL-STD-1320 \(Navy\)](#) and [MIL-STD-1325 \(Navy\)](#) are the applicable military standards covering truckloading and carloading of AA&E. The slash-number documents provide detailed instructions for specific items, including long ordnance items. In almost all cases, these documents specify that flatbed vehicles be used for long ordnance items. However, a few do authorize the use of closed equipment when flatbed equipment is not available and shipment is mandatory. The loading of long ordnance items in closed truck vans or box cars is authorized only when flatbed equipment is not available and shipment must be made because of military necessity. Blocking and bracing shall be as specified in the appropriate military standard. If existing truckloading and carloading military standards do not provide the necessary truckloading and carloading instructions, the shipping activity shall request direction from the [Naval PHST Center](#). Long ordnance items shall be loaded into closed equipment as specified by [MIL-STD-1320](#) and [-1325](#) and as follows:

- a. When loading long ordnance items into closed equipment, extreme care should be exercised in positioning the items into the vehicle. Approved end handling equipment should be used whenever available. Sliding by pushing or pulling over the floor or deck should be held to a minimum.
- b. When required to unload long items from a closed vehicle, it may be necessary to snake the item out. Particular care should be exercised to ensure that the chain or cable being used has an adequate safe working load for the weight of the item being snaked out and that the attachment is secure. Personnel should be cautioned to stand clear of the chain or cable during the snaking process. Do not use fiber or plastic rope for this procedure.

### 5-14. SEALING OF CARRIER'S EQUIPMENT

Whenever AA&E shipments are made, the carrier's equipment must be sealed with U.S. numbered seals, locks, and wire twists. This requirement applies to all classified shipments, full truckloads or carloads of Class/Division 1.1 through 1.4 A&E, and less-than-truckload and less-than-carload shipments when exclusive use of the railcar or vehicle is authorized. Sealing and locking requirements are detailed in [chapter 8](#) of this manual.

### 5-15. SHIPPING DYNAMITE

In general, dynamite is not considered a military explosive for use by naval units or facilities. Under certain specific conditions, [NOSSA](#) may authorize the shipment of dynamite at activities under its cognizance. Handling of dynamite shall be kept to a minimum. It shall not be moved over roller conveyors, and containers shall be carried by hand to avoid shock or friction. Packing and transportation of dynamite shall be in accordance with [DOT](#) regulations.

## 5-16. SHIPPING NON-REGULATED ITEMS

Non-regulated items contain a small amount of hazardous material, but not enough to warrant a hazard classification. Non-regulated items that contain explosives were formerly identified as "Ammunition, Non-Explosive" under the DOT system. These devices contain explosive substances in such quantity or of such character that their inadvertent or accidental ignition or initiation during transport shall not cause any effect external to the device, either by projection, fire, smoke, heat or loud noise. If an item is classified as non-regulated, "N.R" will appear in the "Haz Class" field of Table 3-1 in [NAVSEA SW020-AC-SAF-010](#). The "Remarks" field will provide further information specific to the hazardous material in the item.

**5-16.1. RESTRICTIONS.** Postal regulations prohibit use of the mail system for shipments of material containing explosives. Accordingly, even though an explosive item is considered safe and is classified as a non-regulated item, it shall not be shipped by mail, priority mail or parcel post.

**5-16.2. TRANSPORTATION.** Non-regulated items may be shipped by all modes of transportation, except for those prohibited by [paragraph 5-16.1](#). Proper precaution should be exercised when packaging, shipping, receiving, and handling non-regulated items, even if the container does not indicate any hazardous contents.

**5-16.3. SHIPPING DOCUMENTS AND MARKINGS.** Shippers of items containing explosives which have been classified as non-regulated by [NOSSA](#) shall comply with the following:

a. Mark, label or tag outer shipping container: "Contains a minimal amount of explosive. However, does not meet the definition of explosive for shipping purposes."

b. Shipping documents shall describe the material in accordance with appropriate freight tariffs and shall be annotated according to [5-16.3a](#).

## 5-17. GENERAL SHIPMENT ACCEPTANCE PROCEDURES

A receiving activity shall accept shipment when presented by the carrier and ensure all applicable documentation is in order. Containers must be properly marked or labeled. The cargo shall be unloaded and the carrier's equipment released as soon as possible to avoid detention charges. If the shipment arrives too late to be unloaded during normal working hours, the carrier shall be instructed to move the vehicle to a designated safe parking area. The driver or authorized carrier representative will be advised that responsibility for the shipment remains with the carrier until formal delivery has been made. General acceptance procedures are outlined in [DTR 4500.9-R](#). Specific inspection procedures are described in [paragraphs 5-7.8](#) and [5-9.7](#).

## 5-18. DAMAGED SHIPMENTS

Shipments of AA&E that are received in a damaged condition or are improperly packaged, packed, or loaded shall immediately be investigated and reported on SF 364 or DD 361, as applicable. Photographs should be submitted to supplement the report whenever possible. Details concerning the preparation of SF 364 and DD 361 are presented in [chapter 2](#).

## CHAPTER 6

### SAFETY REGULATIONS

#### 6-1. INTRODUCTION

It is imperative that personnel engaged in the handling, transportation, or storage of arms, ammunition, explosives and related hazardous material (AA&E) read, understand and strictly observe all safety standards, requirements and precautions applicable to their work or duty. Accidents usually result from failure to observe regulations, failure to understand hazards, or failure to take necessary precautions. In each case, the “failure” denotes human error, and human error denotes ignorance, specific carelessness, and poor judgement. Individuals must realize that when they do not comply with safety regulations, they endanger their own safety and the safety of others. In the Navy, safety responsibility follows the line organization.

6-1.1. SAFETY REGULATIONS. The mandatory safety rules and regulations specified in this publication, [NAVSEA OP 4](#), [NAVSEA OP 5 Volume 1](#), [NAVSEA SW020-AD-SAF-010](#) and [MCO 8020.10](#) are explicit. General historical and functional data about naval ammunition can be found in [NAVSEA SW010-AB-GTP-010](#). Additional safety regulations pertaining to the handling and shipping of ammunition, explosives and related hazardous materials (A&E) can be found in [49 Code of Federal Regulations](#), [NAVSUP Pub 505](#), and [NAVSEA SW020-AF-HBK-010](#).

#### 6-2. RESPONSIBILITY FOR SAFETY

The following responsibilities for maintaining safety at Department of the Navy (DON) activities shall be observed.

6-2.1. NAVAL ORDNANCE SAFETY AND SECURITY ACTIVITY. The [Naval Ordnance Safety and Security Activity \(NOSSA\)](#), in accordance with Chief of Naval Operations (CNO) and [Naval Sea Systems Command \(NAVSEASYS COM\)](#) directives, exercises general supervision over explosive safety throughout the Navy. This includes technical supervision over the safety of AA&E throughout shore activities and supervision over specific work by shore stations that involves preparing, handling, loading, shipping, storing and maintaining of AA&E.

6-2.2. COMMANDING OFFICER. The Commanding Officer (CO) at [DON](#) shore activities is solely responsible for the safety of his/her establishment. He/she shall take the same active, aggressive leadership in safety as is taken in other phases of command responsibility. In accordance with [OPNAVINST 8023.2 \(series\)](#) and [MCO 8023.3](#) for Marine Corps activities, it is a CO's responsibility to ensure the qualification and certification of personnel in his/her command who perform or supervise any ordnance and/or explosives operations.

6-2.3. **SUPERVISOR.** The supervisor must advise and train personnel so that they are constantly aware of the hazardous nature of their work. The supervisor must ensure that all employees are qualified and certified to perform the job assigned to them, and that their certification is current. Compliance with the safety regulations of this manual and [NAVSEA OP 5 Volume 1](#) relating to explosives handling must be enforced at all times.

6-2.4. **PERSONNEL.** Operating personnel are responsible for reading, understanding and strictly observing all safety standards, requirements and precautions applicable to their work or duty.

### **6-3. GENERAL SAFETY PRECAUTIONS**

This chapter covers the basic safety requirements, standards and practices to be observed when preparing, handling, loading/unloading, shipping and receiving AA&E. Everyone working with or near any form of explosives should realize that even the least sensitive explosives may detonate if subjected to imprudent or improper handling.

6-3.1. **HANDLING OF AMMUNITION AND EXPLOSIVES.** Complete understanding and strict observance of specified safety regulations are necessary when handling A&E. [NAVSEA OP 5 Volume 1](#) presents additional safety requirements and regulations.

6-3.1.1. A&E, whether in containers, in bulk, or loaded into projectiles, cartridges or ammunition components, shall be handled carefully to prevent shock or friction which could cause fire, explosion or damage to the material. These materials shall not be thrown, dropped, walked, dragged, tumbled over the floor or over other containers, or be otherwise subjected to shock.

6-3.1.2. Bulk explosives and ammunition in containers shall be handled carefully to avoid rupture of the containers or the container seams, and to prevent undue friction between containers. If any container is found in an unsatisfactory condition, its contents must be transferred to a proper container that is in material condition Code A in accordance with [NAVSUP Pub P-724](#). The container shall be properly relabeled.

6-3.1.3. A&E and their related components shall be carefully handled to avoid obliteration or defacement of the identification markings. Only safety hooks with “mousing” devices shall be used to handle ammunition. Bale hooks and similar devices shall never be used on ammunition or ammunition containers.

6-3.1.4. Special care must be taken with containers for fine-grained black powder or other finely granulated explosives to prevent leakage of the contents during handling.

6-3.1.5. Packing boxes having siftproof or waterproof linings shall be handled with care to prevent the liners from splitting.

6-3.1.6. Powder tanks, cartridge tanks, barrels, drums and kegs containing explosives shall never be rolled. When projectiles must be rolled, sufficient dunnage shall be laid down before the projectiles are rolled. The projectiles shall be kept under hand control at all times so they do not bump into each other

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causing arming of their fuzes, or damage or loosening of their windshields, caps, fuzes, tracers, bourrelets, rotating bands or identification markings.

6-3.1.7. Any evidence that AA&E have been roughly handled; dropped in excess of distances cited in [paragraph 6-4](#); or that any explosive material was exposed shall be reported promptly to the responsible officer or supervisor.

6-3.2. **SAFETY TRAINING AND CERTIFICATION.** Any repeated work, no matter how dangerous, is likely to become routine and to lead to carelessness. Constant alertness on the part of the employee and intelligent, close supervision by the supervisor must be maintained to prevent accidents in operations that involve AA&E. The two most important considerations in handling AA&E are safety and responsibility. Safety regulations should be made the subject of periodic and frequent instruction. All employees (military, contract, and civil service), new and experienced alike, should be indoctrinated in the necessity for strict compliance with safety regulations. Applicable regulations are discussed in [paragraphs 6-3.2.1](#) and [6-3.2.2](#).

6-3.2.1. Personnel involved in handling or transporting A&E shall be trained and qualified to perform their work expeditiously and safely. The supervisor shall instruct and train each employee under his/her immediate supervision in the work that the employee shall perform. The instruction may be given directly or through experienced operators, until the supervisor is satisfied that the employee is capable of performing the work safely. The instruction shall include complete information concerning magazine locations, loading/unloading procedures and areas, firefighting procedures, first-aid kits, personnel protective equipment, handling equipment, etc. The supervisor shall explain to all employees under his/her supervision the standard safety regulations and precautions that they shall follow and enforce. Refer to [NAVSEA OP 5 Volume 1](#).

6-3.2.2. Explosive handlers and operators shall be qualified and certified in accordance with the requirements presented in [NAVSEA OP 5 Volume 1](#) or [MCO 8023.3](#) for Marine Corps activities.

6-3.3. **SMOKING REGULATIONS.** Smoking shall be prohibited in any magazine, railcar, motor vehicle, or conveyance containing A&E, or anywhere operations that involve these materials are conducted. "No Smoking" signs shall be conspicuously displayed in all areas where smoking is prohibited. The commanding officer may authorize smoking within areas and buildings containing explosives at specified times and under specified conditions. Smoking shall not be permitted in vehicles on naval shore activities. Smoking shall not be permitted on ships berthed at piers or anchorages during loading or offloading operations, or when A&E are exposed on deck.

6-3.4. **TOOLS.** The regulations in [paragraphs 6-3.4.1](#) and [6-3.4.2](#) concerning the use of tools apply only where an explosive or explosive substance is not exposed. Where an explosive or an explosive substance is exposed, nonsparking (safety) tools must be used and the utmost care must be exercised.

6-3.4.1. In loading or unloading containers of bulk explosives and ammunition from or into railcars, motor vehicles, ship holds, piers, and other confined areas, steel spark-producing hand tools (other than saws, hammers, and pinch bars) shall not be used.

6-3.4.2. The use of steel strapping tools, strap cutters, and crimpers is authorized when steel straps are applied to or removed from pallets or containers of ammunition and explosives.

6-3.5. **UNSAFE CONDITIONS.** Any and all unsafe conditions or unsafe acts in or around magazines, operating buildings or explosives areas shall be immediately corrected, if possible, and promptly reported by employees to their immediate supervisor. The supervisor shall act positively to eliminate and prevent the recurrence of the potential accident hazards.

**WARNING**

Plastic bedliners generate static electricity and are not authorized for use in the transport of scrap or bulk explosives in any container, or for the transport of any ammunition or explosive that is not packaged in its approved shipping container. Special care shall be taken to secure all cargo in vehicles with plastic bedliners because of the slippery nature of the liner surface. In addition, the filling of gas cans with flammable liquids while sitting on a liner in a truck bed is prohibited, as it has been identified as a cause of inadvertent ignition.

6-3.6. **EXPLOSIVES LADEN CONVEYANCES.** The doors of all railcars, motor vehicles, or other conveyances containing A&E will be securely locked and continually guarded when on-station but outside a fenced, restricted area. The only exception is when it is necessary to open the vehicle for inspection or to handle the contents. In such cases, a responsible person shall be in charge of the conveyance. This rule does not apply to railcars or motor vehicles that are sealed for transit. All doors to railcars, trucks, or other vehicles containing explosives shall be securely closed when the car or vehicle is in motion. The vehicle cargo space shall meet the criteria of [paragraph 5-7.1.2](#), and the vehicle shall have the required load covering per [paragraph 5-7.1](#).

6-3.6.1. **Fuel Type Restrictions.** Refer to [paragraph 5-7.1.1.1](#).

6-3.7. **COMPRESSED GAS CYLINDERS.** Compressed gas cylinders shall not be rolled or used as rollers, supports, or for any other purpose than to carry gas. A direct flame should never be permitted to come in contact with any part of a gas cylinder. Gas cylinders shall be protected from objects that will produce a dent, cut or abrasion in the surface of the metal. Compressed gas cylinders shall not be placed in cargo compartments of motor vehicles transporting explosives. Other safety precautions include:

- a. Smoking shall be prohibited within 50 feet of compressed gas cylinder storage and “No Smoking” signs shall be conspicuously posted.
- b. Nonsparking tools shall be used in the vicinity of cylinders of flammable compressed gas.
- c. Containers of compressed gas shall be handled carefully to avoid striking them against solid objects. Common rope slings and electromagnets shall not be used for handling cylinders of compressed gas.

d. Do not refill cylinders unless such action is approved by the command or bureau concerned. Do not refill a container with a gas other than that for which the cylinder has been used.

Refer to [NAVSEA OP 5 Volume 1](#) for further information.

#### **6-4. REPORTING ACCIDENTS INVOLVING DROPPED AMMUNITION**

Any explosive ordnance material that is accidentally dropped 5 feet or more (2 feet for RAP projectiles) during handling shall be moved to a safe and secured area and reported to the nearest naval ammunition activity for disposition instructions. The report should include the following:

- a. Navy nomenclature of material.
- b. Method of packing (palletized, wood or metal container, etc.)
- c. Weight of material.
- d. Height of drop and circumstances involving same.
- e. Condition of packing after drop.

Disposal advice will be provided by the cognizant inventory manager. For Marine Corps activities, notify MARCORSSYSCOM for guidance and disposition of material.

#### **6-5. CHEMICAL TRANSPORTATION EMERGENCY CENTER (CHEMTREC)**

6-5.1. CHEMTREC provides emergency information concerning safety measures required in handling hazardous chemicals that are involved in accidents on the nation's highways, railroads and/or waterways. The CHEMTREC Association operates on a 24-hour basis, 7 days a week, with a nationwide telephone service that also accepts calls from outside the continental U.S.

6-5.2. The service is designed to protect emergency crews and the general public in dealing with chemical transportation emergencies. It has compiled data on thousands of chemicals and how they should be treated under emergency conditions. Concerning radioactive materials, CHEMTREC calls on the Department of Energy (DOE) for information. This information has been cross-referenced as to chemical name and the manufacturer's trade name. In addition, chemicals with similar emergency reaction characteristics have been grouped in appropriate categories.

6-5.3. CHEMTREC is not to be used as a source of general chemical industry information, such as how to locate a missing shipment; nor is it a policy agency. Drivers should not call CHEMTREC on problems other than chemical cargo emergencies. It is a source for providing assistance to official organizations concerned in chemical transportation emergencies, and is designed to provide immediate data on how to handle these emergencies.

6-5.4. In the event of a chemical transportation emergency, assistance may be obtained from [CHEMTREC](#) by telephoning 1-800-424-9300 in the U. S. and Canada; and (703) 527-3887 for calls

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originating outside the continental U.S. Callers should supply the name of the product and the nature of the problem. If more detailed information is required or if the product is unknown, as much of the following information as possible should be provided:

- a. Name of caller and return telephone number.
- b. Location of problem.
- c. Shipper or manufacturer.
- d. Container type.
- e. Railcar or vehicle number.
- f. Carrier's name.
- g. Consignee.
- h. Local conditions.

## CHAPTER 7

### PACKAGING AND TRANSPORT OF DISPOSABLE AMMUNITION, EXPLOSIVES AND RELATED HAZARDOUS MATERIALS (A&E)

#### 7-1. INTRODUCTION

This chapter presents guidance and procedures for the inspection, packaging and shipment of disposable ammunition, explosives and related hazardous material (A&E). Policy and procedures governing the disposal and demilitarization of ammunition, explosives and other dangerous articles (AEDA), including inert ordnance material are contained in [OPNAVINST 8000.16 \(series\)](#) and [OPNAVINST 8026.2 \(series\)](#). General regulations concerning the destruction, disposition, and intentional detonation of specific materials are contained in [NAVSEA OP 5 Volume 1](#) or [MCO P8020.10](#) for Marine Corps activities.

7-1.1. Routine disposal of A&E is a continuing requirement due to material becoming excess to requirements, obsolete or unserviceable. It is often necessary to effect emergency disposition of A&E due to the material becoming unusually sensitive as a result of damage, extensive deterioration or other causes.

7-1.2. Transportation of military munitions intended for disposal shall be coordinated by the Designated Disposition Authority (DDA) identified in [OPNAVINST 8026.2 \(series\)](#). Instructions for the transportation of Marine Corps assets from Navy activities, and Navy assets from Marine Corps activities, to designated demilitarization sites shall be provided by COMMARCORSYSCOM Program Manager for Ammunition (PMAM).

#### 7-2. PRE-SHIPMENT INSPECTION OF DISPOSABLE MATERIAL

Disposable material shall be thoroughly inspected prior to being released for shipment. The inspection will be conducted by qualified individuals consistent with quality assurance procedures to ensure that the material is safe for shipment and that packaging, labeling, marking, loading, blocking and bracing, and documentation is consistent with requirements contained in this manual and in [NAVSEA OP 5 Volume 1](#). Marine Corps activities shall comply with the additional requirements of [MCO P8020.10](#).

#### 7-3. INSPECTION OF SURPLUS OR SCRAP MATERIAL

Items, equipment or containers shall be thoroughly inspected prior to disposal as excess, surplus or scrap to ensure that any A&E, explosive devices or hazardous materials have been removed. Contaminated containers must be cleaned or offered for sale as “contaminated containers.”

## 7-4. CERTIFICATION OF SURPLUS EXPLOSIVES

The following policy and information applies to transportation safety certification of [Department of Defense \(DOD\)](#) sale of surplus A&E:

7-4.1. **SHIPPER/PURCHASER.** The shipper, as referred to herein, is the purchaser of the A&E. Since the material will not move under a Government or commercial bill of lading (GBL/CBL) on behalf of, for, or to the [DOD](#), the shipper will be the purchaser of the material.

7-4.2. **CERTIFICATION OF SURPLUS A&E.** Before shipment, successful bidders in [DOD](#) sales of surplus A&E must certify that the materials purchased are classified, described, packaged, marked, and labeled in accordance with the applicable requirements of [49 CFR 100-179](#). This certification is a requirement of the shipper, not the [DOD](#). A&E sold by the [DOD](#) in packages that are not marked in accordance with the requirements of the [DOT](#) may be shipped from [DOD](#) installations, if the [DOD](#) certifies in writing that the packagings are equal to or greater in strength and efficiency than the packaging prescribed in [DOT regulations](#).

7-4.3. **ARTICLE.** Defense Logistics Agency bid specifications for sale of A&E include an article, as required by [DOD Manual 4160.21-M](#), which in part reads:

“ARTICLE \_\_: TRANSPORTING HAZARDOUS MATERIALS. The transporting of hazardous materials is governed by DOT Hazardous Materials Regulations ([49 CFR 100-199](#)). Although the purchaser, as shipper, will have the responsibility to certify to the [DOT](#) that such hazardous materials are properly classified, described, packaged, marked and labeled and are in a condition safe to transport based on the purchaser's own examination of the material.”

7-4.4. **DOD CONTAINER SPECIFICATIONS.** Much of the A&E offered for sale by [DOD](#) agencies are packed in containers which are not marked according to [DOT](#) specifications. The container used by the [DOD](#), although not marked, is usually stronger than those containers specified by the [DOT](#) for the contents it holds. For example, Propellant, Solid, 1.1C and 1.3C, UN Numbers 0498 and 0499 respectively, can be packaged in inner paper kraft bags with wooden outer packaging according to [49 CFR 173.62](#). Containers normally used by [DOD](#) for this type of commodity are of a heavy, galvanized metal material which surpasses the minimum specification requirements and ensures protection of the A&E. It also provides a greater protection to the carrier and the public in general.

7-4.5. **DOT REGULATIONS.** The Hazardous Materials Board, under Docket No. HM-107, has amended [49 CFR 173.7](#) to permit subject material to be shipped in containers marked/or embossed with [DOT](#) specifications provided a certification from [DOD](#) (cognizant military agency) is supplied to the buyer/shipper certifying that the explosives are packaged in containers as prescribed in the [DOT](#) Hazardous Materials Regulations, or in containers of equal or greater strength and efficiency as required by the [DOD](#) regulations.

7-4.6. **DOT APPROVAL.** The Assistant Secretary of the Navy has directed that instructions be prepared to provide that appropriate certificates be furnished the purchaser (and [DOT](#) when surplus explosives are sold and are packed in military containers which meet the specifications of the [DOT](#), but

are not appropriately marked.) Commanding Officer, [Naval Ordnance Safety and Security Activity \(NOSSA\)](#) as the technical responsible command has been assigned the responsibility for such certification. Prior to offering any surplus explosives for sale, a review of the containers is made to assure that:

- a. They are marked or embossed with appropriate [DOT](#) specifications.
- b. They meet strength and weight limitations required by the [DOT](#).
- c. They are marked with proper shipping classification as specified in [DOT](#) regulations, [DOD Manual 4160.21-M](#), [OPNAVINST 8000.16 \(series\)](#) and [OPNAVINST 8026.2 \(series\)](#).

7-4.6.1. The Commanding Officers of Navy installations from which the surplus A&E will be shipped will be responsible for assigning qualified personnel for the examination and certification of the materials. The reliability of packaging will be made known by including in the Invitations for Bids (IFB) or other solicitations, a statement that the materials are in containers that either meet [DOT](#) specifications or are of equal or greater strength or efficiency. A&E belonging to a military service different from the service of the installation from which the sale is being made, will be examined and certified by that installation using the criteria of the owning service. If containers do not meet the preceding criteria, the addressee shall advise the [Naval Packaging, Handling, Storage and Transportation \(PHST\) Center \(G13\)](#) of the deficiency or reason the containers cannot pass required specifications. The following data shall be submitted:

- a. Type, Mk-Mod, stencilling and other details of the container.
- b. Condition of container and contents.
- c. Equivalent [DOT](#) container specification of container (if known).
- d. Photographs of container showing close-up of all sides, top and bottom.

7-4.6.2. After technical review of this data, and when warranted, the [PHST Center](#) will issue a letter certifying that the container is equal to or of greater strength than that specified by [DOT](#). After receiving [PHST Center](#) approval, the certification shown in [figure 7-1](#) will be prepared in duplicate for each shipment as required by [49 CFR 173.7a\(1\)](#). One copy shall be provided to the originating carrier and one shall be given to the shipper, who shall retain it for not less than one year. The Navy/USMC requires a third copy to be issued and retained by the Navy/USMC activity issuing the certification.

**CERTIFICATION OF PACKAGING FOR SURPLUS HAZARDOUS MATERIALS**

THIS IS TO CERTIFY THAT THE CONTAINERS USED FOR THE SURPLUS HAZARDOUS MATERIALS DESCRIBED ON THE BILL OF LADING NO. \_\_\_\_\_ DATED \_\_\_\_\_ ARE OF EQUAL OR GREATER STRENGTH AND EFFICIENCY THAN THE REQUIREMENTS OF THE DOT REGULATIONS AS STATED IN 49 CFR 173. \_\_\_\_\_ AND ARE IN PROPER CONDITION FOR TRANSPORTATION.

\_\_\_\_\_  
Date of Certification

\_\_\_\_\_  
Signature of Certifying Official

\_\_\_\_\_  
Station Identification

**FIGURE 7-1. Certificate for Packaging of Surplus Hazardous Materials**

NOTES:

1. The above certification will be typed, machine printed, or stamped on plain paper and issued in duplicate as required by [49 CFR 173.7a\(1\)](#). Each signature will be handwritten and true, not copied. The Navy/USMC requires a third copy to be issued and retained by the Navy/USMC activity issuing the certification.
2. Two copies of the certification statement shown above will be given to the shipper (or purchaser) of surplus hazardous materials at the time of shipment. One copy shall be provided to the originating carrier and the other retained for not less than one year. Only that material identified on the bill of lading will be certified at the time of shipment and prior to loading the transport vehicle(s).
3. The shipper paper number and date will be entered, together with the selection reference from [49 CFR 173](#) which is appropriate to these surplus hazardous materials and their packaging.
4. The certification will be dated and signed by the individual responsible for examining the condition of the packaging and for assuring that the packaging meets regulatory requirements.
5. Station identification will be shown under the certifying official signature. This identification will be the name of the station and the social security number, badge number and other identifiable verification of the certifying official.

7-4.7. **WAIVER OF CERTIFICATION.** The requirement for requesting a special certification from [NOSSA](#) is waived if the container is properly marked/embossed with the proper shipping name, is in good condition and meets the packaging requirements of [49 CFR 173 Subpart C](#). Under no circumstances are containers of surplus explosives to be reworked or the contents removed and repackaged without prior [NOSSA](#) approval.

## CHAPTER 8

### SECURITY REQUIREMENTS

#### 8-1. INTRODUCTION

This chapter establishes policies, procedures, and responsibilities applicable to the movement of arms, ammunition, explosives and related hazardous material (AA&E) by all modes of transportation within the continental United States (CONUS). The transportation protective services (TPS) prescribed in this chapter are minimum security standards applicable to the movement of SECRET, CONFIDENTIAL and sensitive shipments.

8-1.1. **SECURITY RISK CATEGORY (SRC).** The SRC relates to a Department of Defense (DOD) hazard and physical security control system whereby DOD-owned AA&E items are classified according to their level of inherent threat to public safety and/or security sensitivity. SRCs are assigned to AA&E items that have been identified as having characteristics that require them to be accounted for, stored, transported or otherwise secured and handled in a special manner to ensure their safety and integrity (see [table 8-1](#)). SRCs are defined in [DOD 5100.76-M](#) and [DTR 4500.9-R](#).

8-1.2. **CONTROLLED INVENTORY ITEM CODE (CIIC).** The CIIC provides a means for identifying DOD supply system items that have characteristics that require that they be accounted for, secured, segregated, or handled in a special manner to ensure their safeguard and integrity. The CIIC designates the degree of security assigned to an item (see [table 8-2](#)). CIIC's are defined in [DOD 4000.25-2-M](#) and [NAVSUP Publication 485](#).

8-1.3. **FORCE PROTECTION CONDITIONS (FPCONS).** Refer to [DTR 4500.9-R, Chapter 205](#), for in-depth information regarding minimum transportation security standards for shipments of SRC I through IV and UNCAT Division 1.1 through 1.3 AA&E moving under FPCONS in effect at points of origin and destination.

#### 8-2. SHIPMENT OF CLASSIFIED AND SENSITIVE CONVENTIONAL AA&E

Station officials, supervisors and operations personnel responsible for preparing AA&E for transport, loading aboard conveyances, conducting conveyance inspections, and shipping and receiving AA&E must exercise due vigilance in the execution of their AA&E transport obligations under varying FPCONS. Physical security criteria for the transportation of sensitive AA&E are specified in [DOD 5100.76M, Chapter 6](#), [OPNAVINST 5530.13 \(series\)](#), and [DTR 4500.9-R](#).

Table 8-1. AA&E Security Risk Categories (SRCs)

<p><b>SRC I EXAMPLES</b></p>	<p><b>MISSILES AND ROCKETS</b> Missiles and rockets in a ready-to-fire configuration, or jointly stored or transported with the launcher tube and/ or gripstock and the explosive round, e.g. REDEYE STINGER, DRAGON, Light Antitank Weapon (LAW) (66mm), Shoulder-launched multi-purpose assault weapon (SMAW) rocket (83mm), M136 (AT4) anti-armor launcher and cartridge (84mm).</p>	<p><b>AMMUNITION AND EXPLOSIVES</b> Complete explosive rounds for Category I missiles and rockets.</p>
<p><b>SRC II EXAMPLES</b></p>	<p><b>MISSILE AND ROCKETS</b> Missiles and rockets that are crew-served or require platform-mounted launchers and other equipment to function. Included are rounds of the tube-launched optically tracked weapon (TOW) and Hydra-70.</p> <p><b>ARMS</b> Light automatic weapons up to and including .50 caliber and 40mm Mk 19 Machine Guns. <b>NOTE:</b> Marine Corps activities will treat 25mm M242 (Bush Master) chain guns (and similar newly-developed weapons) as Category II arms if they are not mounted on secured vehicles.</p>	<p><b>AMMUNITION AND EXPLOSIVES</b> Hand or rifle grenades - high explosive and white phosphorus. Mines, antitank or antipersonnel (unpacked weight of 50 pounds or less each). Explosives used in demolition, C-4, military dynamite, and TNT with an unpacked weight of 100 pounds or less. Warheads for sensitive missiles and rockets weighing less than 50 pounds each. The binary intermediate "DF" and "QA" when stored separately from each other and from the binary chemical munition bodies in which they are intended to be employed. Refer to <a href="#">DOD Instruction 5210.65</a> for security requirements for other chemical agents.</p>
<p><b>SRC III EXAMPLES</b></p>	<p><b>MISSILES AND ROCKETS</b> Missiles and rockets that require platform-mounted launchers and complex hardware and software equipment to function, such as the HELLFIRE missile.</p> <p><b>ARMS</b> STINGER missile launch tube and gripstock. REDEYE missile launch tube, sight assembly, and gripstock. DRAGON missile tracker. Mortar tubes up to and including 81mm. Grenade launchers. Rocket and missile launchers, unpacked weight of 100 pounds or less. Flame throwers. TOW launcher, missile guidance set and optical sight</p>	<p><b>AMMUNITION AND EXPLOSIVES</b> Ammunition, .50 caliber and larger, with explosive filled projectile (unpacked weight of 100 pounds or less each). Incendiary grenades and fuses to high explosive grenades. Blasting caps. Supplementary charges. Bulk explosives. Detonating cord. Warheads for sensitive missiles and rockets weighing more than 50 pounds, but less than 100 pounds each.</p>

**Table 8-1. AA&E Security Risk Categories (SRCs) (Continued)**

SRC IV EXAMPLES	ARMS	AMMUNITION AND EXPLOSIVES
	Non-automated shoulder-fired weapons, other than grenade launchers. Handguns. Recoilless rifles up to and including 106mm.	Ammunition with non-explosive projectiles (unpacked weight of 100 lbs or less each). Fuses, except for high explosives as addressed above. Illumination, smoke, and CS grenades. Incendiary destroyers. Riot control agents, 100 pounds package or less. Ammunition not in another risk category above. Explosive compounds of sensitive missiles and rockets (except warheads). Warheads for precision-guided munitions (PGM) weighing more than 50 pounds (unpacked weight).

**Table 8-2. Security Risk Category (SRC)/Controlled Inventory Item Code (CIIC)**

SRC	CIIC	DEFINITION
I	1	HIGHEST SENSITIVITY. Non-nuclear missiles and rockets in a ready-to-fire configuration (e.g., HAMLET, REDEYE, STINGER, DRAGON, LAW, VIPER) and explosive rounds for non-nuclear missile and rockets. This category also applies in situations where the launcher (tube) and the explosive rounds, though not in a ready-to-fire configuration, are jointly stored or transported ( <a href="#">see note 1</a> ).
II	2	HIGH SENSITIVITY. Arms, Ammunition, and Explosives ( <a href="#">see note 1</a> ).
III	3	MODERATE SENSITIVITY. Arms, Ammunition, and Explosives ( <a href="#">see note 1</a> ).
IV	4	LOW SENSITIVITY. Arms, Ammunition, and Explosives ( <a href="#">see note 1</a> ).
	5	HIGHEST SENSITIVITY (SRC I). Arms, Ammunition, and Explosives with a physical security classification of SECRET ( <a href="#">see note 2</a> ).
	6	HIGHEST SENSITIVITY (SRC I). Arms, Ammunition, and Explosives with a physical security classification of CONFIDENTIAL ( <a href="#">see note 2</a> ).
	7	UNCLASSIFIED/UNCATEGORIZED ( <a href="#">see note 3</a> ).
	8	HIGH SENSITIVITY (SRC II). Arms, Ammunition, and Explosives with a physical security classification of CONFIDENTIAL ( <a href="#">see note 2</a> ).
	9	Controlled Cryptographic Item (CCI). CCI is secure telecommunications or information handling equipment, associated cryptographic component, or other hardware item which performs a critical communications security function. Items are unclassified but controlled, will bear designation "controlled cryptographic item or CCI".
	S	SECRET. Items coded "S", SECRET, will be shipped as required by <a href="#">DOD Directive 5200.1-R</a> which is incorporated in <a href="#">SECNAVINST 5510.36 (series)</a> . All other security protection during the life cycle shall be in accordance with the standards specified for SRC II items.
	C	CONFIDENTIAL. Items coded "C" CONFIDENTIAL, will be shipped and protected during the life cycle the same as for SRC III items. An exception is the REDEYE man portable missile system which shall be shipped and protected as a SRC I item.
	U	UNCLASSIFIED/UNCATEGORIZED ( <a href="#">see note 3</a> ).
	P	PILFERABLE ( <a href="#">see note 4</a> ).

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## Notes:

1. For storage inventory control guidance, see [NAVSUP P-724, chapter 6](#); for transportation protective service requirements, see [paragraph 8-6](#) and [DTR 4500.9-R, part II, chapter 205](#). Ammunition item assigned a demil code-demilitarization required prior to disposal.
2. Items will be stored and transported in accordance with the provisions of [DOD 5100.76-M](#) or [DOD 5200.1-R](#), whichever is more stringent. Ammunition item assigned a demil code-demilitarization required prior to disposal.
3. For storage inventory control guidance, see [NAVSUP P-724, chapter 6](#); for transportation protective service requirements, see [paragraph 8-6](#) and [DTR 4500.9-R, part II, chapter 205](#). Loss, theft, unlawful disposition, and/or recovery of an item in this category will be investigated in accordance with [DOD 4000.25-2-M](#) and [DOD 7000.14-R, Volume 12, Chapter 7](#). Ammunition assigned a demil code-demilitarization required prior to disposal.
4. Items that are easily concealed, especially subject to theft, and desirable for personal use or sale for profit. Transported same as CIIC "U" or "7" (see [DTR 4500.9-R, part II, chapter 205](#)). For storage inventory control guidance, see [NAVSUP P-724, chapter 6](#). Ammunition item assigned a demil code-demilitarization required prior to disposal.

## 8-2.1. SUMMARY OF SHIPPER/CONSIGNOR RESPONSIBILITIES.

- a. Transportation Officers (TOs) will conduct advance AA&E shipment planning to include:

- (1) effective liaison with the receiving activity (consignee) TO, carrier, and [Military Surface Deployment and Distribution Command \(SDDC\)](#) Operations Center to ensure the safe, secure and efficient transport of sensitive AA&E.

- (2) verification of destination activity hours of operation, after-hour delivery requirements, and secure holding capability (see [paragraph 2-7.2.1](#) for pertinent Transportation Facilities Guide instructions).

- (3) effective intra-station liaison with ammunition distribution and control personnel, conveyance load planners, shipping inspectors, and field operations supervisors to ensure that the AA&E annotated on shipment planning worksheets (SPW) and relevant Issue Release/Receipt Documents (DD Form 1348-1/-1A) matches the AA&E that is being prepared for shipment in all respects -- Navy Ammunition Logistics Code (NALC)/lot/serial no./condition code/quantity/etc.; and that the AA&E loaded aboard the conveyance in turn matches the SPW/DD Form 1348-1/-1A per the requisitioner's order.

- (4) verification that the safety and security sensitive information printed on the bill of lading (BL) accurately accounts for the AA&E prepped for shipment to include identification of the hazardous material, number of pieces in the shipment, gross weight and net explosive weight (NEW) of the lading, required TPS (see [paragraph 8-6](#)), emergency response instructions, conveyance seal number(s), special routing instructions for drivers, and hazardous material safe transport certification statement, etc.

- (5) coordination with station physical security personnel, destination TO, and carrier to ensure that the threat condition at origin, destination, and in-transit are properly assessed.

- (6) coordination with consignee and carrier -- especially with regard to SRC I and SRC II shipments -- to ensure that consignee holiday and weekend routines are taken into consideration when timing the release of the shipment at origin.

- b. TO will ensure that the AA&E shipment is properly routed to include:

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(1) completion of required route order processing through [SDDC](#) according to [DTR 4500.9-R, Chapter 202](#) (refer to [paragraph 8-9\(c\)](#)).

(2) determination of the Required Delivery Date (RDD) and annotation of that date on the BL.

(3) preparation and timely transmission of the Report of Shipment (REPSHIP) to the consignee. NOTE: The REPSHIP must be completed and sent prior to the shipment's departure. Refer to [paragraph 2-8.3](#) for further detail.

(4) timely entry of initial shipment data into the Defense Transportation Tracking System (DTTS), see [paragraph 8-6.4](#). Enter initial shipment data into DTTS prior to release of the shipment.

(5) determination of sensitive AA&E SRC and annotation of corresponding TPS on the BL (refer to [paragraph 8-9\(a\)](#) for further details).

c. Prior to departure, responsible station personnel will:

(1) Conduct final safety and security inspection of the shipment -- cargo, securement system, documentation, driver credentials, and conveyance serviceability. (Refer to [NAVSEA SW020-AF-HBK-010, Chapter 4](#) and [Appendix A](#), and [NAVSEA SW023-AK-SAF-010, Appendix A](#)).

(2) Attach security seals to cargo bay doors of conveyance and ensure that seal numbers are annotated on shipping papers.

(3) Ensure that the Signature and Tally Record (DD Form 1907) (see [paragraph 8-8](#)) is properly administered and a copy of the signed form is passed to the drivers.

(4) Ensure that drivers have a complete set of shipping papers to include the BL, DD Form 1907, DD Form 626, emergency response instructions, and route plan.

(5) Confirm operational status of DTTS system for AA&E shipments in the motor vehicle mode.

(6) Verify that proper TPS has been assigned for the shipment based on the corresponding cargo SRC and that the driver(s) understand the TPS obligations. Note special TPS requirements for SRC I and II shipments.

d. Monitor status of outbound AA&E shipments in-transit as required via effective liaison with receiving installation TO, DTTS, carrier, and [SDDC](#).

(1) Begin tracing of any shipment of classified or SRC I or II AA&E that is not received within 12 hours of the estimated time of arrival on the RDD; tracing shall begin within 24 hours for SRC III or IV shipments. The [SDDC](#) Operations Center shall be notified if the carrier cannot provide a reasonable explanation for the delay.

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e. Maintain a 24-hour, 7-days a week emergency preparedness capability in consonance with emergency response instructions annotated on the BL. [NAVSEAINST 8020.18 \(series\)](#) and [NOSSAINST 8020.18 \(series\)](#) are applicable.

### 8-2.2. SPECIAL CONSIDERATION FOR WATER SHIPMENTS.

a. AA&E will be transported via the Defense Transportation System using Military Sealift Command (MSC) controlled vessels or U.S. Flag vessels (with at least two ship's officers who are U.S. citizens accepting security responsibility). If none of the vessels described above are available, MSC may approve use of foreign flag chartered vessels provided:

(1) The carrier and ship's personnel are reasonably vetted in accordance with MSC established guidelines.

(2) MSC specifies security and accountability measures which will compensate for lack of direct U.S. control.

(3) There will be no port calls between departure port and port of destination.

(4) AA&E will not be left unattended after being offloaded, and will be taken into custody by U.S. personnel who will check the seals and the condition of the shipment.

b. Commanders at all levels will assess the threat and vulnerability to the AA&E cargo that is planned for transit through their AOR (Area of Responsibility). The threat/vulnerability assessment should take into account (1) the type of sealift assigned to the mission; (2) the extent of MSC control over the sealift; (3) the risk category of the AA&E cargo; and (4), the FPCON. Risk control measures include crew screening, use of electronic cargo and conveyance surveillance devices, embarked security, Fleet Anti-Terrorist Support Team (FAST) deployment, and combat escort.

c. Pre-stowage planning must consider safety and security concerns such as cargo compatibility and segregation, ordnance container locking and sealing capability, and SEAVAN/MILVAN stowage configurations to preclude ready access to container doors. Break-bulk cargo should be stowed in the following order of priority: (1) lockers, reefer boxes or deep tanks that can be locked and sealed; (2) bins that can be boxed solidly with plywood or other appropriate material, and stowed in the upper between decks of the hatches immediately fore and aft of the ship's house.

d. Specific locations of AA&E cargo, with any special considerations, will be indicated on the final stow plan and presented to the responsible ship's officer.

### 8-2.3. SPECIAL CONSIDERATION FOR SMALL SHIPMENTS OF SMALL ARMS, SMALL ARMS AMMUNITION, INERT ARMS AND MISSILE COMPONENTS.

a. Small Arms. Small quantities, 15 or fewer small arms (SRC II and IV and M-16 rifles), may be sent via registered mail (return receipt requested) when shipment size and weight meet U.S. Postal Service requirements. Small quantities, 15 or fewer, small arms may also be sent via commercial carrier

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with DOD Constant Surveillance Service (CIS), as the only required TPS, and when placed in a locked container. Cargo size and weight factors must meet the carrier requirements.

(1) An alternative option to transporting limited quantities of small arms weapons is the use of the Blanket Purchase Agreement (BPA) commercial express carriers. When shipping these small quantities of small arms weapons, the following requirements shall be adhered to:

- (a) Next Day Delivery is mandatory and will be ordered and used for all shipments.
- (b) Shipments will be shipped and received from any consignee within CONUS (including Alaska, Hawaii, and Puerto Rico).
- (c) Small quantities of 15 or fewer SRC II and SRC IV small arms weapons, weapons parts (CIIC 7 and N), barrels and major subassemblies (including silencers, mufflers, scopes, and noise suppression devices) are authorized. Small arms weapons include both SRC II and SRC IV small arms.
- (d) Contact destination activity prior to releasing the package to the DOD BPA carrier and verify the ability of the destination activity to receive next day delivery of the shipment.

b. Small Arms Ammunition.

(1) Small quantities, 150 pounds or less, of sensitive SRC IV small arms ammunition, Class/Division 1.4S, may be sent by commercial carrier providing CIS (as the only required TPS) and when placed in a locked container. Cargo size, weight, and safety factors must meet the carrier requirements. If the selected mode is less-than-truckload (LTL), each shipment must be overpacked to a minimum of 150 pounds. When placed in a closed and locked conveyance, locked container/dromedary (DROM) or similar equipment, the shipment does not require overpacking.

(2) An acceptable transportation alternative to CIS for small quantities of SRC IV small arms ammunition is to ship via a DOD Blanket Purchase Agreement (BPA) awarded carrier under the General Services Administration (GSA) Multiple Award Schedule and within the contract's size and weight limitations. The following conditions apply:

- (a) Ammunition must be less than 50 caliber.
- (b) Individual requisitions are limited to 4,000 rounds or less.
- (c) Ammunition will be packed in unit packages of 4,000 rounds or less, each package not to exceed 150 pounds.
- (d) No more than five packages or 20,000 rounds per each conveyance will be shipped and each package must be destined for a separate consignee.
- (e) Shipments via DOD BPA carriers do not require overpacking.

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(f) All other BPA contract conditions and IATA/ICAO Dangerous Goods regulations will be strictly adhered to.

c. Arms and Missile Components. Inert/non-hazardous arms and missile components will be afforded at least the same protection as SRC IV arms. NOTE: frames and receivers are to be treated as weapons and will be shipped according to applicable SRC requirements. Inert/non-hazardous arms and missile components may be sent via registered mail (return receipt requested) when the shipment size and weight meet U.S. Postal Service requirements.

### 8-2.4. OTHER AA&E TRANSPORT SECURITY MEASURES.

a. Where feasible, and in harmony with compatibility and routing constraints, consolidate individual LTL or less-than-carload (LCL) shipments and develop load plans consistent with truckload (TL)/carload (CL) movements.

b. Subject to the demands of operational necessity and as directed by higher authority, arms and ammunition of the same caliber shall not be loaded aboard the same container or conveyance.

c. AA&E will be transshipped in CONUS through DOD managed and operated air and water ports of embarkation/debarkation. Exceptions based on military contingency, tactical or emergency conditions will be conveyed to all concerned via [SDDC](#) per United States Transportation Command ([USTRANSCOM](#)) direction.

d. Ammunition, explosives and other dangerous materials scheduled for demilitarization and retrograde shipments shall receive the same protection as other shipments of AA&E.

e. Subject to the demands of operational necessity and as directed by higher authority, missile and rocket rounds shall be shipped separately from launch and control equipment.

f. Shipments of SRC I AA&E by all modes shall provide a continuous audit trail from shipper to consignee with advance certification of serial numbers of individual items and/or certified items. Two-man certification is required; i.e., each container must be checked by two responsible agents of the shipper and sealed and locked in their presence prior to delivery to the carrier. This rule applies at transshipment points and terminals whenever the shipment loses its original identity; e.g., when two or more shipments are consolidated into another container for further movement or if repacking is required.

8-2.4.1. Hinge/Hasp Requirements for Trailers, Straight Trucks, and Dromedary Boxes. Trailers, straight trucks and/or dromedary boxes used to transport sensitive conventional AA&E must have all door hinges and hasps installed to preclude removal when doors are closed and locked. Hinges and hasps shall be attached to doors by welding bolts or by riveting.

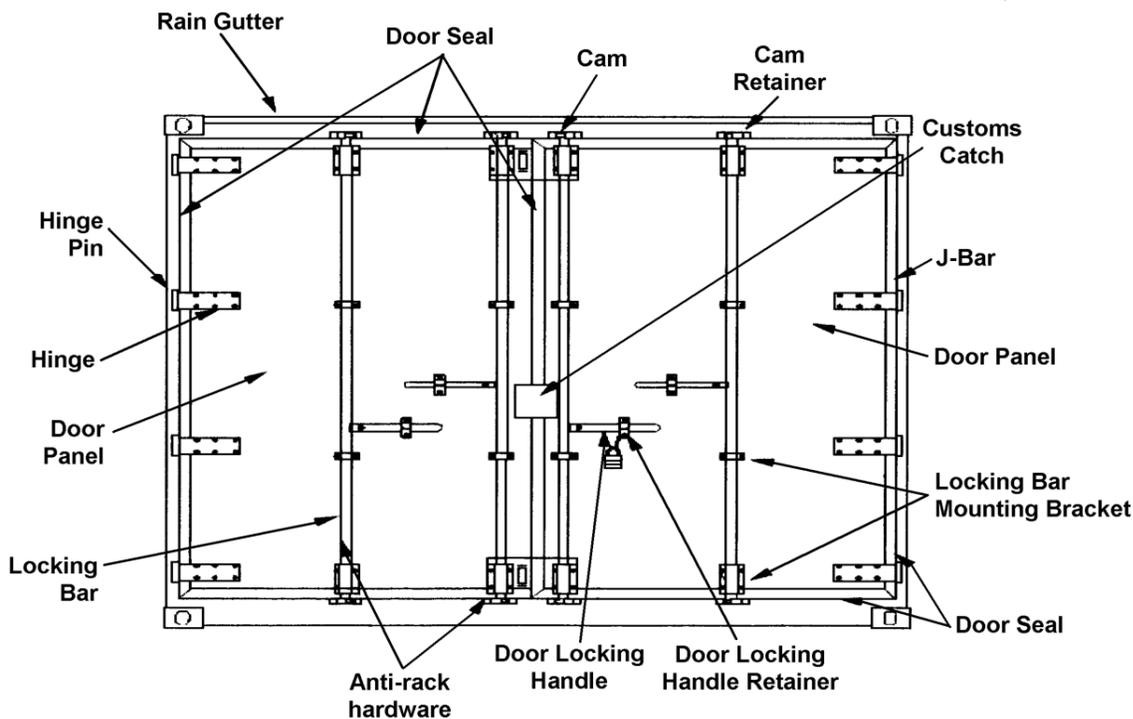
8-2.4.2. Door Hinges/Locking Hardware. For each door hinge, door level handle, seal plate, pin, and bottom cam guide to the lock shaft, a minimum of one bolt must be either welded or riveted in a manner to prohibit easy removal. A bolt may also be turned inward with the nut on the inside as long as the bolt is flush with the nut. The use of cotter-pin type fasteners for hinge pins is not acceptable, as this device is easily removed. A bolt/nut configuration that is welded offers a better alternative. This requirement applies to each hinge pin. Refer to [DTR 4500.9-R](#) for further detail.

### **8-3. SPECIAL (NUCLEAR) WEAPONS MATERIAL**

Shipments of special weapons material shall be made in accordance with the provisions of OPNAVINST C8126.1 (series) and Navy SWOP 45-51B.

### **8-4. SEALING OF SHIPMENTS**

When sensitive AA&E is loaded aboard closed conveyances (dromedary; ISO/MILVAN/ CONEX; motor vehicle trailer; boxcar), the shipper shall ensure that the doors to those conveyances are sealed with a DOD approved numbered (serialized) security seal (see [paragraph 8-4.5](#)). Seal numbers must be annotated on the BL. This standing rule applies to both TL and LTL/dromedary shipments. All AA&E shipments moving in MILVAN/ISO containers configured with a customs catch plate door design (see [figure 8-1](#)) shall have a security seal applied to both the left and right door. In these situations, both security seal numbers should be recorded on the BL. Refer to [DTR 4500.9-R](#) for further detail.



**FIGURE 8-1. Rear End Door Assembly with Customs Catch Plate**

**8-4.1. SPECIAL INSTRUCTIONS APPLICABLE TO THE ATTACHMENT AND REMOVAL OF SECURITY SEALS.**

a. Some shipments of sensitive AA&E may be shipped in accordance with exclusive use routing criteria. According to SDDC [Military Freight Traffic Unified Rules Publication \(MFTURP\) -1](#), exclusive use of vehicle or dromedary requires the carrier to devote the vehicle or dromedary exclusively to the delivery of a specified shipment. DOD approved security seals will be used to secure the doors of closed conveyances loaded with sensitive AA&E and being routed as exclusive use. If -- due to emergency or upon receipt of prior approval from the consignor or consignee -- the carrier has a need to remove a seal, then that carrier will immediately reseal the conveyance (trailer/dromedary) with an equivalent seal. The new seal numbers shall be annotated on the BL. Note that exclusive use of vehicle/dromedary does not constitute expedited service.

b. According to [DTR 4500.9-R, Chapter 205](#) and [MFTURP-1](#), the shipper must also attach a DOD approved security seal to sensitive AA&E shipments that do not require exclusive use. The carrier may remove the seal in an emergency or at stop-off points and replace it with an equivalent seal. New seal numbers must be annotated on the BL. Vehicle/DROM sealed either by the shipper or carrier does not necessarily mean that the conveyance is dedicated according to the terms of exclusive use. For example, a U.S. numbered security seal will be attached to the doors of a trailer that has been loaded to capacity -- no other cargo can be loaded aboard the trailer. The trailer doors will be sealed and the carrier

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is expected to move directly to destination within the RDD time allotted, separate from exclusive use and/or expedited service.

c. When the seal is replaced either by the carrier or by the TO at a stop-off point, the following information must be entered on the BL:

- (1) Name of person ordering the seal to be removed.
- (2) Replacement seal number.
- (3) Date and time replacement seal applied.
- (4) Reason for replacement.

8-4.2. **SEAL NOTICE.** A seal notice (NAVSUP Form 407) shall be completed by the shipping activity and attached near the cargo opening of any vehicle transporting SRC I, II and/or SECRET material. This notice ([figure 8-2](#)) provides pertinent information should the carrier need to request authorization from the consignor to break the security seals.

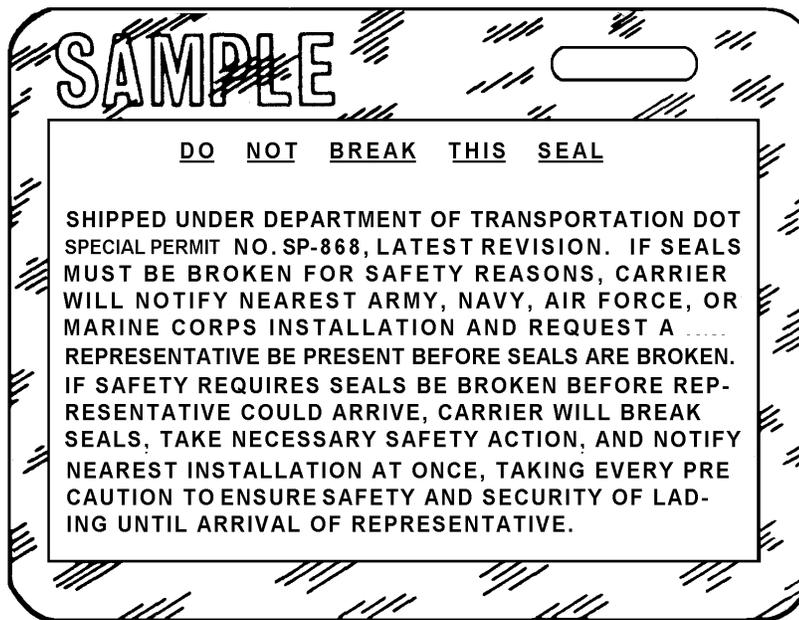
NAVSUP FORM 407 (REV. 10-78)			
<h1><u>NOTICE</u></h1>			
The Doors of This Car or Vehicle are Sealed with NAVY SEALS. The Seals are Not to be Broken nor the Car or Vehicle Entered (except in an extreme emergency) Without Prior Approval of the (Insert name and telephone number of shipping activity)			
GIVE ALL REFERENCES NOTED BELOW			
<b>REFERENCES</b>	Car or Vehicle Initial & No. No 272/276B ICC 47142	B/L No.	Trans. Control No. (if any) R00164-4140-0200
	Consignor NWC China Lake, CA		Origin China Lake, CA
	Consignee NSWC Dahlgren, VA		Destination Dahlgren, VA
	S/N 0108-LF-500-4070		

**FIGURE 8-2. NAVSUP Form 407, Seal Notice for Railcars or Motor Vehicles.**

8-4.3. **USE OF SEAL TAG.** When a shipment of DOD Hazard Class/Division 1.1 through 1.3 ammunition, explosive and related hazardous materials (A&E) is to be transported under the provisions of [DOT-SP-868](#), a waterproof seal tag shall be attached to the security seal. This tag will identify the shipment as being transported under [DOT-SP-868](#), and will provide guidance should the breaking of

seals be necessary to gain access to the cargo compartment. The tag ([figure 8-3](#)) shall be encased in or protected by transparent, waterproof material containing an eyelet through which the metal band of the seal will be threaded before the seal is attached to the load. Seal tags are no longer available through GSA; they must be locally reproduced to meet the necessary specifications for use.

8-4.4. **SEAL RECORD.** When seals are applied to commercial carrier equipment, the seal numbers, seal ownership, and the applying activity (carrier and shipper) shall be indicated in the appropriate spaces on the BL. When Rail Armed Guard Surveillance Service (ARG) and Rail Surveillance Service (RS) apply, shipper must report railcar initials and numbers to the appropriate [SDDC](#) area command to obtain Military Expediting (MTX) service.



**FIGURE 8-3. Waterproof Seal Tag Required for Classified Shipments**

8-4.5. **DOD APPROVED CONVEYANCE SEALS.**

The cargo access doors of closed conveyances used for transporting sensitive AA&E shall be secured with DOD approved serialized bolt seals (NSN 5340-01-260-9935). For additional security, a cable lock seal (NSN 5340-00-084-1570) may also be used. Refer to [DTR 4500.9-R](#) for further detail. Other security seals may be substituted provided they meet Federal Specification [FF-S-2738](#) (Seals, Antipilferage) requirements. The ball-type seal, embossed with the letters U.S. and serially numbered (NSN 5340-00-081-3381) may be used with a wire-twist security device (see [paragraph 8-4.6](#)) when bolt or cable seals are not readily available or when the door closure mechanism does not permit their use. Local, organic shipments of Class/Division 1.1 through 1.4 A&E may be transported using an approved field service padlock which meets [FF-P-2827](#), provided that the shipping activity's Standard Operating Procedures (SOP) reflects authorization for use of this alternative locking system. There are two models

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for this padlock; the 3/8" diameter shackle model 655 is assigned NSN 5340-01-380-9430; the 1/2" diameter shackle model 656 is assigned NSN 5340-01-380-9432. The following are DOD-tested and approved transportation security seals:

### NOTE

The security seals listed below may be procured from the Defense Supply Center, 700 Robbins Avenue, Philadelphia, PA 19111.

- a. NSN 5340-01-260-9935, Modified Rod-LOC II Seal (serialized bolt seal), Anti-Pilferage.
- b. NSN 5340-00-084-1570, Cable Lock Seal, Anti-Pilferage.
- c. NSN 5340-00-081-3381, Serialized Ball Seal, Anti-Pilferage.
- d. NSN 5340-01-237-7646, Tyden Car Ball Seal, Anti-Pilferage.
- e. NSN 5340-01-177-7405, Cone-LOC Seal.
- f. NSN 5340-01-380-9430, Field Service Padlock with 3/8" shackle, and NSN 5340-01-380-9432 Field Service Padlock with 1/2" shackle used with NSN 5340-00-081-3381, Serialized Ball Seal (local organic shipments only).

**8-4.6. WIRE SECURITY DEVICE (USED WITH THE BALL-TYPE SEAL LOCK).** A number 5, American wire gauge steel wire twist (or a wire cable of larger or equivalent thickness) together with a ball-type seal lock, will be used to secure door hasps if serialized bolt or cable seal locks are not available or cannot be used, according to [paragraph 8-4.5](#). Refer to [NAVSEA SW020-AF-HBK-010, paragraph 4-8.2](#) and [figure 4-6](#) for further detail and illustration.

### **8-5. BREAKING OR CHANGING U.S. NUMBERED CONVEYANCE SEALS IN-TRANSIT**

Upon being informed of an in-transit accident or incident involving a shipment of DOD owned AA&E, responsible AA&E transport personnel at both the origination and destination activities shall be prepared to respond expeditiously. Refer to [paragraphs 2-8.5](#) thru [2-8.5.2](#) for detailed instructions.

**8-5.1.** Upon arrival at the site of an accident or incident involving DOD owned AA&E, DOD first responders shall:

- a. Inspect the lading to ensure that no breach of security has occurred.
- b. Observe the transfer of lading.
- c. Extend technical assistance when requested by the carrier.
- d. Apply new numbered seals.
- e. Authorize continuation of the movement.

If the security of a shipment has been compromised, or if such is suspected, the CO of the installation involved shall immediately notify the nearest field office of the [Naval Criminal Investigative Service](#)

(NCIS) and [Naval Ordnance Safety and Security Activity \(NOSSA\) \(N5\)](#). The drivers shall remain with the vehicles to protect the lading until authorized military or Government representatives arrive.

8-5.2. For in-transit contingencies other than reported accidents and incidents, in the event that the carrier has need to break the seal of an AA&E loaded conveyance, that carrier shall follow the instructions annotated on the BL. If the AA&E cargo is being routed under the terms of exclusive use, expedited service or as a full-capacity load, these instructions will include the requirement for the carrier to contact the shipper or the consignee prior to removal of the seal. Upon receiving the necessary approval, the carrier may proceed to remove the seal. The newly applied seal number must be annotated on the face of the BL. See [paragraph 8-10.1.2](#) for discrepancies involving missing or changed seals.

## 8-6. TRANSPORTATION PROTECTIVE SERVICE (TPS)

The TPS reflects the minimum requirements applicable to the shipment of SECRET and CONFIDENTIAL AA&E as prescribed in [DOD 5200.1-R](#) and sensitive AA&E as prescribed in [DOD 5100.76-M](#). The carrier must use the appropriate TPS according to established FPCONs and the security policies and standards presented in [DTR 4500.9-R](#). All TPS are explained in [DTR 4500.9-R](#).

8-6.1. **COMMERCIAL CARRIERS.** The basic standards for off-station shipments within CONUS are set forth in [DTR 4500.9-R](#) for SRC I through IV AA&E, Class 1.1 through 1.4 A&E, and sensitive and classified materials. For Navy and Marine Corps activities, all SRC I movements off-station require the accompaniment of a Security Escort Vehicle (SEV) under all FPCON conditions (refer to [paragraph 8-6.6](#)), unless the SRC shipment is being transported in a box van trailer equipped with trailer tracking technology and the applicable sensors. SEV is required for SRC II under FPCON DELTA only. Shipments to be transported by commercial carrier will conform to the requirements listed in this manual and [DTR 4500.9-R](#). AA&E shipments by commercial modes within geographic locations outside of CONUS shall adhere as closely as practical to the standards in [DTR 4500.9-R](#). When comparable safeguards cannot be obtained from commercial sources, compensatory measures shall be taken to provide standards equivalent to those in [DTR 4500.9-R](#).

8-6.2. **ORGANIC AND UNIT MOVEMENTS.** Organic or unit movements will adhere as closely as practical to the commercial standards set forth in [DTR 4500.9-R](#), except that Satellite Motor Surveillance (SNS) is not required. Armed guard surveillance will be subject to local command policy based on the assessed threat and the need to safeguard mission integrity. An armed guard is required aboard Marine Corps installations for the movement of any amount of AA&E greater than individual issue. Refer to [OPNAVINST 5530.13 \(series\)](#).

8-6.3. **ACCOUNTABILITY DURING ON-STATION MOVEMENTS.** All transportation security criteria apply except that armed guards and SNS may not be required (see [subparagraphs 8-6.3.1](#) and [8-6.3.2](#)). Refer to [OPNAVINST 5530.13 \(series\)](#) for further guidance. On-station movement of SRC I and II AA&E by vehicles or other conveyances will not be started until entries are made in log books or production records, or until receipt forms have been initiated. The unit of measure will be the designated unit of issue for AA&E items. Receipt documentation will accompany the conveyance. For movement between areas, a procedure for continuously recording transfer of custody will be maintained using either the individual receipts, production records containing receipts, or log books. All documentation will include the amount and type of SRC I and II AA&E, date and time for transfer, and signature of person

receiving custody. Accounting for munitions containing bulk explosives, propellants or illuminants will start when and where the items become finished products.

8-6.3.1. Commercial Vehicles. All transportation security criteria apply except that SNS is not required. However, drivers of commercial vehicles must ensure that all DTTS obligations are satisfied with respect to shipment status. AA&E contained in commercial vehicles outside of restricted areas must be under constant surveillance.

8-6.3.2. Organic Vehicles. All transportation security criteria apply except that SNS is not required. On-station movements of A&E via organic vehicles may be conducted with one explosive driver. A&E contained in organic vehicles outside of restricted areas must be under constant surveillance. See [paragraph 1-7.3](#) for special instructions regarding varying on-station conditions.

8-6.3.3. Security, Safety and Other Requirements. [NAVSEA SW023-AG-WHM-010](#) (formerly NAVSEA OP 4461) provides safety and technical guidance on loading and dunnaging AA&E in or on motor vehicles used for on-station movements, and describes approved dunnage material which enhances security protection. [NAVSEA SW023-AK-SAF-010](#) provides the same information for railcars used for on-station movement of AA&E.

8-6.4. **DEFENSE TRANSPORTATION TRACKING SYSTEM (DTTS)**. DTTS is a satellite based automated electronic tracking system that is designed to monitor the status of in-transit highway shipments of DOD owned AA&E. First implemented in February 1989, DTTS contributes to the safe, secure and efficient highway transport of DOD AA&E by (1) providing a ready means of emergency first alert in the event of an accident or incident;(2) providing a real-time communication link shared by the primary parties to the AA&E shipment -- driver, carrier dispatcher, shipper, consignee;(3) facilitating carrier access to DOD approved secure holding facilities in response to in-transit contingencies;(4) providing a means for conducting real-time in-transit surveillance;(5) providing a real-time automated system for satisfying the [DTR 4500-9.R](#) mandated Report of Shipment (REPSHIP) requirement. DTTS' mission is derived from the standing joint-service Memorandum of Understanding (MOU) updated 16 June 2005. DTTS' policy and implementing procedures are addressed in [DTR 4500.9-R](#), Part II, Cargo Movement, and [MFTURP-1](#).

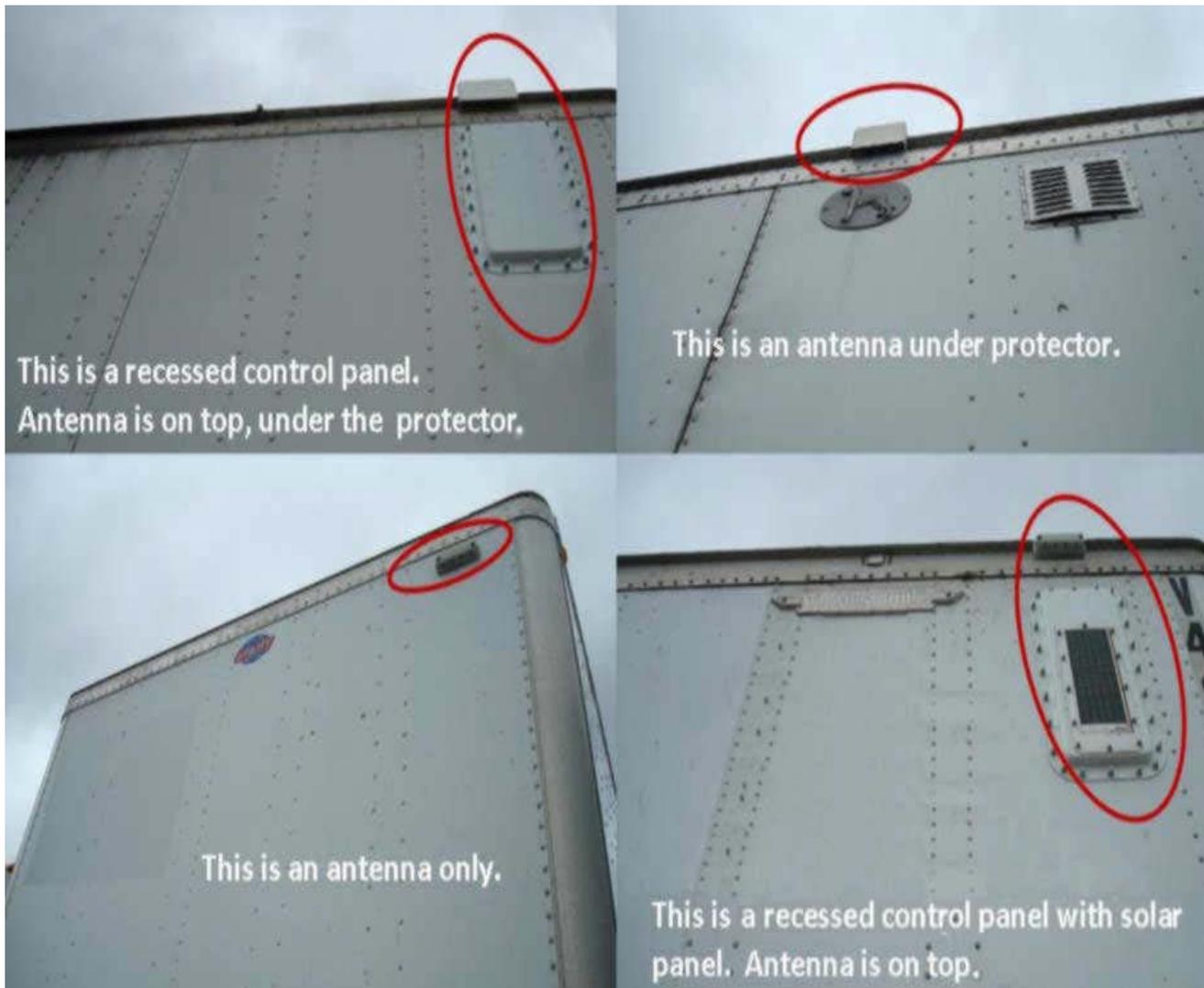
8-6.4.1. Driver Responsibility. See [paragraph 5-7.5.20.1\(k\)](#).

8-6.5. **TRAILER TRACKING SERVICE (TTS)**. In 2010, the DOD deployed Trailer Tracking Service (TTS) technology to augment SNS and enhance security and visibility of DTTS-monitored shipments of SRC I through IV AA&E moving in commercial closed box van trailers. Use of this technology will be optional for AA&E that does not have an assigned SRC. Currently approved DTTS commercial munitions carriers will expand their TPS offerings to include TTS capability. Only those carriers offering TTS in accordance with a tender of services will be used for shipments requiring this service; a trailer tracking accessorial charge may be applied. With TTS technology, a Hazards of Electromagnetic Radiation to Ordnance (HERO) certified transceiver is affixed to the box van trailer. This transceiver may either operate independently on a lithium battery, or receive power via the tractor's umbilical tether to the trailer. The transceiver will alert DTTS in the event that the trailer becomes detached from the power unit while in-transit. The DOD supplements this effort with the use of door sensors, which will alert DTTS in the event that a door to the box van trailer has been opened when the

trailer is not in a secure area. See figures 8-4 through 8-7 for examples of exterior sensors and door sensors. Further testing and adjustments may allow for the future expansion of this capability to flatbed and dromedary shipments. TTS should be requested in lieu of SEVs during most FPCONs. TOs shall be responsible for verifying that commercial box van trailers to be used in the transport of SRC I through IV AA&E are equipped with TTS technology (visual check for door sensor). Trailers missing TTS components will be rejected; carrier non-compliance with TTS will be documented and reported according to paragraph 2-8.1.

**NOTE**

The acronym "TTS" is widely recognized; however, in the Global Freight Management (GFM) system the Trailer Tracking Transportation Service is identified as "DCS".



**FIGURE 8-4. Trailer Tracking (Exterior Devices)**

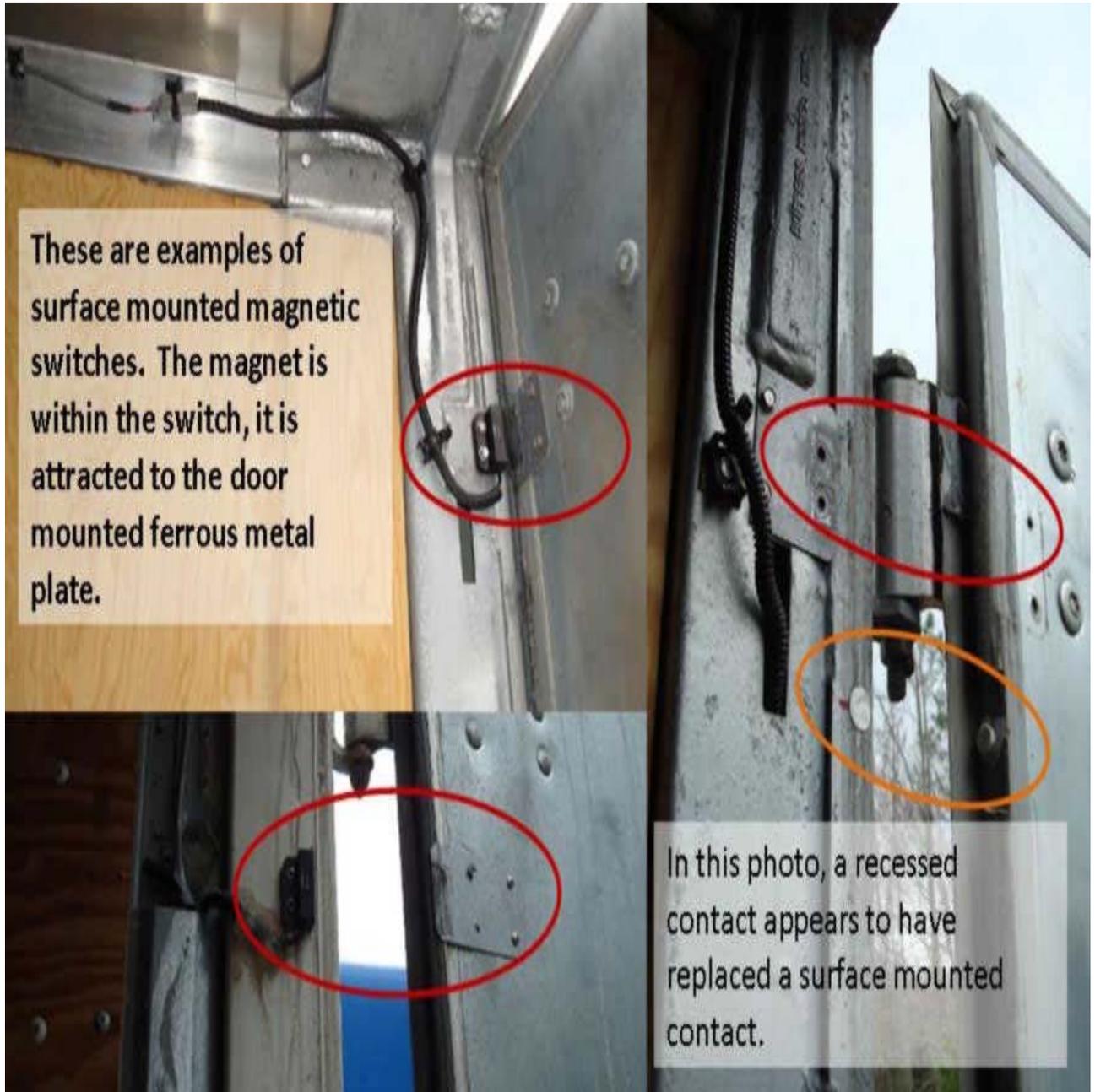
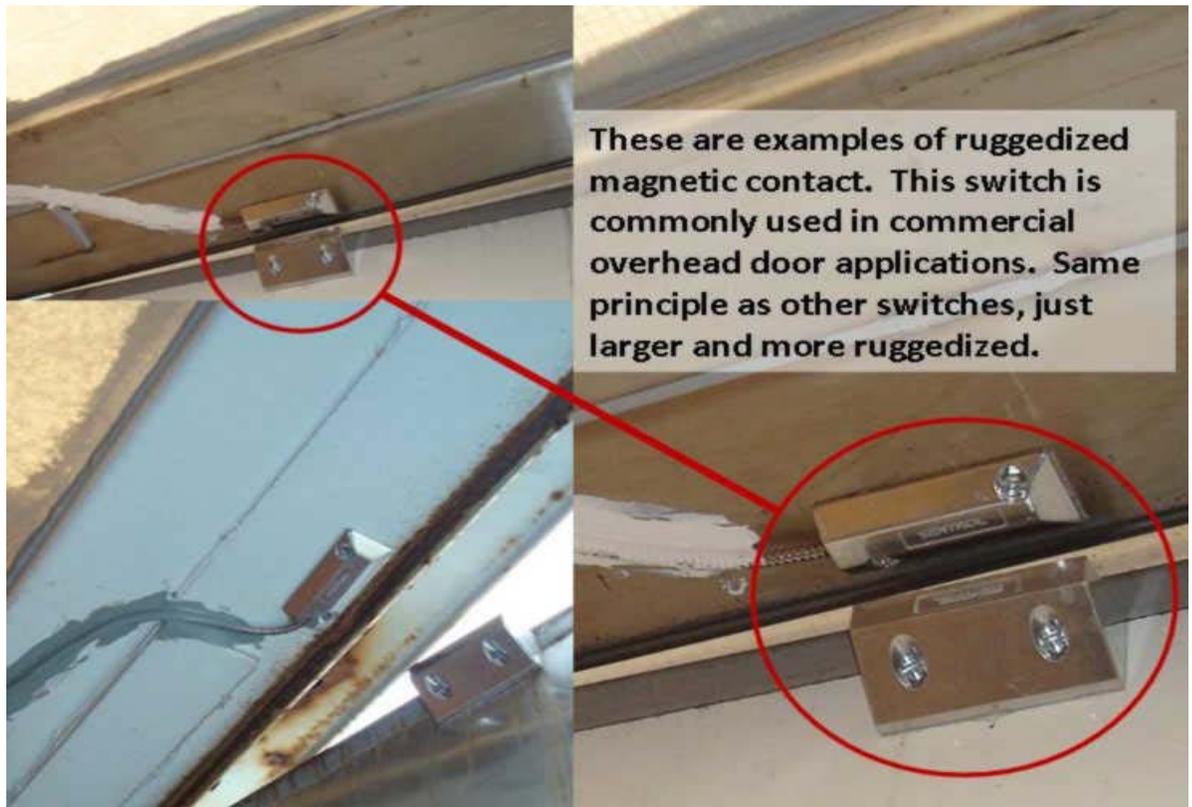


FIGURE 8-5. Trailer Tracking Door Contacts (Surface)



FIGURE 8-6. Trailer Tracking Door Contacts (Recessed)



**FIGURE 8-7. Trailer Tracking Door Contacts (Industrial)**

8-6.6. **USE OF MILITARY-OWNED GUARD CARS AND CARRIER-OWNED EQUIPMENT FOR TRANSPORTING ESCORTS.** Procedures governing the use of military-owned guard cars and carrier-owned cabooses or other passenger-carrying equipment to transport guards or technical escorts are outlined in [DTR 4500.9-R](#).

8-6.6.1. **Technical Escort Service.** The requirements for technical escort service are given in [OPNAVINST 8070.1 \(series\)](#).

8-6.7. **FOREIGN MILITARY SALES SHIPMENTS.** Shipments to foreign governments will be made by the Defense Transportation System (DTS) unless otherwise approved by the CNO or a designated representative. Shipments will be made in accordance with the provisions set forth in this chapter until released to an authorized representative of the purchasing government at the Port of Embarkation (POE) or Port of Debarkation (POD). A letter of authorization will include provisions to issue advance notice of shipments of SRC I manportable missiles and rockets in a ready-to-fire configuration and SRC II AA&E to the activity responsible for providing armed guard protection. Shipments of classified AA&E to foreign governments will be in accordance with this chapter or with the provisions contained in [DOD 5200.1-R](#), whichever is more stringent.

## 8-7. TRANSPORTATION SECURITY WAIVERS AND EXCEPTIONS

Navy commands shall submit requests for waivers and exceptions involving transportation security issues to [NOSSA \(N5\)](#). Marine Corps requests shall be submitted to CMC (Code LPCD).

## 8-8. USE AND DISTRIBUTION OF SIGNATURE AND TALLY RECORD, DD 1907.

The DD 1907 ([figure 8-8](#)) must accompany every shipment of classified or protected material accorded a signature and tally service, and is designed to provide continuous accountability and custody of the shipment from point of pickup to delivery. This form shall be furnished to the carrier's representative. The representative shall be instructed that this form must be accurately completed, signed by each individual responsible for the shipment (at origin, throughout transit, and at delivery), and surrendered along with the BL to the consignee. The DD Form 1907 must have two valid signatures prior to shipment release. The origin TO must furnish a REPSHIP in accordance with [paragraph 2-8.3](#). Shippers will prepare four copies of DD 1907 and distribute as follows:

- a. For single-line shipments:
  - (1) Original to carrier to accompany shipment to final destination;
  - (2) A copy to carrier to accompany shipment for delivery to consignee;
  - (3) A copy for retention by carrier;
  - (4) A copy for retention by shipper.
- b. For interline shipments:
  - (1) Original to origin carrier to accompany shipment to final destination.
  - (2) A copy to origin carrier to accompany shipment for delivery to consignee.
  - (3) A copy to origin carrier to accompany shipment for retention by destination carrier.
  - (4) A copy for retention by shipper.

The consignee is not required to return a copy of DD Form 1907 to the shipper.

## 8-9. SHIPPER/CONSIGNOR TRANSPORTATION OFFICE.

Along with the responsibilities outlined in [paragraph 8-2.1](#), the following requirements must be met:

- a. The BL shall be annotated to indicate the type of TPS requested: e.g. PPS, DDP, CIS, RIS, SNS, and whether the seals are carrier or shipper owned, whether applied by the carrier or the shipper, and the associated serial numbers. A statement shall be conspicuously placed on the BL, " Notify

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consignee (enter area code and telephone number) immediately if shipment is delayed en route." The BL shall contain instructions for drivers to seek a safe haven on a U.S. military installation in the event of civil disorder, natural disaster, emergencies, or carrier strikes. Contract host nation drivers can also seek refuge on a host nation military installation.

b. The DD 1907 shall be completed and distributed in accordance with [paragraph 8-8](#).

c. All routing information shall be held close. For Class/Division 1.1 through 1.3 A&E and sensitive weapons shipments, carriers' drivers are required, upon arrival at the shipping activity, to present in writing the proposed route of travel from origin to destination. The TO will compare this proposed route against available intelligence to ensure there are no potential areas of undesirable activity. The proposed route will then be approved, or the TO will request an alternate route in coordination with the carrier's home office. Drivers shall be instructed that the route of movement and the nature of the cargo will not be divulged to any unauthorized person, and shall never be discussed over CB or similar radio communications, telephone, or in personal conversation at fuel or eating stops.

d. Lost or unaccounted for shipments shall be traced immediately upon notification of non-delivery. As outlined in [paragraph 8-2.1](#), the origin activity TO shall begin tracing of any shipment of classified or SRC I or II AA&E that is not received within 12 hours of the estimated time of arrival on the RDD; tracing shall begin with 24 hours for SRC III or IV shipments. The [SDDC](#) Operations Center shall be notified if the carrier cannot provide a reasonable explanation for the delay.

e. Loss, theft, unlawful disposition or unaccountability of Navy and Marine Corps sensitive AA&E shall be immediately reported according to the provisions of [OPNAVINST 5530.13](#) (series) and the reporting criteria of [OPNAVINST 3100.6](#) (series).

### **8-10. RECEIVER/CONSIGNEE RESPONSIBILITIES.**

Receiver/consignee activities shall monitor the status of inbound AA&E shipments in-transit as required via effective liaison with the receiving activity TO, DTTS, the carrier, and [SDDC](#).

#### **NOTE**

According to [DTR 4500.9-R](#), all CONUS receiving activities are required to confirm delivery of SRC I and II shipments in the DTTS website within two hours of shipment delivery.

**8-10.1. DESTINATION TRANSPORTATION OFFICE.** Upon receipt of a REPSHIP, the receiving activity TO shall make appropriate arrangements to accept custody and control of the shipment. A suspense list shall be maintained together with timely and accurate due-in files. Upon arrival, the DD 1907 and the driver's credentials shall be verified. The TO should compare the DD 1907 with the routing information furnished in the Global Freight Management (GFM) System and report any discrepancy noted according to the provisions of [DTR 4500.9-R](#). After receipt of shipment and completion of DD 1907, the TO will furnish the delivery carrier with the original form to attach to the original BL and SF 1113, Public Voucher for Transportation Charges, for forwarding to the appropriate shipper service

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finance office for payment. Shipment/conveyance receipt inspection shall be conducted in accordance with [NAVSEA SW020-AF-HBK-010](#), [OPNAVINST 5530.13 \(series\)](#) and the following paragraphs.

**8-10.1.1. Receipt of Sealed Shipments.** All inbound sealed conveyances containing AA&E shall be inspected thoroughly to ensure seals are intact and that there are no signs of theft, tampering, or damage. The seal numbers shall be compared with those shown on the BL. If the seals are those originally applied and are not broken, the word "intact" will be annotated opposite the applicable seal number; if the seals are broken, the word "broken" will be annotated; if the seals are other than the original seals, an annotation similar to the following will be shown in the "Description of Articles" or "Marks" spaces or on the reverse of the BL: "Original seals missing. Received with AB RR Seal No. XXX) (show either "intact" or "broken"). If the BL lists application of a wire twist seal, inspect the wire twist seal for evidence of tampering.

**8-10.1.2. Shipments with Missing or Changed Seals.** If a shipment is presented for acceptance with U.S. numbered seals changed or missing, and the receiving activity has not been notified in advance of the discrepancy, a report shall be forwarded to [NOSSA \(N5\)](#) (see [paragraph 2-8.9](#)). If the shipment is classified and the receiving activity has not been notified in advance of the discrepancy, both [NOSSA](#) and the nearest office of the NCIS shall be notified immediately if there is any evidence of theft. Navy and Marine Corps sensitive AA&E missing as a result of theft should be reported according to the provisions of [OPNAVINST 5530.13 \(series\)](#) and the reporting criteria of [OPNAVINST 3100.6 \(series\)](#).

**8-10.1.3. Shipment Inventory Verification.** If evidence of theft, tampering or damage is found on an incoming shipment of AA&E, an immediate inventory shall be performed to determine the extent of loss or damage. If seals are intact, and there is no other evidence of cargo damage or tampering, inventory quantity verification of SRC I and II AA&E shall be conducted within 24 hours following receipt; SRC III and IV AA&E shipment shall be subject to inventory quantity verification within 48 hours following receipt. For AA&E shipments arriving after duty/working hours on weekdays, on weekends, or on holidays (in the absence of tampering) quantity verification shall take place the next working day after receipt according to the SRC I through IV quantity verification schedule detailed above.

**8-10.1.4. Discrepancy Reporting.** The local security officer shall be notified in the event that a discrepancy involves an actual or suspected breach of security. Station safety and Explosives Ordnance Disposal (EOD) officials must be notified in the event that a discrepancy compromises or in any manner threatens the safe handling and/or continued on-station shipment dispatch (see [paragraph 5-8.4.2](#)). The [SDDC](#) Safety and Security Office HOTLINE, 1-800-524-0331, shall be notified of shipment discrepancies in CONUS. The Airlift Mobility Command (AMC) or Military Sealift Command (MSC) shall be notified in OCONUS.

## 8-11. TEMPORARY STORAGE IN VEHICLES, VANS, AND RAILCARS

The following requirements shall be met:

a. AA&E contained in such conveyances will not be left unattended or unsecured outside of restricted areas. Each door to the conveyance will be secured by a numbered seal that meets specification [FF-S-23769, "Seals, Antipilferage."](#) Use of padlocks is discouraged. Drivers shall not be dismissed at the destination until the seals are verified as intact with the proper number. Protection will be provided

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for stocks of numbered seals and seal inventory records to prevent theft or alterations to documents which accompany movements and shipments to points inside and outside the activity.

b. AA&E contained in such conveyances must be parked in designated restricted areas and attended or observed by duty personnel or guards (via CCTV is acceptable), or else each vehicle, van and railcar will be physically inspected by a security patrol every hour.

c. Refer to [OPNAVINST 5530.13](#) (series) for surveillance requirements during operating and non-operating hours.

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[CLICK HERE TO REPRODUCE AND ANNOTATE THIS FORM](#)

<b>SIGNATURE AND TALLY RECORD</b> <i>(See DoD 4500.9-R for guidance)</i> <i>(Use of equivalent carrier-furnished signature and tally record is acceptable.)</i>		<i>OMB No. 0702-0027</i> <i>OMB approval expires</i> <i>Oct 31, 2008</i>		
The public reporting burden for this collection of information is estimated to average 3 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services Directorate (0702-0027). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.				
<b>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION. RETURN COMPLETED FORM AS DIRECTED IN THE DISTRIBUTION INSTRUCTIONS BELOW.</b>				
<b>DISTRIBUTION INSTRUCTIONS</b>				
(1) The SHIPPER will print two copies, retain one copy and give one to the Origin Carrier. (2) The ORIGIN CARRIER will deliver one copy with original signatures to the Destination Carrier. (3) The DESTINATION CARRIER will attach one copy (reflecting all original signatures) and Standard Form 1113, Public Voucher for Transportation Charges, to the original Commercial Bill of Lading and forward for payment. Reproduced completed copy of DD Form 1907 will be delivered to the Consignee and one will be retained. (4) The CONSIGNEE will ensure Destination Carrier surrenders a reproduced copy of completed form with all signatures.				
<b>SECTION I - TO BE COMPLETED BY THE SHIPPER</b>				
<b>1a. SHIPPER NAME</b>		<b>b. ORIGIN</b>		
<b>2. PROTECTIVE SERVICE REQUESTED</b>		<b>3. COMMERCIAL BILL OF LADING NUMBER</b>		
<b>4a. CONSIGNEE NAME</b>		<b>b. DESTINATION</b>		
<b>5. PERMIT NUMBER (If any)</b>		<b>6. TRANSPORTATION CONTROL NUMBER</b>		
<b>7. ROUTING</b>		<b>8. WEIGHT</b>	<b>9. CUBE</b>	
<b>10. SPECIAL INSTRUCTIONS</b>			<b>11. DATE SHIPMENT TENDERED TO CARRIER (YYYYMMDD)</b>	
<b>12. NAME OF CARRIER</b>			<b>13. NUMBER OF PIECES</b>	
<b>14. TYPE OF PACKAGE(S) (For unsealed loads only) OR CONVEYANCE IDENTIFICATION AND SEAL NUMBERS (For sealed loads only)</b>		<b>15. FREIGHT CLASSIFICATION DESCRIPTION</b>		
<b>SECTION II - TO BE COMPLETED BY EACH PERSON ACCEPTING CUSTODY OF CLASSIFIED OR PROTECTED MATERIAL REQUIRING THE USE OF TRANSPORTATION PROTECTIVE SERVICE DURING TRANSIT</b>				
<b>16. CUSTODY RECORD</b>				
<b>PRINT NAME OF PERSON AND COMPANY REPRESENTED</b> a.	<b>STATION INTERCHANGE POINT DESTINATION</b> b.	<b>SIGNATURE OF PERSON ACCEPTING CUSTODY</b> c.	<b>TIME ACCEPTED</b> d.	<b>DATE ACCEPTED (YYYYMMDD)</b> e.

DD FORM 1907, NOV 2006

PREVIOUS EDITION IS OBSOLETE.

FormFlow/Adobe Designer 7.0

**FIGURE 8-8. DD Form 1907, Signature and Tally Record (Sheet 1 of 2)**



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## CHAPTER 9

### SPECIAL SHIPPING INSTRUCTIONS

#### 9-1. INTRODUCTION

This chapter describes special shipping procedures and safety precautions required for the packaging, handling, and shipment of specific items of ammunition, explosives and related hazardous materials (A&E). These instructions will be amended as required to reflect procedural changes or to incorporate new procedures.

#### 9-2. TRIAL SHIPMENTS OF NAVAL ORDNANCE

Trial shipments may be required to evaluate new types of transportation equipment, radical methods of blocking and bracing, and/or specific ordnance item peculiarities related to shipping. These require laboratory-controlled impact tests for railcars and rough road tests for trucks. Reports of successful trial shipments and tests are forwarded to [Department of Transportation \(DOT\)](#), [Bureau of Explosives \(BOE\)](#) and other concerned activities to justify waivers, special permits and rule changes.

##### 9-2.1. NAVAL ORDNANCE SAFETY AND SECURITY ACTIVITY (NOSSA)

RESPONSIBILITIES. To implement, execute and document trial shipments, the following actions are required:

a. Confirm the need and establish dates for trial shipments. Coordinate the dates with the [Naval Packaging, Handling, Storage and Transportation \(PHST\) Center](#), Naval Surface Warfare Center Indian Head Division (NSWC IHD), Detachment Picatinny, Picatinny Arsenal, NJ 07806-5000; consignor, consignee, DOT, BOE and other authorities as required.

b. Originate a letter to the [Naval PHST Center](#), NSWC IHD Detachment Picatinny, consignor, and consignee, with copies to concerned parties, establishing a trial shipment and including all pertinent information.

c. Coordinate the trial shipment with the Military [Surface Deployment and Distribution Command \(SDDC\)](#), [Airlift Mobility Command \(AMC\)](#), [Military Sealift Command \(MSC\)](#), [U.S. Coast Guard](#), and other regulatory authorities, as required.

d. If necessary, obtain special waivers or exemptions to make the trial shipment.

e. Make necessary arrangements with appropriate carriers and obtain required amounts and types of equipment needed for the trial shipment, as specified by the proposed operational plan supplied by NSWC IHD Detachment Picatinny.

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f. Advise other Department of Defense (DOD) offices and concerned regulatory authorities of the proposed trial shipment and arrange for their participation as required.

**9-2.2. NSWC IHD DETACHMENT PICATINNY RESPONSIBILITIES.** To implement, execute and document trial shipments, the following actions are required:

a. Submit a proposed operational plan for a trial shipment to [NOSSA \(N5\)](#) for approval with copies to N55 and NAVAIRSYSCOM (AIR-54) as applicable. The plan shall include a proposed MIL-STD or approved NAVSEA drawing.

b. Inform [NOSSA \(N5\)](#) of the shipments and types of equipment required for the trial shipment.

c. Provide technical direction for developing, evaluating, and documenting procedures and use of instrumentation for monitoring the trial shipment, as directed by [NOSSA \(N5\)](#).

d. Upon completion of trial shipment, prepare a test report and forward to all concerned activities.

e. Prepare and approve MIL-STD slash sheets and NAVSEA drawings.

f. Distribute the approved MIL-STD or NAVSEA drawing to all concerned activities and include it on the Explosives Safety Technical Manuals DVD.

**9-2.3. CONSIGNOR RESPONSIBILITIES.** The consignor will ensure all labeling, placarding, shipping papers, and other requirements of this manual, as applicable, are met for trial shipments and will:

a. Provide necessary material, labor, loading area, and handling equipment to load the cargo for trial shipment in accordance with procedures specified in the proposed MIL-STD or NAVSEA drawing.

b. Prepare Report of Shipment (REPSHIP), refer to [paragraph 2-8.3](#). The words “Trial Shipment” shall appear on all shipping papers, including the REPSHIP.

c. Subsequently photograph the loading. Five 8 x 10 inch prints of each photograph, or equivalent digital photographs, shall be forwarded to NSWC IHD Detachment Picatinny.

**9-2.4. CONSIGNEE RESPONSIBILITIES.** The consignee shall provide necessary labor, unloading area, and handling equipment to unload cargo in accordance with procedures specified by NSWC IHD Detachment Picatinny.

a. Upon receipt of shipment, immediately advise NSWC IHD Detachment Picatinny by telephone of its condition, especially if there are deficiencies.

b. Photograph condition of equipment and lading upon arrival and step-by-step unloading process. Five 8 x 10 inch prints of each photograph, or equivalent digital photographs, shall be forwarded to NSWC IHD Detachment Picatinny.

c. Remove any instrumentation and/or recording devices and forward them to NSWC IHD Detachment Picatinny for analysis.

d. When directed, compile costs for unloading the trial shipment and forward information, including other required data, to NSWC IHD Detachment Picatinny.

9-2.5. **NOSSA TRIAL SHIPMENTS OTHER THAN ORDNANCE.** Proposals concerning trial shipments of **NOSSA** material other than ordnance will be coordinated with N5 for approval prior to undertaking a trial shipment. In this connection, sufficient background data regarding the commodity to be transported shall be submitted with the trial shipment proposal.

### 9-3. SHIPMENT OF FORBIDDEN EXPLOSIVES

The DOT's Hazardous Materials Regulations in [49 CFR 173.21](#) and [173.54](#) contains requirements governing the offering of certain explosives for transportation and specifies the criteria used to identify those explosives.

9-3.1. **POTENTIAL SHIPPERS.** All shippers of A&E are instructed to take note of the previously cited prohibitions, and should take all steps necessary to ascertain that the materials they offer for transportation do not fall under any of the conditions specified above. It is requested that any person having knowledge of anyone manufacturing, preparing, or processing materials of this kind (who may be a potential shipper), advise such individual of the prohibitions mentioned above.

9-3.2. **PENALTIES FOR NONCOMPLIANCE.** [49 CFR 107.329\(a\)](#) and [171.1\(g\)](#) state that any person who knowingly violates a requirement of the Federal Hazardous Material Transportation regulations is liable for a civil penalty of not more than \$55,000. and not less than \$250 for each violation. When the violation is a continuing one, each day of the violation constitutes a separate offense.

### 9-4. HAZARDOUS MATERIAL SAMPLES

When limited amounts of A&E for testing purposes are transported in Navy motor vehicles, many of the restrictions imposed for normal shipments of such material are modified. These modifications are authorized by **NOSSA** only for shipments of samples, and the following regulations must be strictly enforced:

- a. A single load of high-explosive samples shall not exceed 2,000 pounds.
- b. Samples of A&E shall not be transported with other cargo of an incompatible nature, as determined from [tables 5-1](#) and [5-2](#).
- c. Projectiles, bombs, boxed ammunition and explosives shall be stowed securely in place with appropriate dunnage.
- d. Boosters, fuzes, primers and other such components shall be packed separately and secured so that they cannot move. If they are to be transported in the same motor vehicle with projectiles, bombs, or other high explosives, each box of components must be shipped inside a larger box constructed of wood

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at least 1-inch thick and lined with at least 3 inches of mineral wool or similar inert noncombustible material on the four sides, top and bottom.

e. When detonators and blasting caps must be shipped in the same conveyance with high explosives, loaded bombs, or similar articles, they shall be limited to small quantities specifically approved by [NOSSA \(N5\)](#). They must be packed in special steel containers capable of confining the force of explosion without disruption or fragmentation of the container. The steel container must then be packed in a wooden box with sand or noncombustible inert cushioning material surrounding the container on the four sides, top, and bottom. The box must be braced within the conveyance to prevent movement, and it must be separated from the high-explosive material. The types of conveyances to be used for this type of shipment are limited to Navy and Marine Corps owned motor vehicles and motor carrier and air taxi operators approved to transport explosives for the [DOD](#).

f. Component boxes loaded in the same motor vehicle with materials such as projectiles or bombs must be separated from them by empty boxes or suitable dunnage, to ensure that the components will be protected in the event of a collision.

### 9-5. SHIPMENT OF OTTO FUEL II

OTTO Fuel II is a non-explosive, shock-insensitive liquid monopropellant used in the propulsion of Mk 46, Mk 48, Mk 8 Advanced Capability (ADCAP) and Mk 54 torpedoes. The fuel is considered non-flammable in view of its extremely high flash point (265°F). OTTO Fuel II may be transported by rail, highway, water or air. Intermodal (IMO) portable tanks are authorized for transportation on rail flatcars, however, tank trailers on rail flatcars are not authorized. Air shipments are authorized by Airlift Mobility Command (AMC), logistics aircraft (military), or air taxi. Refer to [NAVSEA SW020-AC-SAF-010](#) for specific transportation and storage information. Consult NAVSEA S6340-AA-MMA-010 for additional instructions pertaining to OTTO Fuel II packaging, marking, labeling, shipping, etc., and for special instructions concerning the transportation of fleet-returned, reclaimed, contaminated, and contaminated waste OTTO Fuel II.

9-5.1. SHIPMENT OF EXPENDED TORPEDOES, MK 46, MK 48, MK 50, MK 54 ALL MODS. Exercise torpedoes Mk 46, Mk 48, Mk 50, and Mk 54, all Mods, contain a Mk 84 Mods 1 and 2 Sonar Transmitter, commonly referred to as a "pinger" because of the acoustic transmission it emits. During transportation of expended Mk 46, Mk 48, Mk 50, and Mk 54, all Mods, the pinger, which is internal, may activate if the battery doesn't run down or expire, or if residual salt water comes into contact with the device. Upon activation, no action is required by the driver. Origin transportation officers are required to ensure that commercial munitions carrier drivers are briefed about the potential for pinger activation, acknowledge, and sign the form shown in [figure 9-1](#). The signed copy of [figure 9-1](#) shall be included with shipping paperwork for these expended torpedoes.

<p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;">Expended Mk 46, Mk 48, Mk 50, and Mk 54 Exercise Torpedoes, all Mods, contain a Sonic Location Device "pinger" that may activate during transportation. The pinger device is INERT, non-hazardous, and presents no danger during shipment.</p> <p style="text-align: center;"><b>Driver acknowledgement</b></p> <p>Signature: _____</p> <p>Date: _____</p> <p style="text-align: center;"><b>Driver acknowledgement</b></p> <p>Signature: _____</p> <p>Date: _____</p>
--

**FIGURE 9-1. Notice to SDDC DOD Approved Freight Carriers of Mk 84 Mods 1, 2 Sonar Transmitters**

**9-6. SHIPMENT OF HARPOON AND TOMAHAWK MISSILES**

Surface and submarine launched HARPOON and TOMAHAWK missiles in the all-up configuration; i.e., completely assembled with guidance, control, conventional warhead, solid propellant booster motor, and liquid fuel sustainer engine sections in a single shipping container are to be transported per [49 CFR](#).

9-6.1. **MARKING MATERIAL.** Shippers of HARPOON and TOMAHAWK and component parts shall describe and mark material as shown in [NAVSEA SW020-AC-SAF-010](#).

9-6.2. **MILITARY AIR SHIPMENTS.** Military air shipments are regulated by [NAVSUP Pub 505](#).

**9-7. SHIPMENT OF TRIDENT MISSILES**

Logistics support of Fleet Missile (FBM) weapon systems, including transportation and configuration control, is under the direction of the Strategic System Program Logistic Support Coordinator. For further information, see [FBM Weapon System 101](#).

## 9-8. SHIPMENT OF SONOBUOYS

Sonobuoys are sophisticated electro-mechanical devices that are launched from aircraft. Sonobuoys are designed to detect sound in water and transmit the resultant signal to an aircraft by radio. The hazardous material in a sonobuoy consists of a compressed non-flammable gas and an explosive device. Firing the device opens the compressed gas vessel and inflates a flotation bladder. Some sonobuoys also contain lithium batteries. The batteries provide power to the electronics system. For all types of sonobuoys including explosive sonobuoys (AN/SSQ 110 Series), relevant transportation information can be found in NAVAIR 28-SSQ-500-1, Technical Manual for Sonobuoys. This manual is now available at the Joint Technical Data Integration (JTDI) website, <https://www.jtdi.mil>. Government users must have a Common Access Card (CAC) with Public Key Infrastructure (PKI) certificate. Users should request access for PMA-264 under Navy; CDs are available upon request. For updated information, call the Sonobuoy Hot Line at DSN 482-3577, COMM (812) 854-3577, FAX DSN 482-3573, COMM (812) 482-3573.

**9-8.1. SONOBUOYS WITHOUT LITHIUM BATTERIES.** Testing of sonobuoys without lithium batteries in the shipping container has shown that no energy is released outside the shipping container. All sonobuoys with nonflammable, compressed gas and explosive valves are to be shipped as described in NAVSEA SW020-AC-SAF-010. **HOWEVER, DOES NOT MEET THE DEFINITION OF EXPLOSIVE FOR SHIPPING PURPOSES.** These sonobuoys are approved for all modes of transportation. Consult Appendix A to NAVAIR 28-SSQ-500-1 for additional information and a complete listing of affected sonobuoy types and corresponding NALCs.

**9-8.1.1.** The sonobuoys in this category include AN/SSQ-36 (NALCs 8W59 and 8W74), AN/SSQ-47B (NALC 8W32), AN/SSQ-53B (NALC 8W40 and 8W62), AN/SSQ-53D (NALC 8W72), AN/SSQ-53E (NALC 8W84), AN/SSQ-53F (NALC 8W88), AN/SSQ-57B (NALCs 8W70 and 8W73), and AN/SSQ-57C (NALC 8W88).

**9-8.2. SONOBUOYS CONTAINING NON-REGULATED LITHIUM BATTERIES.** Sonobuoys containing lithium batteries which are comprised of one or more cells are exempt from hazardous material regulations provided they meet certain safety criteria per [49 CFR Part 173.185\(b\) and \(c\)](#) and [NAVSUP Pub 505](#) (for military air shipment). Shippers must consult these publications for details regarding exception criteria. The exception criteria is based on the amount of lithium content in each cell; safety test results of record; packaging to include hermetically sealed inner packaging, short-circuit preventative measures, and strong outer packaging; and whether the batteries contain liquid or solid state lithium cathodes. Consult Appendix A to NAVAIR 28-SSQ-500-1 for additional information and a complete listing of affected sonobuoy types and corresponding NALCs.

**9-8.2.1.** These sonobuoys are to be shipped as described in [NAVSEA SW020-AC-SAF-010](#) and are also approved for all modes of transportation. Sonobuoys in this category include AN/SSQ-53B (NALCs 8W40 and 8W62) and AN/SSQ-77A (NALCs 8W46 and 8W64)

**9-8.3. SONOBUOYS CONTAINING REGULATED LITHIUM OR LITHIUM ALLOY BATTERIES (MORE THAN 0.5 GRAMS PER CELL).** Sonobuoys containing regulated batteries are to be shipped in accordance with [49 CFR 173.185](#), International Maritime Dangerous Goods, Volume IV (IMDG), IATA Dangerous Goods Regulation, or [NAVSUP Pub 505](#) (Military Air Shipments). The

sonobuoys listed below are not to be shipped on passenger aircraft. Air shipments via military cargo only aircraft require a Shipper's Declaration for Dangerous Goods Form. These sonobuoys must be marked "LITHIUM BATTERIES." They must also be labeled with the FLAMMABLE SOLID label and, when offered for air movement, CARGO AIRCRAFT ONLY labels, in accordance with [49 CFR 172.420](#) and [172.448](#) respectively. Consult Appendix A to NAVAIR 28-SSQ-500-1 for additional information and a complete listing of affected sonobuoy types and corresponding NALCs.

9-8.3.1. The sonobuoys in this category include AN/SSQ-62B (NALCs 8W63 and 8W71) and AN/SSQ-86 (NALC 8W68).

9-8.4. AN/SSQ 110 SONOBUOYS. Due to their design and explosives content, series AN/SSQ 110 Sonobuoys are transported and stored as Hazard Class/Division 1.1 Compatibility Group D devices. These include NALCs 8W77, 8W80, and 8W81. Consult Appendix A to NAVAIR 28-SSQ-500-1 for additional information.

## **9-9. SHIPMENT OF ASBESTOS**

Asbestos and materials containing asbestos are ORM-C materials which are unsuitable for shipment unless properly identified and prepared for transportation. These materials include those removed from structures or any other place at an activity because they may be a hazard to the health of personnel.

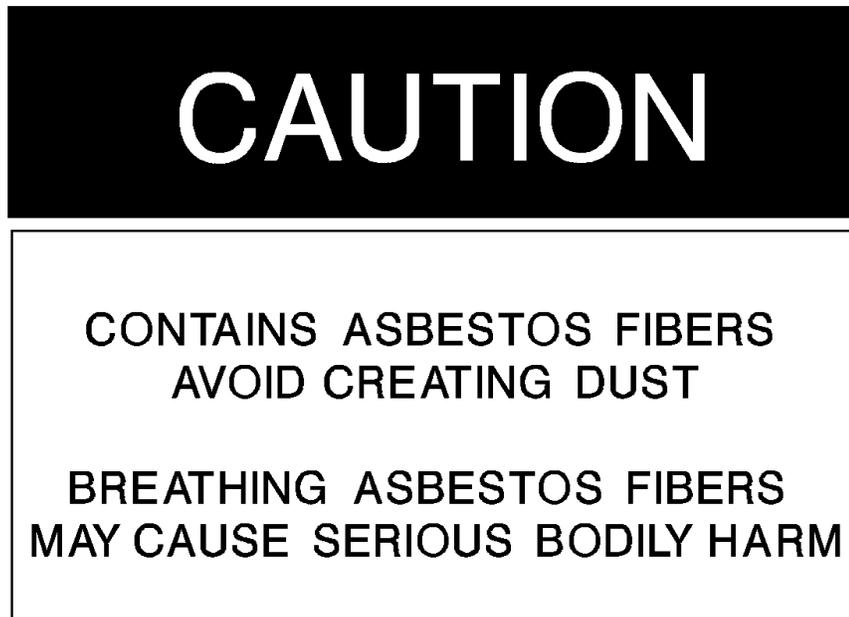
9-9.1. HYDRATED MINERAL SILICATES. Asbestos includes any of the following hydrated mineral silicates: chrysotile, crocidolite, amosite, anthophyllite asbestos, tremolite asbestos, actinolite asbestos, and every product containing any of these minerals.

9-9.2. EXCEPTION. Asbestos which is immersed or fixed in a natural or artificial binder material (such as cement, plastic, asphalt, resins, or mineral ore) and manufactured products containing asbestos or any materials or products whose commercial value is not dependent on their asbestos content, are not subject to the requirements of this paragraph.

9-9.3. COMMERCIAL ASBESTOS. Commercial asbestos is any material or product containing asbestos that has commercial value because of its asbestos content. It must be offered for transportation and transported in:

- a. Rigid, airtight packagings such as metal or fiber drums, and portable tanks.
- b. Bags or other non-rigid packagings in closed freight containers, motor vehicles, or railcars that are loaded by and for the exclusive use of the consignor and unloaded by the consignee; or
- c. Bags or other non-rigid packagings which are dust and sift proof, and which are palletized and unitized by methods such as shrink wrapping in plastic film or wrapping in fiberboard secured by strapping. Pallets need not be used during transportation by vessel for loads with slings that are unitized by methods such as shrink wrapping, if the slings adequately and evenly support the loads and the unitizing method prevents shifting of the bags or other non-rigid packagings during conditions normally incident to transportation.

9-9.4. ASBESTOS LABEL. All shipments of asbestos and/or shipments of items containing asbestos shall be properly marked according to [29 CFR 1910.122\(f\)](#) with a caution label. Labels shall include the following information, as described in [29 CFR 1910.1001\(j\)](#).



**FIGURE 9-2. Asbestos Warning Label**

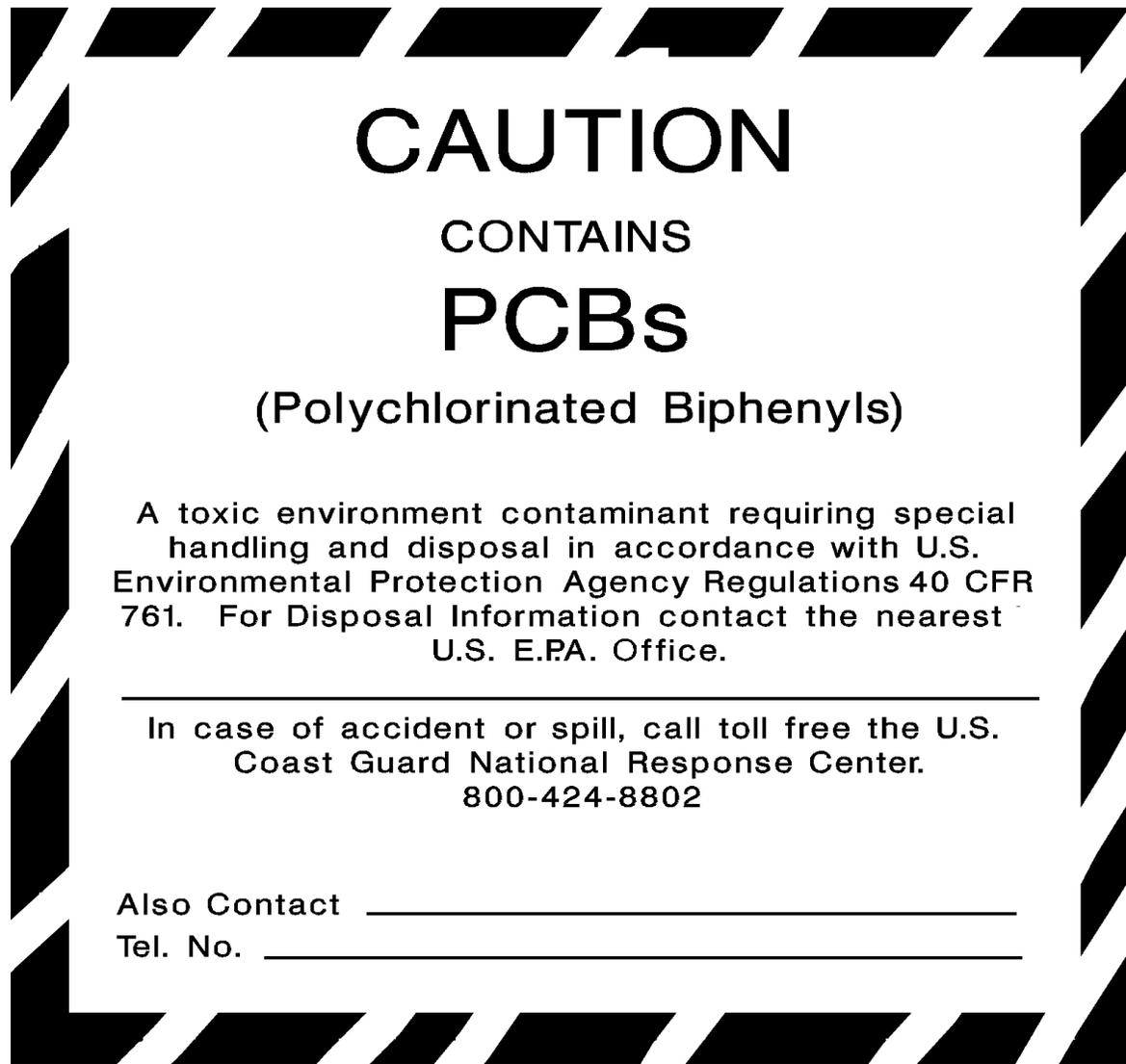
**9-10. SHIPMENT OF UNDERWATER MINES MK 56 AND MK 57 CONTAINING NAVY FORMULA NO. 184 (PCB)**

Mk 56 and Mk 57 mines and associated components use an anti-fouling compound (Navy Formula No. 184) which contains Mercurous Chloride and Polychlorinated Biphenyls (PCB). This compound is affected by the EPA Final Ban Rule and the Toxic Substance Control Act. Hazard information associated with Navy Formula No. 184 may be found in NAVSEA Technical Manuals SW551-B0-MMI-010, SW550-AA-MMI-010 or SW550-AA-MMI-040.

9-10.1. WARNING LABELS. Mandatory warning labels required for Formula No. 184 coated Mk 56 and Mk 57 underwater mine material are displayed in [figures 9-3](#) and [9-4](#). These labels must be attached to the outside surface of the affected material so as to permit unobstructed visibility during transport and storage. The label shown in [figure 9-3](#) can be locally fabricated/procured, and must be durable and weather resistant. The label shown in [figure 9-4](#) is the official EPA-approved warning labels required by [40 CFR 761](#).



FIGURE 9-3. PCB Warning Label, Locally Procured



**FIGURE 9-4. Example of EPA-Approved PCB Labeling**

9-10.2. **EXAMPLE OF CONTAMINATED ITEMS.** Some Mk 56 and Mk 57 underwater mine material treated with Formula No. 184 anti-fouling compound are shown in [table 9-1](#).

#### **9-11. SHIPMENT OF MUNITIONS CONTAINING DEPLETED URANIUM**

Activities will obtain the Navy Radioactive Materials Permit Number 13-00164-L1NP prior to the shipment or receipt of munitions containing depleted uranium. This permit may be obtained from Naval Surface Warfare Center, Crane Division, Mission Support Services Directorate (Code BXNL), Bldg 3239, 300 Hwy 361, Crane, IN 47522, (812) 854-2802. Specific storage, handling and transportation accident and incident safety precautions will be addressed by NSWC Crane Mission Support Services Directorate.

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**Table 9-1. Anti-Fouling Compound Contaminated Items,  
Mine Mk 56 and Mk 57**

ITEM	NALC
Mine, Underwater, Mk 56 Mod 0, Configuration D	U953
Mine, Underwater, Mk 56 Mod 0, Configuration D	UM75
Anchor, Mk 56 Mod 4	R036
Anchor/Mechanism Section Subassembly for Mine, Underwater, Exercise and Training, Mk 56	9W01
Anchor/Mechanism Section Subassembly for Mine, Underwater, Exercise and Training, Mk 57	9W02
Anchor/Mechanism Section Subassembly for Mine, Underwater, Exercise and Training, Mk 57	9W85

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APPENDIX A

**MOTOR CARRIERS APPROVED TO TRANSPORT AMMUNITION AND EXPLOSIVES, CLASS/DIVISION 1.1, 1.2 AND 1.3, FOR THE DEPARTMENT OF DEFENSE AND THE MILITARY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND (SDDC)**

**A-1** Carriers holding specific authority to transport ammunition and explosives (Class/Divisions 1.1, 1.2 and 1.3), or authority that is not restricted against ammunition and explosives (Class/Divisions 1.1, 1.2 and 1.3) are listed below. Refer to the SDDC DOD Approved Freight Carrier List for further information.

CARRIER	Standard Carrier Alpha Code (SCAC)	24 - Hour Telephone Numbers
<a href="#">Alaska West Express, Inc.</a> 660 Western Drive Anchorage, AK 99501	ALWE	Tele: (907) 279-9515
<a href="#">Baggett Transportation</a> 2 South 32nd Street Birmingham, AL 35233	BAGT	Tele: 1-800-633-8982
<a href="#">Bed Rock Inc. DBA Tri State Motor</a> 8141 E 7th Joplin, MO 64802	TSMT	Tele: (417) 624-3131
<a href="#">Carlile Transportation Systems</a> 1800 E. 1st Avenue Anchorage, AK 99501	CEPH	Tele: 1-800-478-1853
<a href="#">Chalich Trucking Inc.</a> 8049 146th Avenue NW Ramsey, MN 55305	CLHM	Tele: (763) 421-1095 or 1-800-670-8835
<a href="#">Earl Paddock Transportation Inc.</a> 560 Seaman Street Stoney Creek, ON Canada	PDKE	Tele: (800) 263-4587
<a href="#">Fedex Custom Critical</a> 1475 Boettler Road Uniontown, OH 44685	FDCC	Tele: 1-800-762-3787
<a href="#">Green Valley Transportation Corp.</a> 30131 S. Highway 33 Tracy, CA 95304	GVTD	Tele: (209) 836-5192

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<b>CARRIER</b>	<b>Standard Carrier Alpha Code (SCAC)</b>	<b>24 - Hour Telephone Numbers</b>
<u>Kahbeah Contracting &amp; Trucking</u> 510 North Yates Tallula, IL 62688	KAHB	Tele: (217) 634-4157
<u>Landstar Express America</u> 13410 Sutton Park Drive South Jacksonville, FL 32224	LEAM	Tele: 1-800-872-9400
<u>Landstar Inway, Inc.</u> 1000 Simpson Road Rockford, IL 61102	LDWY	Tele: 1-800-443-6808
<u>Landstar Ranger, Inc.</u> 13410 Sutton Park Drive South Jacksonville, FL 32224	LRGR	Tele: 1-800-872-9400
<u>Mercer Transportation Co.</u> 1128 West Main Street Louisville, KY 40232	MCET	Tele: 1-800-626-5375
<u>NEI Transportation LLC</u> 302 Thunder Road Duenweg, MO 64841	NEIN	Tele: (417) 623-6885
<u>Panther II Transportation, Inc.</u> 4940 Panther Parkway Seville, OH 44273-8929	PTWT	Tele: 1-866-455-8205
<u>Prestera Trucking Inc.</u> 19129 U. S. Hwy 52 South Point, OH 45680	PRAI	Tele: 1-800-759-9555
<u>R &amp; R Trucking, Inc.</u> 302 Thunder Road Duenweg, MO 64841	RRUK	Tele: (417) 623-6885
<u>TNI (USA), INC. DBA AATCO</u> 302 Thunder Road Duenweg, MO 64841	AADD	Tele: (417) 623-6885
<u>T. F. Boyle Transportation</u> 15 Riverhurst Road Billerica, MA 01821	BYLE	Tele: 1-800-343-2004

**A-2** Carriers (heavy and specialized) authorized to transport other than ammunition and explosives (Class/Divisions 1.1 through 1.3) may be found through the SDDC website at <http://www.sddc.army.mil>. Questions regarding approved freight carriers may be directed to the SDDC; appropriate contact numbers can be found at the SDDC website.

## APPENDIX B

### SHIPPING LABELS

#### B-1. GENERAL

Federal regulations require that each package or container containing ammunition, explosives and related hazardous materials (A&E) be conspicuously labeled before being offered for shipment by motor vehicle, rail, or air transport (refer to [paragraph B-2](#) for water transport requirements). Label requirements are discussed in [paragraph 3-5](#) of this manual. The various types of labels used for A&E shipments are illustrated in [figures B-1](#) through [B-20](#). According to Department of Transportation (DOT) requirements, each label must be diamond shaped with each side at least 4 inches long and have a solid line border at least 3-1/2 inches long on each side. Labeling requirements for shipments of A&E in CONUS are specified in [49 CFR Parts 172.400 thru 172.450](#). Labeling requirements for the international transport of these hazardous materials by air and water are specified in ICAO's Technical Instructions for the Safe Transport of Dangerous Goods by Air, Part 5, Chapter 3, and IMO's International Maritime Dangerous Goods Code (IMDG) Vol 1, Chapter 5 respectively.

B-1.1. For transport of waste munitions, additional environmental labeling requirements may apply and a local environmental official should be consulted. The following may apply to shipment of waste munitions: [40 CFR 263.11](#) states that an Environmental Protection Agency (EPA) identification is needed. The [40 CFR 263.12](#) gives the requirements for transfer facilities. The manifest system is described in [40 CFR 263.20](#). In the event of an accidental discharge of waste munitions, the requirements listed in [40 CFR 263.30](#) apply.

#### B-2. UNITED NATIONS (UN) AND INTERNATIONAL MARITIME ORGANIZATION (IMO) LABEL REQUIREMENTS

B-2.1. The new [UN](#) classification and labeling system went into effect 1 January 1991. The [DOT](#) adopted the basic concepts of the [IMO](#) and the [UN](#) labeling system.

B-2.2. The requirements of [49 CFR 171.12](#) must be complied with for any shipment which is to be made by water transport. Labels now on hand may be used provided the [UN](#) class number cited in the [IMO](#) code is shown on each label. The number may be overprinted or marked with the appropriate hazard class numeral. The number must be the same color as the symbol and must be 0.5-inch (12.7 mm) or less in height. It must be located at the bottom corner of the label.

#### B-3. ORDERING LABELS

Labels are no longer available through GSA. They must be procured through a commercial source. Each label must be durable and weather resistant. Labels must be able to withstand, without deterioration or a substantial change in color, a 30-day exposure to conditions incident to transportation.



**FIGURE B-1.**  
**Class/Division 1.1 through 1.3 Explosives Label**  
For shipments of Class/Division 1.1 through 1.3 explosives. (Black printing on orange.)



**FIGURE B-2.**  
**Class/Division 1.4 Explosives Label**  
For shipments of Class/Division 1.4 explosives. (Black printing on orange.)



**FIGURE B-3.**  
**Class/Division 1.5 Explosives Label**  
For shipments of Class/Division 1.5 explosives - blasting agents. (Black printing on orange.)



**FIGURE B-4.**  
**Class/Division 1.6 Explosives Label**  
For shipments of Class/Division 1.6 explosives. (Black printing on orange.)



**FIGURE B-5.**  
**Nonflammable Gases Label**  
For shipments of nonflammable gases. (Black or white symbol and inscription printed on green.)



**FIGURE B-6.**  
**Flammable Gases Label**  
For shipments of flammable gases. (Black or white symbol and inscription printed on red.)



**FIGURE B-7.**  
**Flammable Liquids Label**  
For shipments of flammable liquids. (Black or white symbol and inscription printed on red.)



**FIGURE B-8.**  
**Flammable Solids Label**  
For shipments of flammable solids. (Black printing with red vertical stripes on white background with symbol.)



**FIGURE B-9.**  
**Oxidizing Materials Label**  
For shipments of oxidizing materials (materials that are not organic peroxides). (Black printing on yellow.)



**FIGURE B-10.**  
**Organic Peroxides/  
Oxidizing Materials Label**  
For shipments of organic peroxides classed as oxidizing materials. (Black printing on red upper half and yellow lower half.)



**FIGURE B-11.**  
**Poisonous Gas Label**  
For shipments of poisonous, nonirritant gases. (Black printing on white). The words "TOXIC GAS" may be used in lieu of the words "POISON GAS".



**FIGURE B-12.**  
**Poisonous Liquids Label**  
For shipments of poisonous nonirritant liquids. (Black printing on white.)



**FIGURE B-13.**  
**Infectious Substance Label**  
 For shipments of infectious substances. (Black printing on white.)



**FIGURE B-14.**  
**Radioactive Material I Label**  
 For shipments of radioactive materials. Radioactive White-I. (Black printing on white, except for the “I” which must be red.)



**FIGURE B-15.**  
**Radioactive Material II Label**  
 For shipments of radioactive materials. Radioactive Yellow-II. (Black printing on yellow upper half and white lower half, except for the “II” which must be red.)



**FIGURE B-16.**  
**Radioactive Material III Label**  
 For shipments of radioactive materials. Radioactive Yellow-III. (Black printing on yellow upper half and white lower half, except for the “III” which must be red.)



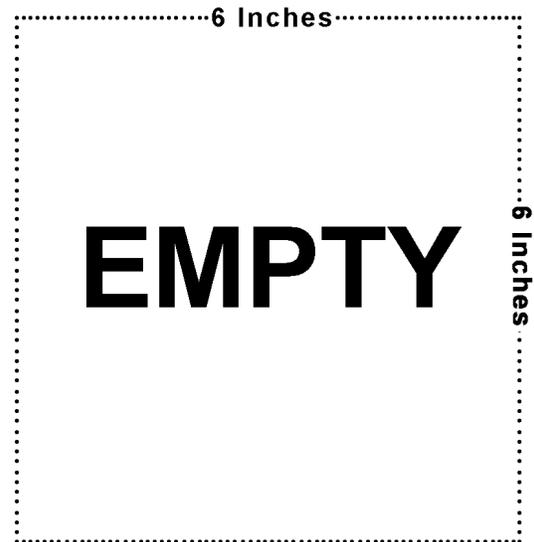
**FIGURE B-17.**  
**Corrosive Material Label**  
For shipments of corrosive materials. (Black printing on white in top half, and black background with white printing on bottom half.)



**FIGURE B-18.**  
**Water-Reactive Material Label**  
For shipments of water-reactive materials. (Black or white symbol and inscription printed on blue.)



**FIGURE B-19.**  
**Spontaneously Combustible Material Label**  
For shipments of spontaneously combustible materials. (Black printing on white upper half and red lower half.)



**FIGURE B-20.**  
**Empty Container Label**  
For empty containers. (Black on white.)

## APPENDIX C

### MOTOR VEHICLE AND TRAILER SIZE AND WEIGHT LIMITATIONS (INCLUDING DOUBLES)

**C-1. INTRODUCTION.** Table C-1 presents detailed data on size, weight, and load limits established for motor vehicles and trailers in the United States. The information in this appendix was derived from materials prepared by J. J. Keller and Associates, Inc., 3003 W. Breezewood Lane, P.O. Box 368, Neenah, WI 54957-0368. The data was effective 1 December 2010.

**C-2. INTERSTATE SYSTEM LIMITS.** Federal law establishes the following maximum weight limits which states must allow on their portion of the Interstate System: single axle 20,000 pounds; tandem axle 34,000 pounds; gross weight 80,000 pounds (weights include all enforcement tolerances). The maximum gross weight of a vehicle or combination is determined by the formula:

$$W = 500\left(\frac{LN}{N-1} + 12N + 36\right);$$

Where W equals the overall gross weight on any group of two or more consecutive axles to the nearest 500 pounds, L is the distance in feet between the extremes of any group of two or more consecutive axles, and N equals the number of axles in the group under consideration; except that two consecutive sets of tandem axles may carry a gross load of 34,000 pounds each, provided the overall distance between the first and last axles of such consecutive sets of tandem axles is 36 feet or more.

Other Federal provisions are:

\* Width: 102 inches

\* Length: States cannot set overall length limits on tractor-semitrailer or tractor-semitrailer-trailer combinations.

States must allow tractors with double trailers.

States must allow semitrailers of at least 48 feet in length, trailers of at least 28 feet in length.

\* These dimensions apply only to interstates and federal-aid highways designated by the Federal Highway Administration.

**C-3. TRAILERS PERMITTED.** No state shall prohibit the use of trailers or semitrailers of such dimensions as those that were in actual or lawful use in such state on 1 December 1982. Neither shall any state prohibit the use of existing trailers or semitrailers of up to 28.5 feet in length in a truck tractor-semitrailer-trailer combination if those trailers and semitrailers were actually and lawfully operating on 1 December 1982, within a 65-foot length limit in any state.

**Table C-1. Summary of Vehicle Size and Weight -- MAXIMUM LIMITS -- DECEMBER 2010**

STATE	LENGTH (FEET)										HEIGHT (FEET)	WIDTH (INCHES)		WEIGHT (1,000 LBS)					
	INTERSTATE AND DESIG. HWYS. (DES)					STATE AND SUPP. HWYS. (OTHER)								SINGLE AXLE WEIGHT		TANDEM AXLE WEIGHT		GROSS VEHICLE WEIGHT	
	STRAIGHT TRUCK	COMBINATIONS †		TRAILING UNITS ‡		STRAIGHT TRUCKS	COMBINATIONS †		TRAILING UNITS ‡			DES.	OTHER	INTER-STATE	OTHER	INTER-STATE	OTHER	INTER-STATE	OTHER
		TRACTOR, SEMI-TRAILER	TRACTOR TWIN TRAILER	SEMI-TRAILER	TRAILER		TRACTOR SEMI-TRAILER	TRACTOR TWIN TRAILERS	SEMI-TRAILER	TRAILER									
ALABAMA	40	Ø	Ø	57 <sup>XX</sup>	28'6"	40	Ø	Ø	53	28.6"	13'6"	102	BB	20	20	34	40	80	84
ALASKA	45	75	75	53 <sup>L</sup>	48 <sup>L</sup>	45	75	75	48 <sup>L</sup>	48 <sup>L</sup>	14	102	102	20	20	38	38	K	K
ARIZONA*	40	Ø	Ø	57'6"	28'6"	40	65	65	53	28'6"	KK	102	96	20	20	34	34	80	80
ARKANSAS	40	Ø	65	53.5	28'6" <sup>O</sup>	40	Ø	65	53.5	28'6" <sup>O</sup>	13'6"	102	102	20	20	34	34	80	80
CALIFORNIA	40	B	B	B	B	40	B	B	B	B	14	102	102	20	20	34	34	80	80
COLORADO*	45	Ø	Ø	57.33 <sup>D</sup>	28'6" <sup>D</sup>	45	Ø	Ø	57.33 <sup>D</sup>	28'6" <sup>D</sup>	YY	102	102	20	20	36	40	80	85
CONNECTICUT	45	Ø	Ø	48 <sup>LL</sup>	28	45	Ø	Ø	48 <sup>LL</sup>	28	13'6"	102.36	102.36	22.4	22.4	36 <sup>W</sup>	36 <sup>W</sup>	80	80
DELAWARE*	40	Ø	Ø	53	29	40	60	60	NS	NS	13'6"	102	102	20	20	34	40	80	80
DISTRICT OF COLUMBIA	40	Ø	Ø	48	28	40	55	A	NS	A	13'6"	102	96	22	22	38	38	80	80
FLORIDA*	40	Ø	Ø	53 <sup>L</sup>	28	40	Ø	A	53 <sup>L</sup>	28	13'6"	102	102	22	22	44	44	80	80
GEORGIA*	NS	Ø	Ø	53	28	NS	100 <sup>MM</sup>	100 <sup>MM</sup>	53	28	13'6"	102	96	P	P	Q	40.68	80	80
HAWAII	45	NS	NS	48	NS	45	65	65	48	NS	14	108	108	22.5	22.5	34	34	80	88
IDAHO	45	75 <sup>T</sup>	Ø	53	68 <sup>H</sup>	45	75 <sup>T</sup>	75	48	61 <sup>GG</sup>	14	102	102	20	20	34	34	80	105.5 <sup>M</sup>
ILLINOIS	42	NS	G	53 <sup>G</sup>	28'6"	42	G	60	53 <sup>G</sup>	28'6"	13'6"	102	102	20	20	34	34	80	80
INDIANA*	40	Ø	Ø	53 <sup>HH</sup>	28'6"	40	Ø	Ø	53 <sup>HH</sup>	28'6"	13'6"	102	102	20	20	34	34	80	80
IOWA	41	Ø	Ø	53	28'6"	40	Ø	Ø	53	28'6"	13'6"	102	102	20	20	34	34	80	80
KANSAS*	45	Ø	Ø	59'6"	28'6"	45	Ø	Ø	59.5	28'6"	14	102	102	20	20	34	34	80	85.5
KENTUCKY	45	Ø	Ø	53	28	45	65	A	NS	A	13'6"	102	96	20	20	34	34	80	J

\* States allowing 400lb. weight allowance for idle reduction technology.

**Table C-1. Summary of Vehicle Size and Weight -- MAXIMUM LIMITS -- DECEMBER 2010 (Continued)**

STATE	LENGTH (FEET)										HEIGHT (FEET)	WIDTH (INCHES)		WEIGHT (1,000 LBS)					
	INTERSTATE AND DESIG. HWYS. (DES)					STATE AND SUPP. HWYS. (OTHER)								SINGLE AXLE WEIGHT		TANDEM AXLE WEIGHT		GROSS VEHICLE WEIGHT	
	STRAIGHT TRUCK	COMBINATIONS †		TRAILING UNITS ‡		STRAIGHT TRUCKS	COMBINATIONS †		TRAILING UNITS ‡			DES.	OTHER	INTER-STATE	OTHER	INTER-STATE	OTHER	INTER-STATE	OTHER
		TRACTOR, SEMI-TRAILER	TRACTOR TWIN TRAILER	SEMI-TRAILER	TRAILER		TRACTOR SEMI-TRAILER	TRACTOR TWIN TRAILERS	SEMI-TRAILER	TRAILER									
LOUISIANA	45	∅	∅	59'6"	30	45	65	A	NS	A	14'	102	102	20	22	34	37	80	88
MAINE*	45	∅	∅	53 <sup>V, SS</sup>	28'6"	45	65	X	53	28'6"	13'6"	102	102	R	22.4	34	38	80	80
MARYLAND	40	∅	∅	53 <sup>L, V, WW</sup>	28	40	∅	A	48	A	13'6"	102	102 <sup>WW</sup>	22.4	22.4	34	34	80	80
MASSACHUSETTS	40	∅	∅	53	28	40	∅	∅	53	28	13'6"	102	102	22.4	22.4	36	36	80	80
MICHIGAN	40	∅	58	53 <sup>I</sup>	28'6"	40	∅	59	50	NS	13'6"	102	96	JJ	JJ	JJ	JJ	JJ	JJ
MINNESOTA*	45	∅	∅	53 <sup>EE</sup>	28'6"	45	75	E	53 <sup>EE</sup>	28'6"	13'6"	102	102	20	18	34	34	80	80
MISSISSIPPI	40	∅	∅	53	30	40	∅	∅	53	30	13'6"	102	102	20	20	34	34	80	80
MISSOURI*	45	∅	∅	53	28	45	60	65	NS	NS	KK	102	102	20	22	34	36	80	80
MONTANA	55	∅	∅	53	28'6"	55	∅	∅	53	28'6"	14	102	102	20	20	34	34	123	123
NEBRASKA*	40	∅	∅	53	65 <sup>Y</sup>	40	∅	∅	53	65 <sup>Y</sup>	14'6"	102	102	20	20	34	34	80	95
NEVADA	40	∅	∅	53	28'6"	40	∅	∅	53	28'6"	14	102	102	20	20	34	34	80	80
NEW HAMPSHIRE	45	N/S	N/S	53 <sup>L</sup>	28	45	NS	NS	48	28	13'6"	102	102	22.4	22.4	34	36	80	80
NEW JERSEY	40	∅	∅	53 <sup>L</sup>	28	40	∅	CC	48	28	13'6"	102	96 <sup>QQ</sup>	22.4	22.4	34	34	80	80
NEW MEXICO	40	∅	∅	57'6"	28'6"	40	65	65	NS	NS	14	102	102	21.6	21.6	34.32	34.32	80	86.4
NEW YORK*	40	∅	∅	53 <sup>PP</sup>	28'6"	40	65	65	48	28'6"	13'6"	102	102	20 <sup>II</sup>	22.4	34 <sup>II</sup>	36	80	80
NORTH CAROLINA	40	∅	∅	53 <sup>L</sup>	28	40	∅ <sup>ZZ</sup>	A	53 <sup>ZZ</sup>	A	13'6"	102	102	20	20	38	38	80	80
NORTH DAKOTA	50	∅	∅	53	53	50	75 <sup>U</sup>	75 <sup>U</sup>	53	53	14	102	102	20	20	34	34	80	105.5
OHIO	40	∅	∅	53	28'6"	40	∅	∅	53	28'6"	13'6"	102	102	20	20	34	34	80	80
OKLAHOMA*	45	∅	∅	59'6"	53	45	∅	∅	53	29	13'6"	102	102	20	20	34	34	80	90

\* States allowing 400lb. weight allowance for idle reduction technology.

Table C-1. Summary of Vehicle Size and Weight -- MAXIMUM LIMITS -- DECEMBER 2010 (Continued)

STATE	LENGTH (FEET)										HEIGHT (FEET)	WIDTH (INCHES)		WEIGHT (1,000 LBS)					
	INTERSTATE AND DESIG. HWYS. (DES)					STATE AND SUPP. HWYS. (OTHER)								SINGLE AXLE WEIGHT		TANDEM AXLE WEIGHT		GROSS VEHICLE WEIGHT	
	STRAIGHT TRUCK	COMBINATIONS †		TRAILING UNITS ‡		STRAIGHT TRUCKS	COMBINATIONS †		TRAILING UNITS ‡			DES.	OTHER	INTER- STATE	OTHER	INTER- STATE	OTHER	INTER- STATE	OTHER
		TRACTOR, SEMI- TRAILER	TRACTOR TWIN TRAILER	SEMI- TRAILER	TRAILER		TRACTOR SEMI- TRAILER	TRACTOR TWIN TRAILERS	SEMI- TRAILER	TRAILER									
OREGON	40	∅	∅	53	N	40	N	N	N	N	14	102	102	20	20	34	34	105.5	105.5
PENNSYLVANIA*	40	∅	∅	53 <sup>FF</sup>	28'6"	40	∅	A	53 <sup>FF</sup>	A	13'6"	102	96 <sup>NN</sup>	22.4 <sup>Z</sup>	22.4 <sup>Z</sup>	36 <sup>Z</sup>	36 <sup>Z</sup>	80	80
RHODE ISLAND	40	∅	∅	53 <sup>L</sup>	28'6"	40	∅	∅	48.5	28'6"	13'6"	102	102	22.4	22.4	36	36	80	80
SOUTH CAROLINA*	40	∅	∅	53 <sup>L</sup>	28'6"	40	∅	A	48	A	13'6"	102	102	20	22	35.2 <sup>E</sup>	39.6	80	80
SOUTH DAKOTA	45	∅	∅	53	S	45	∅	∅	53	S	14	102	102	20	20	34	34	80	K
TENNESSEE	40	∅ <sup>F</sup>	∅ <sup>F</sup>	53 <sup>F</sup>	28'6"	40	∅	A	50 <sup>EE, F</sup>	A	13'6"	102	102	20	20	34	34	80	80
TEXAS	45	∅	∅	59	28'6"	45	∅	∅	59	28'6"	14	102	102	20	20	34	34	80	80
UTAH	45	∅	∅	53	61 <sup>Y</sup>	45	∅	∅	48 <sup>UU</sup>	61 <sup>Y</sup>	14	102	102	20	20	34	34	80	80
VERMONT	46	∅	∅	53 <sup>OO</sup>	28	46	75 <sup>AA</sup>	A	53 <sup>OO</sup>	A	13'6"	102	102	20	22.4	34	34	80	80
VIRGINIA*	40	∅	∅	53 <sup>FF</sup>	28'6"	40	65 <sup>FF</sup>	A	53 <sup>FF</sup>	A	13'6"	102	102	20	20	34	34	80	80
WASHINGTON*	40	∅	∅	53	61 <sup>Y</sup>	40	∅	∅	48	60 <sup>Y</sup>	14	102	102	20	20	34	34	105.5	105.5
WEST VIRGINIA*	40	∅	∅	53 <sup>C</sup>	28	40	70	A	48	A	13'6"	102	96	20	20	34	34	80	80 <sup>DD</sup>
WISCONSIN*	40	∅	∅	53 <sup>RR</sup>	28'6"	40	75	A	48 <sup>SS</sup>	A	13'6"	102	102	20	20	34	34	80	80
WYOMING	60	∅	TT	60	TT	60	∅	TT	60	TT	14	102	102	20	20	36	36	117	117

\* States allowing 400lb. weight allowance for idle reduction technology.

**NOTES:**

**TOLERANCES:**

ALABAMA . . . . .	10% weight tolerance on other roads.
CALIFORNIA . . . . .	200 lbs on Platform Scales, or 2% of scale wt. on Portable Scales.
DISTRICT OF COLUMBIA . . . . .	1,000 lb tolerance on GVW.
HAWAII . . . . .	5% weight tolerance on state and supplemental routes only.
MARYLAND . . . . .	1,000 lbs tolerance on GVW.
MISSISSIPPI . . . . .	None on federal highways, 5% on tandem and 2% on gross on selected other highways.
MISSOURI . . . . .	If on highways other than interstate, can exceed axle and gross weight limitations up to 2,000 lbs.
MONTANA . . . . .	Up to 5% (7% for livestock), \$10.00 trip permit fee charged.
NEW HAMPSHIRE . . . . .	5% tolerance below 80,000 lbs on supp. highways only.
PENNSYLVANIA . . . . .	3% on axle weight except when weighed on stationary scales on interstate highways.
VERMONT . . . . .	On other highways only--10% on axles, 5% on gross.
WEST VIRGINIA . . . . .	10% weight tolerance on state and supplemental highways.

- † Only tractor-semitrailer and tractor-twin-trailer combinations are considered here. For other combinations, contact state agency.
- ‡ Semitrailer in tractor-semitrailer combination, and trailer in tractor-twin-trailer combination.
- ∅ No overall length restrictions imposed, but must not exceed trailer length.
- NS Not specified, (but must meet trailer length).
- A Not allowed (allowed in some states by permit).
- B On any highway: tractor-semitrailer combination 65' (distance between kingpin and rearmost semitrailer axle must be 40' or less; single axle semitrailer kingpin dimension is limited to 38').  
 On federally designated highways: no overall combination length limitation or kingpin restriction if semitrailer is 48' or less. Or, semitrailer may be 53', if kingpin to centerline of rearmost axle for trailers with 2 or more axles is no longer than 40', single rear axle is limited to 38'.  
 Twin-trailer combinations: to 65' on all highways if either trailer exceeds 28'6"; 75' on non-designated highways if neither trailer exceeds 28'6"; and unlimited length on federally designated system if neither trailer exceeds 28'6".
- C 53' trailers permitted if distance between last axle of tractor and first axle of semitrailer does not exceed 37'.
- D Combinations with semitrailers or twin-trailers in excess of limits may not exceed 70'.
- E If gross weight is more than 75,185 lbs, legal tandem weight is 34,000 lbs.
- F The towed vehicle shall not exceed 50' in length from the point of attachment to the tractor. If the towed vehicle exceeds 48'. in length from the point of attachment to the tractor, the distance between the kingpin and the rearmost axle or a point midway between the two rear axles, if the two rear axles are a tandem axle, shall not exceed 41'.

**NOTES (Continued):**

- G Semitrailers operated on Class I and II hwy. are limited to 45'6" maximum kingpin to rear axle (42'6" on Class III and other hwy.). Tractor-semitrailer-trailer combos have no limit on Class I highways and a 65' front axle to rear axle on Class II highways. On Class III and other hwy. maximum tractor/semitrailer or twin-trailer wheel base is 55' or 65' overall length.
- H Combination of trailers can be 68' including tongue.
- I Semitrailers longer than 50' can operate on designated highways only; are limited to 3 axles; and shall have a wheelbase of 37' 6" to 40' 6" ( $\pm 6"$ ) (measured from the kingpin coupling to the center of the axles or to the center of tandem axle if equipped with 2 axles).
- J On Class AAA highways, 80,000 lbs; on Class AA highways, 62,000 lbs; and on Class A highways, 44,000 lbs.
- K GVW is governed by Bridge Formula.
- L If in excess of 48'---maximum distance from kingpin to center of rearmost axle, (not to exceed 41' if single) or the center of a group of rear axles, must be equipped with a rear underride guard.
- M Allowed with permit only.
- N Tractor-semitrailer combination: 60' for group 1 highways, 50' for group 2 and group 3 highways. Semitrailers: not specified for group 1, 40' for group 2, and 35' for group 3. Tractor-twin-trailers: 75' for group 1, 65' for group 2 and group 3. Trailers: 40' for group 1, 35' for group 2 and group 3. On interstate and designated highways: no semitrailer or trailer in a twin-trailer combination may exceed 40', both trailing units together measured from the front of the first to the rear of the second may not exceed 68'.
- O If trailer was manufactured prior to 2 December 1982, 28'6"; if trailer was manufactured after 1 December 1982, 28'.
- P 18,000 lbs + 13% w/low pressure tires; 16,000 lbs +13% w/high pressure, solid rubber or cushion tires.
- Q 34,000 lbs Exception: If vehicle is less than 55' long and gross weight is less than 73,280 lbs, will allow 40,680 lbs.
- R Single axle: 22,000 lbs if GVW is less than 73,280 lbs; and 20,000 lbs if GVW is more than 73,280 lbs but less than 80,000 lbs.
- S 28'6" on each trailer unit operating in a road tractor-trailer-trailer combination if the towbars do not exceed 19' and overall length of the trailer-trailer unit including towbars does not exceed 80'. The maximum length of semitrailer-semitrailer or semitrailer-trailer combination, excluding the length of the truck-tractor, is 81'6" provided the maximum length of either unit does not exceed 45'. If the towbar length exceeds 19', the towbar shall be flagged during daylight hours and lighted at night. The weight of the second unit may not exceed the weight of the first unit by more than 3,000 lbs.
- T Unless otherwise noted.
- U 2, 3 and 4-unit combinations, 110' on four-lane divided highways; 95'. on most state hwy.
- V "Wide Right Turn" sign also required.
- W If axles of tandem are less than 6' apart.
- X 28'6" semitrailer and 28'6" straight trailer only allowed on certain roads.

**NOTES (Continued):**

- Y As measured from front of first trailing unit to rear of second.
- Z When GVW is 73,280 lbs or less, single axle may not exceed 22,400 lbs, and tandem; 36,000 lbs, if GVW exceeds 73,280 lbs, single axle may not exceed 20,000 lbs, and tandem 34,000 lbs.
- AA Allowed if trailer is 53' or less. Permit may be required on USRT4-call VT Transport.
- BB 96" on lane widths less than 12', otherwise 102".
- CC Only allowed on N.J. Double Trailer Truck Network.
- DD 65,000 lbs on county routes.
- EE Kingpin to center of rear axle cannot exceed 43'.
- FF Provided distance between kingpin and center of rearmost axle group is 41' or less, or a point midway between rear tandem axles.
- GG Combination of trailers can be 61' including tongue, or 75' overall.
- HH Kingpin to rearmost axle cannot exceed 43'; if the semitrailer is longer than 48'6".
- II If GVW is below 71,000 lbs, single axle weight may be 22,400 lbs, tandem axle weight may be 36,000 lbs.
- JJ Variable, contact the Michigan Department of Transportation.
- KK 14' on interstate and designated system only, otherwise 13'6".
- LL Semitrailers measuring greater than 48' and less than or equal to 53' are allowed to travel on all interstate, state and U.S. routes numbered 1-399 inclusive and state routes numbered 450, 476, 508, 693, and 695. These semitrailers are also allowed to travel (1) one mile off of these routes for food, fuel and terminal access provided the distance is no more than 43'. between the kingpin and the center of the rearmost axle with wheels in contact with the road surface.
- MM 100' unless limited and will then be posted.
- NN 102" permitted on all roads for trucks; combos allowed 102" on interstate or designated highways, but only 96" on all other roads.
- OO Maximum distance from kingpin to center of rearmost axle not to exceed 43' and must be equipped with rear underride guard.
- PP Distance from kingpin to center of rear axle is limited to 43' maximum and must be equipped with a rear underride guard. Not allowed in New York City.
- QQ 102" allowed in N.J. 102-inch Truck Network.
- RR Kingpin to rear axle cannot exceed 43'.
- SS 53' allowed if kingpin to rear axle does not exceed 43'.

- TT In a double-trailer combo, the semitrailer cannot exceed 48' and the second trailer or semitrailer cannot exceed 40'. Combined length of trailers cannot exceed 81'.
- UU No overall limit if trailer is 48' or less. 53' trailers allowed within 1 mile of designated routes.
- VV If greater than 53' 6", kingpin to rear axle or center of rear axles cannot exceed 41'.
- WW 96" applies on I-895, the Harbor Tunnel Thruway. On US1/Conowingo Dam trailers 102" wide/53' long not allowed.
- XX If greater than 53' 6" , kingpin to rear axle limited to 41'.
- YY 14'6" on designated highways, otherwise 13'
- ZZ 53' trailer on primary highway routes only; see <http://www.ncdot.gov/travel/statemapping/>.
- \* States allowing 400 lb. weight allowance for idle reduction technology.

## APPENDIX D

### DEPARTMENT OF TRANSPORTATION (DOT) SPECIAL PERMITS AND CERTIFICATES OF EQUIVALENCY (COE)

#### D-1. INTRODUCTION.

The regulations of the [Department of Transportation \(DOT\)](#), [49 CFR 171-178](#), [383](#), [391](#) and [397](#) governing the safe transport of ammunition, explosives and related hazardous materials (A&E) are binding upon all shippers and all common, contract and private land carriers who transport A&E in interstate or foreign commerce. The Hazardous Materials Safety and Security Reauthorization Act of 2005 amended the federal hazardous materials transportation law by changing the term "exemption" to "special permit". [Title 49 CFR Part 107.101](#) allows "special permits" to DOT regulations affecting the transportation of A&E, provided certain risk assessment/risk control criteria are met. Per [49 CFR 107.105\(d\)](#), each special permit application must include a justification statement that demonstrates that the alternate methods described in the special permit request achieve a level of safety that is at least equivalent to that required by regulation. Substantiation must include risk assessment analyses, supporting data and test results.

D-1.1. [Table D-1](#) of this appendix outlines current DOT special permits. This table is setup with hyperlinks, which will allow the user to click on a special permit number and automatically access the DOT website (<http://www.phmsa.dot.gov>). Once at this website, the entire special permit can be viewed and hard copies with signatures can be printed, if needed. Data for shipments under Navy Certificates of Equivalency (COE's) are found in [table D-2](#).

#### D-2. PROCEDURE FOR OBTAINING AND/OR RENEWING SPECIAL PERMITS.

D-2.1. OBTAINING SPECIAL PERMITS. Upon determining that existing DOT or other regulations are not applicable to a proposed shipment, the shipping activity shall request a special permit from the Naval Surface Warfare Center, Indian Head Division Detachment Picatinny (Code G13), Naval Packaging, Handling, Storage and Transportation (PHST) Center, Building 458, Whittemore Avenue, Picatinny Arsenal, New Jersey 07806-5000. Additionally send a copy of the DOT special permit request application to Commanding Officer, [Naval Ordnance Safety and Security Activity \(NOSSA\)](#), Code N5, Farragut Hall, 3817 Strauss Avenue, Suite 108, Indian Head, MD 20640-5151. Requests shall be submitted in triplicate 150 days before the requested effective date and shall include the following data as applicable:

a. A detailed description of the proposal, including drawings, plans, calculations, procedures, test results, previous special permits or approvals, a list of specification containers (if any) to be used, a list of modified specification containers (if any) to be used, and a description of the modifications and any other supporting information.

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b. The chemical name, common name, hazard classification, form, quantity, properties and characteristics of the material covered by the proposal, including composition and percentage (specified by volume or weight) of each chemical, if solution or mixture.

c. All relevant shipping and accident experience.

d. A description of the proposed mode of transportation, identifying any increased risks that are likely to result if the special permit is granted. Specify safety control measures considered necessary or appropriate to compensate for any increased risks.

e. The proposed duration or proposed schedule of events for which the special permit is required.

f. Description of how the proposed special permit and safety control measures for such will achieve the level of safety outlined below:

(1) Is at least equal to that specified in the regulation from which the special permit is sought; or

(2) If the regulations do not contain a specified level of safety, will be consistent with the public interest and will adequately protect against the risks of life and property which are inherent in the transportation of A&E in commerce.

**D-2.2. APPLICATION FOR RENEWAL.** Each application for the renewal of a special permit shall be submitted to [NOSSA \(N5\)](#) in triplicate at least 60 days before the expiration date of the special permit and preferably not more than 120 days before the expiration date. If, at least 60 days prior to the expiration of an existing special permit of a continuing nature, the holder files an application for renewal which is complete and conforms with the requirements listed below, the special permit will not be considered to have expired until the application for renewal has been finally determined. Compliance with the recording requirements of [paragraph D-6](#) automatically ensures that [NOSSA \(N5\)](#) will process existing special permits for renewal prior to their expiration. Requests shall include the following data, as applicable:

a. Identification of the special permit for which a renewal is required.

b. Certification that the description, technical information and safety assessment submitted in the original application (or as may have been updated by any subsequent application for renewal) is still accurate and correct.

c. Any amendments to previously submitted descriptions, technical information and safety assessments that will be needed to ensure accurate updates of such.

d. All relevant shipping and accident experience that has occurred in connection with the special permit since its issuance or most recent renewal. If no accidents have been experienced, such information should be stated. This statement must include the approximate number of shipments made or packages shipped, and the number of shipments or packages involved in any loss of contents (including loss by venting when transporting a compressed or cold temperature gas).

**D-3. TERM OF A SPECIAL PERMIT.**

Generally, new special permits expire two years from issuance and renewals of existing special permits expire four years from issuance. If it becomes apparent that a shipment for which a special permit has been issued will not be completed before the expiration date, a request for extension shall be submitted through appropriate command channels to [NOSSA \(N5\)](#). This request must be submitted at least 60 days prior to the expiration date of the special permit. All such requests shall include the contemplated date(s) of shipment(s) completion. If special permits have expired and have not been renewed by the DOT, yet the requirements for shipping of a material still exists, contact [NOSSA \(N5\)](#) for assistance.

**D-4. CARRIER COPY OF SPECIAL PERMIT.**

When shipments of A&E are made by motor, rail or air carriers and certain deviations are granted by a DOT special permit, a copy of the applicable basic (or revised) special permit with a copy of extensions, corrected copies, etc. shall be attached to the carrier's copy of the BL (or other shipping document furnished the carrier.)

D-4.1. The BL shall be annotated "Copy of DOT Special Permit No. \_\_\_ Provided Carrier." For military and/or air shipments, such information shall also be annotated in the "Remarks" column of the DD Form 2890.

**D-5. LIST OF SPECIAL PERMITS.**

Each special permit has an identifying number (i.e., E-868 or SP-7605, etc.). Special permits applicable to this publication are listed in numerical order in [table D-1](#). Some permits will retain their previous DOT exemption identifying number until it reaches its expiration date and is either cancelled or replaced with a "SP" number.

**D-6. RECORDING SHIPMENTS UNDER SPECIAL PERMITS.**

Activities shipping material moving under a DOT special permit shall maintain data on each shipment as follows:

- a. DOT special permit number.
- b. Number of shipments made.
- c. Number of accidents/incidents or packages involved in any loss of contents (explain each).
- d. Damaged or improper shipment (list DD Form 361 report number and date).
- e. Negative reports are required.

D-6.1. Consignee shall report damaged or improper shipment as outlined in [paragraph 2-8.7](#). The DD Form 361 shall be annotated "Special Permit No. \_\_\_ applies to this shipment."

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D-6.2. Per [49 CFR](#) requirements and [DTR 4500.9-R, Chapter 204](#), a history of all shipments made under DOT special permits shall be forwarded quarterly. All information outlined in [paragraph D-6](#) shall be included. This data shall be submitted using the web-based data entry system found at <https://nossa.nmci.navy.mil/aaet/surveys.aspx>. Access to this site requires a Public Key Infrastructure (PKI) certificate. If no usage is reported on a particular DOT special permit for one full year, that special permit will be cancelled by [SDDC](#).

### D-7. COMPETENT AUTHORITY APPROVALS (CAAs)

D-7.1. Many of the packagings once authorized and approved by Competent Authority Approvals (CAAs) are now reflected/incorporated in the modal regulations. Also, in many instances the regulatory references cited on the CAAs have changed or are no longer in effect. Therefore, if information regarding CAAs is required, please contact the [Naval Packaging, Handling, Storage and Transportation \(PHST\) Center](#), Naval Surface Warfare Center Indian Head Division (NSWC IHD), Detachment Picatinny, [robert.dress@navy.mil](mailto:robert.dress@navy.mil).

### D-8. CERTIFICATES OF EQUIVALENCY (COEs)

D-8.1. Data on Certificates of Equivalency (COEs) are listed in [table D-2](#). Unless annotated with an expiration date, these documents remain valid from the date of issue until they are withdrawn or superseded by a revised approval. Copies of COEs may be printed from this DVD. [Table D-2](#) lists only COEs issued from 1989 to the present. For information on COEs issued before this timeframe, please contact Mr. Bob Dress at the [Naval PHST Center](#), [robert.dress@navy.mil](mailto:robert.dress@navy.mil).

Table D-1. Numerical List of Major DOT Special Permits

Special Permit No.	Summary of Provisions	Issue Date	Expiration Date
SP-868 (11th Rev.)	Authorizes exceptions to requirements for carrier inspection of the method of manufacture, inspection of packaging, vehicle, etc. for transportation of certain Division 1.1 -1.3 explosives.		
SP-970 (15th Rev.)	Authorizes the transportation of diborane classed as a Division 2.3 material in DOT Specification 3AA cylinders overpacked in certain insulated drums or wooden boxes.		
SP-2709 (24th Rev.)	Authorizes the transportation of certain 1.1C, 1.1D and 1.3C liquid explosives in both UN-specification and non-specification packagings.		
SP-2787 (10th Rev.)	Authorizes the transportation in commerce of certain Division 2.2 gases in a non-DOT specification pressure vessel, as detailed within this special permit.		
SP-3004 (10th Rev.)	Authorizes shipments of oxygen, argon, hydrogen, and nitrogen in certain 373-cubic inch non-DOT specification sampling cylinders.		
SP-3121 (19th Rev.)	Authorizes the transportation of certain poisonous material in DOT Specification MC 338 cargo tanks.		
E-3415 (8th Rev.)	Authorizes the transportation of rocket motors (Divisions 1.1C, 1.2C or 1.3C) without overpacking. <b>This exemption has been incorporated into 49 CFR.</b>		
SP-3498 (16th Rev.)	Authorizes the transportation of fueled combat and other military vehicles loaded with ammunition basic load (ABL), accessory ammunition, and other HAZMAT in periods of declared national emergency, or during contingencies requiring expedited movement of U.S. forces as approved by the appropriate command authority.		

A link to the DOT website is provided, however, be advised that some information may have changed since the issuance of this manual.

**NAVSEA SW020-AG-SAF-010 TENTH REVISION**

**Table D-1. Numerical List of Major DOT Special Permits (Continued)**

<b>Special Permit No.</b>	<b>Summary of Provisions</b>	<b>Issue Date</b>	<b>Expiration Date</b>
SP-5022 (22th Rev.)	Authorizes the transportation of certain packages of Division 1.1, 1.2 and 1.3 explosives in temperature controlled equipment subject to the limitations and requirements of this special permit.	15 Jul 09	31 Mar 11
SP-5112 (10th Rev.)	Authorizes use of a specified container to transport certain Division 1.1 explosives.	26 Feb 09	31 Aug 10 (SDDC Renewal Submitted)
SP-7573 (14th Rev.)	Authorizes transportation in air commerce of hazardous materials not authorized for shipment by cargo aircraft or in quantities greater than those authorized for shipment by cargo aircraft only.	4 May 11	31 Dec 14
SP-7765 (20th Rev.)	Authorizes transport in commerce of certain compressed gases in non-DOT specification pressure vessels.	22 Mar 10	28 Feb 14
SP-8228 (22nd Rev.)	Authorizes the transport in commerce of a small sample of an unapproved explosive substance or article in special packagings as prescribed.	27 Sep 11	31 Mar 15
SP-8451 (33rd Rev.)	Authorizes the transport of not more than 25 grams of solid explosive or pyrotechnic material having an energy density not significantly greater than pentaerythritol tetranitrate classed as Division 1.4E in a special shipping container.	13 Mar 09	31 Jul 13
SP-8569 (10th Rev.)	Authorizes the transport of 6.6 gallons of hydrazine, aqueous solution, in non-DOT specification, specially designed military packaging.	1 Mar 10	31 Aug 13
SP-9232 (12th Rev.)	Authorizes emergency air shipment of military explosives and HAZMAT during periods of declared national emergency, contingencies or expedited movement of U.S. Forces.	19 Dec 07	30 Nov 11

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NAVSEA SW020-AG-SAF-010 NINTH REVISION

Table D-1. Numerical List of Major DOT Special Permits (Continued)

Special Permit No.	Summary of Provisions	Issue Date	Expiration Date
E-9528 (4th Rev.)	Authorizes the transport in commerce of certain class 3 hazardous materials in non-self propelled aerospace ground equipment, subject to the limitations stated. <b>No longer required; the provisions of this exemption were incorporated into 49 CFR 173.220 (b)(4).</b>		
SP-9571 (8th Rev.)	Authorizes the transport of not more than 5 grams of an approved or unapproved explosive in a special packaging.	15 Jul 09	30 Jun 13
SP-9610 (14th Rev.)	Authorizes the transportation in commerce of certain empty packagings containing residues of Class 1 smokeless powders without complete shipping papers and placarding.	21 Aug 09	31 Jan 14
SP-9649 (11th Rev.)	Authorizes transportation in commerce of munitions of Class I (explosive) hazard containing components manufactured of depleted uranium metal subject to the limitations and special requirements prescribed.	1 May 08	30 Apr 12
SP-10247 (9th Rev.)	Authorizes transportation in commerce of certain small quantities of Divisions 2.1, 2.2, 2.3, and 6.1, and Class 3 and 8 materials which are not authorized under 173.4.	5 Jun 09	31 Dec 11
SP-10631 (11th Rev.)	Authorizes the transportation in commerce of certain hazardous materials, as specified within this special permit, in DOT Specification MC338 cargo tanks.	5 Jan 11	30 Nov 14
SP-11156 (17th Rev.)	Authorizes the transport in commerce of certain hazardous materials, as listed in paragraph 6 of this special permit, in non-DOT specification multi-wall plastic-lined paper bags.	20 Feb 09	31 Jan 14

A link to the DOT website is provided, however, be advised that some information may have changed since the issuance of this manual.

Table D-1. Numerical List of Major DOT Special Permits (Continued)

Special Permit No.	Summary of Provisions	Issue Date	Expiration Date
<a href="#">SP-11296 (14th Rev.)</a>	Authorizes the transportation in commerce of certain waste aerosol cans containing flammable gas propellants, including isobutane and propane, overpacked in a UN1A2 steel drum or a UN1H2 plastic drum for disposal.	23 Mar 09	31 Jan 14
<a href="#">SP-11516 (13th Rev.)</a>	Authorizes the transportation in commerce of certain DOT Specification 2Q containers containing Class/Division 2.1 or 2.2 gases specified by this special permit.	26 Jan 11	31 Dec 14
<a href="#">SP-11624 (13th Rev.)</a>	Authorizes the transportation in commerce of certain waste paints and paint related materials, Class 3, in metal or plastic pails, packed in cubic yard boxes, dump trailers, and roll-off containers.	20 Mar 09	31 Jan 14
<a href="#">SP-11629 (8th Rev.)</a>	Authorizes the transport in commerce of certain simulators with a history of outgassing hydrogen due to a reaction between the magnesium based pyrotechnic compounds and internal moisture under prescribed special handling conditions.	12 Aug 11	31 May 15
<a href="#">SP-11952 (7th Rev.)</a>	Authorizes the transportation in commerce of certain pressure metal containers containing limited quantities of compressed nitrogen.	12 Feb 09	31 Jan 12
<a href="#">SP-12030 (5th Rev.)</a>	Authorizes the transportation in commerce of battery fluid, acid, packaged with a dry storage battery in a UN4G fiberboard box with a maximum gross weight not over 37.0 kg, which exceed the weight limitation authorized by the Hazardous Materials Regulations (HMR).	1 Apr 11	31 Jan 15

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Table D-1. Numerical List of Major DOT Special Permits (Continued)

Special Permit No.	Summary of Provisions	Issue Date	Expiration Date
<a href="#">SP-12056 (12th Rev.)</a>	Authorizes the transportation in commerce of certain non-DOT specification propellant tanks designed to a military specification, overpacked in a UN 1A2 stainless steel drum, containing Division 6.1 liquid or Division 2.3 gas.	28 Apr 11	31 Mar 15
<a href="#">SP-12162 (7th Rev.)</a>	Authorizes the transport in commerce of certain non-DOT cylinders containing Div. 2.2 materials for use in the Advanced Seal Delivery System (ASDS).	8 Nov 10	30 Apr 14
<a href="#">SP-12609 (5th Rev.)</a>	Authorizes the transport in commerce of a caustic alkali liquid (decontamination solution) in packages filled prior to 1 Oct 91 meeting the regulations in effect on 30 Sept 91.	1 Nov 10	30 Sep 14
<a href="#">SP-12842 (5th Rev.)</a>	Authorizes the transportation in commerce of Division 2.1 and Division 2.2 materials in aerosol cans contained in strong outer packages with a gross mass not to exceed 500 kg to a recycling or disposal facility.	12 Feb 09	28 Feb 13
<a href="#">SP-13002 (6th Rev.)</a>	Authorizes the transport in commerce of compressed nitrogen gas in accumulators that are an integral part of a launcher assembly.	27 Jan 11	31 Dec 14
<a href="#">SP-13133 (7th Rev.)</a>	Authorizes the transport in commerce of not more than 25 grams of explosive or pyrotechnic material that has an energy density not greater than that of PETN, classed as Division 1.4E when packed in a special shipping container.	30 Apr 09	28 Feb 14
<a href="#">SP-13318 (8th Rev.)</a>	Authorizes the transport in commerce of DOT specification 39 cylinders of 75 cubic inches or less volume, except as specified, for the materials authorized by this special permit.	21 Jul 09	31 May 15

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Table D-1. Numerical List of Major DOT Special Permits (Continued)

Special Permit No.	Summary of Provisions	Issue Date	Expiration Date
SP-13958 (1st Rev.)	Authorizes the transport in commerce of low specific activity LSA-II radioactive waste in non-specification packages consisting of either gondola railcars or tarpaulin-covered dump trucks, as specified within this special permit.	17 Apr 07	31 Mar 11 (Renewal Submitted to DOT)
SP-14282 (7th Rev.)	Authorizes the transport in commerce of certain detonators and detonator assemblies on the same motor vehicle with any other Class 1 explosives when they are in separate and isolated cargo-carrying compartments powered by the same tractor.	21 Jan 10	31 Dec 11
SP-14392 (6th Rev.)	Authorizes the stowage of Class 1 (explosive) materials below deck of a cargo vessel with an alternative container stowage configuration.	27 Jan 10	31 Dec 12
SP-14418 (7th Rev.)	Authorizes the transportation in commerce of water-reactive solids, powder in special packaging without being labeled or marked with the proper shipping name.	23 Mar 09	28 Feb 13
SP-14636 (3rd Rev.)	Authorizes the transportation in commerce of certain DOT specification 3AA and 3T cylinders that are past the test date for requalification	29 Jul 10	28 Feb 14

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Table D-2. Certificates of Equivalency (COE's)

COE #	COMMODITY	DATE OF ISSUE
NA-89-501D	RAM Guided Missile Round Pack Mk 44 and Mk 47 in Container Mk 734 Mod 0	03 Mar 94
NA-89-504G	EX 72 Booster in Wooden Container	08 Dec 94
NA-89-508	OTTO Fuel II in OTTO Fuel II Bulk Container	05 May 89
NA-89-509A	Compressed Oxygen in LAR V UBA Oxygen Cylinder	31 Jul 98
NA-89-516	Mk 70 Booster or Mk 12 Rocket Motor in Mk 722 Container	17 Jul 89
NA-90-501A	TRIDENT II D-5 Second Stage Igniter	25 Jun 90
NA-90-505	Mk 70 Booster in Mk 578 Container	09 Mar 90
NA-90-506	Mk 70 Booster or Mk 12 Rocket Motor in Mk 686 Container	29 Mar 90
NA-90-510D	Mk 50 Gas Injection Assembly	06 Jun 94
NA-91-506A	CBU-78/B, CBU-78A/B (GATOR) in Container, CNU-319/E	17 Dec 97
NA-91-509A	BGM-109 TOMAHAWK Missile Air Vehicle in Modified CNU-308/E Container	27 Oct 92
NA-91-510	Fast Deep Target, Propulsion System and Payload in Aluminum Container	25 Nov 91
NA-92-500	Advanced Air to Air Missile (AAAM) Sustainer Motor in Wooden Shipping Container	16 Jan 91
NA-92-502D	EX 72 Booster in Wooden Container, Shipping and Storage	05 May 95
NA-92-509	(Cancelled)	
NA-92-512B	Propellant Grain Mk 61 Mods 0/1 in Mk 576 Mod 1 Container	18 Mar 99
NA-93-500D	SLAM Tactical (AGM-84E) Missile in Container Mk 724 Mods 0/1	09 Mar 94
NA-93-501B	HARPOON Missile, Tactical or Exercise Training in Container Mk 631 Mod 0	07 Jan 94
NA-93-502A	Encapsulated HARPOON Missile Tactical in Container, Mk 630 Mod 0	01 Jun 94

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-93-503A	HARPOON Missile, Tactical in Container, Mk 607 Mod 0	20 May 93
NA-93-505B	Encapsulated HARPOON Missile Exercise in Container, Mk 630 Mod 0	16 Jun 95
NA-93-506B	HARPOON Missile, Exercise, Air Launch, in Container Mk 607 Mod 0	19 Dec 96
NA-93-507B	SLAM Training Missile and SLAM Inert Test Missile in Mk 724 Mods 0/1 Container	01 Dec 95
NA-93-508	Mk 3 Mod 0 Acoustic Device Countermeasure in Container, CNU-488/E	12 Mar 93
NA-93-510	AQM-37C Missile Target with Pressurized Nitrogen Tank Within	10 Jun 93
NA-93-513C	ARL Air/Surface ATD Vehicle in Aluminum Container	20 Jun 95
NA-93-516	ASROC AUR in Mk 608 Mod 0 Container	16 Jul 93
NA-93-521	GEN II in Wooden Box	22 Apr 93
NA-93-524A	HARPOON Sustainer Section in Container Mk 621 Mod 0	15 Jun 98
NA-93-528B	Superseded by <a href="#">NA-05-515</a>	
NA-93-529E (Exp 31 Jul 13)	TOMAHAWK Cruise Missile in Skid, Shipping and Storage, Mk 30 Mods 0 and 1	22 Jul 08
NA-93-530A	Superseded by <a href="#">NA-05-516</a>	
NA-94-503	Mk 32 Mk 33 Air Stabilizer in Container, Shipping and Storage, Mk 732 Mod 0	10 Feb 94
NA-94-507A	Detonating Cord Panel Array in Container, Shipping and Storage	13 Apr 95
NA-94-508	SS-N-2 (STYX) Warhead in Container, Shipping and Storage	18 May 94
NA-94-510	TRIDENT II (D5) Launcher Closure in Aluminum Container	14 Apr 94
NA-94-511A	SPARROW Training Missiles in Mk 12 Mod 3 Cradle	23 Jul 98

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-94-513	TRIDENT II (D5) Nose Fairing Section in Wooden Container	18 May 94
NA-94-514	TRIDENT II (D5) Nose Cap Section in Wooden Container	18 May 94
NA-94-515	ARL Torpedo Defense Vehicle in Container, Mk 714 Mod 0	13 Jun 94
NA-94-516	Lightweight Exoatmospheric Projectile in Navy Leap Shipping and Storage Container	13 Jun 94
NA-94-517	Guanidinium Nitroformate (GUNF) in 50% Slurry with Carbon Tetrachloride in Combination Package	27 Jul 94
NA-94-518A	STANDARD Missile (Type 2 Block IV) in Mk 21 Mod 0 Vertical Launching System Shipping and Handling Canister	17 Jun 98
NA-94-519B	Superseded by <a href="#">NA-06-510</a>	
NA-94-520D	STANDARD ER Missile (SM-2 Blk II) or Flight Test Round (SM-2 Blk IIIA) in Mk 13 Mod 0 VLS Canister	18 Jul 98
NA-94-521A	POLARIS (A3) Gas Generator, Mk 13 Mod 0, in Steel Shipping Container	05 Oct 94
NA-94-522B	Superseded by <a href="#">NA-04-507</a>	
NA-94-524	Nitrate Esters in a PPP-C-1337B 30-Gallon Drum	07 Sep 94
NA-94-525B	TRIDENT I (C4) Gas Generator, Mk 68 Mod 0, in Steel Shipping Container	14 Feb 02
NA-94-527	Sea Lance Short Burn Grain in Wooden Box	14 Sep 94
NA-94-528	ASW Short Burn Grain in Wooden Box	14 Sep 94
NA-94-530	Mk 90 Mod 0 Propellant Grain in Mk 682 Mod 0 Container	25 Oct 94
NA-94-531	TRIDENT I (C4) Launcher Tube Closure in Steel Container	14 Sep 94
NA-94-532	Mk 31 Mod 0 or Mod 1 Air Stabilizer in Mk 636 Mod 0 Container	07 Oct 94

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-94-533	POSEIDON (C3) Gas Generator, Mk 50 Mod 0, in Steel Strapping Container	14 Oct 94
NA-94-535	AN/SSQ-62B (XN-110) Sonobouys in Unitized Configuration	25 Oct 94
NA-94-536	Explosive Composition (TEX) in Plywood Container	21 Nov 94
NA-94-538	GEN II in Wooden Container	29 Dec 94
NA-95-501A	Linear Shaped Charges in Metal Drum Container, Shipping and Storage	16 Oct 95
NA-95-503	Flexible Explosive Array Net, in Nature Wood Container, Shipping and Storage	26 Apr 95
NA-95-504	Capsule Assembly, A/W-99, in Container, Mk 630 Mod 0	16 Jun 95
NA-95-505	Mk 2 Mod 0 Destructor Charge, in Mk 543 Mod 0 Container	11 Jul 95
NA-95-506	Compressed Helium in Cryoengine	26 Jun 95
NA-95-508A	Afterbody, Tailcone Section, Mk 17 Mod 2 for Mk 48 ADCAP Torpedo in Mk 531 Mod 3 Container	05 Dec 95
NA-95-509B	Superseded by <a href="#">NA-06-504</a>	
NA-95-511B	Superseded by <a href="#">NA-06-505</a>	
NA-95-512	Liquid Monopropellant in a Steel Drum with Polyethylene Insert	11 Aug 95
NA-95-515A	Mk 4 Reentry Body Assembly (Inert Head) in H1333 Drum Container, Shipping and Storage	16 Jan 96
NA-95-516A	Mk 5 Reentry Body Assembly (Inert Head) in H1514 Drum Container	25 Jan 02
NA-95-518	Distributed Explosive Technology (DET) 6.3B Mine Clearance System in Fiberglass Container	03 Oct 95
NA-95-519	Destruct Assembly (FLSC and PBCS) Second Stage in P27713 Destruct Assembly Container	09 Nov 95
NA-95-520	Destruct Assembly (FLSC), Third Stage in P27820 Destruct Assembly Container	09 Nov 95

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-95-521	Destruct Assembly (FLSC), First Stage in P27611 Destruct Assembly Container	06 Nov 95
NA-95-527	Sea SLAM Demo Missile Canister in Wooden Box	01 Dec 95
NA-96-500	SRAW Target Assembly 12V in M548 Container	02 Feb 96
NA-96-503	C4 Nose Fairing (N/F) Eject Rocket Motor in P27102 Plastic Container	28 Feb 96
NA-96-504	FS/SS TVC Gas Generator in P27707 Plastic Container	28 Feb 96
NA-96-505	TS TVC Gas Generator in P27805 Plastic Container	28 Feb 96
NA-96-506	TS Eject Motor in P27817 Plastic Container	28 Feb 96
NA-96-508	Superseded by <a href="#">NA-07-503</a>	
NA-96-510A	Compressed Argon in SM-2 Block IV RRFD Guidance Section	8 Nov 96
NA-96-511	PETN Detonating Cord in Ammo Box, M19A1	26 Jun 96
NA-96-512	Acoustic Device, Rocket Launched, Expendable in Mk 635 Mod 0 Container	27 Aug 96
NA-96-513	SLAM ER Missile in Wood Box	26 Sep 96
NA-96-514	PBXN 106 in Steel Drum	30 Oct 96
NA-96-515	NASA Mk 70 Rocket Motor in Container, Mk 200 Mods	25 Oct 96
NA-96-516	Submarine Launched Mobile Mine (SLMM) in Fiberglass Container, CNU-308/E	25 Oct 96
NA-96-517	Post Run Aft Section of the SLMM In Fiberglass Container, CNU-308/E	25 Oct 96
NA-96-518	MA-31 Missile in a Russian Wooden Shipping Container	30 Oct 96
NA-96-519	Mk 60 Mod 1 Mine, Underwater (Captor) Less Mk 46 Torpedo) in Mk 24 Mod 0 Shipping and Storage Skid	08 Nov 96
NA-96-520A	SLMM in Aluminum Container, Shipping and Storage, Mk 481 Mod 0	18 Dec 96
NA-96-521	Post Run Aft Section of the Demonstration Improved SLMM in Container, Mk 481 Mod 0	21 Nov 96

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**Table D-2. Certificates of Equivalency (COE's) (Continued)**

COE #	COMMODITY	DATE OF ISSUE
NA-96-528	JSOW in Aluminum Container	21 Nov 96
NA-96-529	JSOW in Aluminum Container	21 Nov 96
NA-97-500	AMRAAM Captive Carry Reliability Vehicle (CCRV) in Container CNU-415A/E and CNU-415B/E	22 Jan 97
NA-97-501	STANDARD Missile Autopilot Battery Unit (APBU) in Alternate Plywood Container	24 Jan 97
NA-97-505A	AN/SSQ-62 Mods or AN/SSQ-110 Mods Sonobuoys in Unitized Configuration	13 Mar 97
NA-97-507A	Decoy Devices in Container, M548	11 May 00
NA-97-508	Decoy Devices in Container, PA19	31 Mar 97
NA-97-509	Delay Composition (Various) in Metal Inner Containers with an Outer Wooden Container	16 Apr 97
NA-97-510	Delay Composition (Various) in Glass Inner Containers with an Outer Wooden Container	16 Apr 97
NA-97-515A	JSOW in Container, Shipping and Storage, CNU-575/E	29 Jul 97
NA-97-516A	Distributed Explosive Technology 6.4 Mine Clearance System in Det Frame Assy	11 May 99
NA-97-518	Magnesium Teflon Viton (MTV) Meal in an Outer Mk 2 Mod 0 Ammo Component Box	11 Aug 97
NA-97-519B	Mk 72 Mod 0 (SM-2 Blk IV) AUR Booster in Container, Mk 763 Mod 0	16 Dec 97
NA-97-520	AN/SSW-110A Sonobuoys in Unitized Configuration	29 Aug 97
NA-97-521	STANDARD Missile AEGIS Leap Intercept Project in Canister, Mk 21 Mod 0	21 Sep 97
NA-97-522A	Compressed Nitrogen in Laser Guided Training Round (LGTR)	16 Aug 01
NA-97-523	STANDARD Missile (SM-2 Blk III) Rocket Motor Assy in Canister, Mk 13 Mod 0	19 Sep 97
NA-97-524	AN/55Q-110 (Mods) Sonobuoys in Collapsible Shipping and Storage Container	01 Oct 97

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-97-527	Mk 104 DTRM Ignition Compound Packaged in Wooden Container	10 Dec 97
NA-98-500	Motor Component Replacement Technology (MCRT) Demonstration Rocket Motor on a Covered Transporter	18 Mar 98
NA-98-501C (Exp 6 May 14)	SLAM ER Missile in CNU-595/E Container	6 May 09
NA-98-502	Covered Transporter Certification (TRIDENT I or II)	20 Apr 98
NA-98-503E	JSOW AGM-154 Series Variants Packaged in CNU-575/E Shipping and Storage Container	15 Aug 04
NA-98-504C	MA-31 or MA-31 ER Missile SSST Vehicle Variants Packaged in Wooden Container	22 Aug 02
NA-98-505	Mk 128 Mods JATO Rocket Motors	10 Jun 98
NA-98-506	JSOW Variants Packaged in Wooden Container	29 Jul 98
NA-98-507A	STANDARD Extended Range (ER) Missile or Theatre Ballistic Missile Target (TBMT)	19 Jul 00
NA-98-509	EX 165 Mod 0 SABRE Linear Demo, Charge packaged in EX 785 Mods Launch Container	07 Aug 98
NA-98-510	STANDARD Missile (SM-3) ALI CTV-1A Variant	27 Aug 98
NA-98-511	Oxygen Cylinder containing up to 3000 psi compressed oxygen gas as part of LAR V Underwater Breathing Apparatus	30 Sep 98
NA-98-513A	STANDARD Missile (RIM-66) Missile or one Blast Test Vehicle	28 Mar 02
NA-99-500B	POSEIDON (C3) or TRIDENT I (C4) Second Stage Rocket Motor Loaded in Special Environmentally-Controlled Van (TARVAN)	18 May 11
NA-99-501A	BQM-74E Target Drone Variants Assembled on Dolly Maintenance Stand	27 Mar 01
NA-99-502	Versatile Exercise Mine (VEM), Mk 74 Mod 1	15 Mar 99
NA-99-504	BLU-109/B or BLU-116/B Penetrator Bombs	3 Aug 99
NA-99-506	SM-3 Guided Missile System Intercept Aerial Missile	6 Jul 99
NA-99-509B	Superseded by <a href="#">NA-05-502</a>	

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-99-511A	Vandal Target AUR Variants	14 Nov 02
NA-99-512A	BQM-74E Target Drone Variants Assembled on Handling Dolly (P/N 93654)	23 Mar 01
NA-00-500	Mk 48 Exercise Torpedo in Modified Mk 30 Cradle	6 Jan 00
NA-00-501	SM-3 Guided Missile System, Intercept-Aerial, Upper Stage in Modified EX 776 Mod 0 Shipping and Storage Container (S/N 002)	11 Jan 00
NA-00-502	Mk 56, Mk 104 Rocket Motor (DTRM) and Mk 30 Rocket Motor (Sustainer) in Container, Mk 693 Mod 0	11 Jan 00
NA-00-503	Superseded by <a href="#">NA-05-513</a>	
NA-00-504	Superseded by <a href="#">NA-05-514</a>	
NA-00-506A	Evolved Seasparrow Missile (ESSM) All-Up-Round (AUR) Packaged in VLS Mk 25 Mod 0 Canister	8 Mar 01
NA-00-507	Mk 54 Common Fleet Exercise Section	8 Mar 00
NA-00-508	MM-38 Missile in VLS Canister	15 Mar 00
NA-00-510	Harm Missile Packaged in CNU-355/E Shipping and Storage Container	21 Mar 00
NA-00-511	Superseded by <a href="#">NA-06-511</a>	
NA-00-513	Androgynous Peripheral Docking Assembly in Container, Shipping ADPA1 Adapter Assembly, ICM	27 Mar 00
NA-00-515	Mk 46 Torpedo Explosive Bolt in Mk 317 Mod 0 Container	26 Apr 00
NA-00-516A	TERRIER Missile Target (TMT) Autopilot Battery Section Packaged in Mk 460 Mod 3	1 Apr 02
NA-00-517A	Pressure Vessel for LAU-7 Missile Launcher	9 Jun 03
NA-00-518A	Pressure Vessel for LAU-127 Missile Launcher	9 Jun 03
NA-00-519A	Pressure Vessel for LAU-138 Missile Launcher	9 Jun 03
NA-00-520	Mk 48 Mod 4 Exercise Torpedo Packaged in Mk 746 Mod 0 Container	1 Jun 00

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**Table D-2. Certificates of Equivalency (COE's) (Continued)**

COE #	COMMODITY	DATE OF ISSUE
NA-00-521	Bomb, Mk 84 Series and BLU-117 Series Packaged in Unit Load Adapter, Mk 79 Mods	9 Jun 00
NA-00-522	CBU and ROCKEYE Mods in Container CNU-238/E	12 Jun 00
NA-00-525G (Exp. 31 May 13)	Mk 30 Mod 2 EDM TUV Packaged in Extended Container Assembly	9 May 08
NA-00-528	Simulated WDU-36/B Warheads in Palletized Unit Load	8 Aug 00
NA-00-529	SM-3 Guided Missile System Intercept Aerial Upper Stage in Modified Mk 776 Mod 0 Container	22 Sep 00
NA-00-530	Mk 104 Mods DTRM Packaged in Mk 750 Mod 0 Shipping and Storage Container	2 Nov 00
NA-01-500	MTV Propellant Strands in Mk 2 Mod 0 Ammunition Component Box	12 Mar 01
NA-01-501	Explosive Samples in Ammunition Box	22 Feb 01
NA-01-502A	Recovered 7.62mm/.30 Caliber Ammunition in M548 Shipping and Storage Container	28 Jun 07
NA-01-503A	Recovered .45 Caliber Ammunition in M548 Shipping and Storage Container	15 Jun 07
NA-01-504A	Recovered .38 Caliber Ammunition in M548 Shipping and Storage Container	15 Jun 07
NA-01-505A	Recovered .50 Caliber Ammunition in M548 Shipping and Storage Container	15 Jun 07
NA-01-507A	Recovered 20MM Ammunition in M548 Shipping and Storage Container	9 Jul 07
NA-01-508	Recovered Mk VI Depth Charge Booster in M548 Shipping and Storage Container	17 Sep 01
NA-01-509A	Recovered 40MM Ammunition in M548 Shipping and Storage Container	9 Jul 07
NA-01-510A	Recovered 20MM Nose in M548 Shipping and Storage Container	29 Jun 07
NA-01-511A	Recovered Mk 2 Mod 0, 1 Pounder in M548 Shipping and Storage Container	9 Jul 07

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-01-514	Recovered Base Fuzes in M548 Shipping and Storage Container	17 Sep 01
NA-01-515	Recovered Tetryl Pellets in M548 Shipping and Storage Container	17 Sep 01
NA-01-516	Recovered Detonating Cord in M548 Shipping and Storage Container	17 Sep 01
NA-01-517	Recovered Flexible Line Shape Charge in M548 Shipping and Storage Container	17 Sep 01
NA-01-518	Recovered Flash Tube in M548 Shipping and Storage Container	17 Sep 01
NA-01-521	Contaminated Explosives Waste Material Packaged in a Collapsible Fiberboard Box	7 Jun 01
NA-01-522	Contaminated Explosives Waste Material Packaged in a Wooden Box	7 Jun 01
NA-01-523	Contaminated Explosives Waste Material Packaged in a DOS Warhead Wooden Box	7 Jun 01
NA-01-524	Contaminated Explosives Waste Material Packaged in an Airedale Shipping Box	7 Jun 01
NA-01-525B	AMRAAM Variants Packaged in CNU-415A/E, B/E and C/E, D/E, and/or E/E Containers	9 May 09
NA-01-527	Electric Primers Packaged in Steel Drum	10 Aug 01
NA-01-530	Superseded by <a href="#">NA-05-515</a>	
NA-01-531A	SM-2 or SM-3 Guided Missile Variants in Mk 776 Mod 1 Container	15 Mar 02
NA-01-532A	Superseded by <a href="#">NA-06-508</a>	
NA-01-533	Mk 1 Mod 0 Guided Missile Propulsion Section in EX 1 Mod 1 Container	29 Nov 01
NA-02-500A	Mk 4 Enhanced Effectiveness (E <sup>2</sup> ) Reentry Body Packaged in a Modified H1514 Shipping and Storage Drum Container	4 Jan 05
NA-02-501	FTP-1 Payload Assembled on FTP-1 Cradle Assembly Packaged in a Wooden Container	14 Feb 02

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**Table D-2. Certificates of Equivalency (COE's) (Continued)**

COE #	COMMODITY	DATE OF ISSUE
NA-02-502A	Long Endurance Low Frequency Acoustic Source (LELFAS) Deployment Unit in Modified Mk 481 Container	29 Mar 02
NA-02-503A	Airborne Expendable Countermeasure Dispenser in Aluminum Shipping and Storage Container	20 May 02
NA-02-505A	Swampworks Advanced Torpedo (SWAT) -1, -2 and -3 Variants Packaged in a Modified Mk 796 Mod 0 Container	2 Jul 04
NA-02-507	M72 LAW System 21MM Trainer Rocket Packaged in a Wooden Box	29 Jul 02
NA-02-509	Mk 12 Mod 1 Booster Packaged in Mk 200 Mod 0 or 1 Shipping and Storage Container	30 Oct 02
NA-02-510	Mk 34 Mod 0 Pyrotechnic Lead Spool, Assemblies (for pyrotechnic lead, 1000 feet), Packaged in CNU-405/E Shipping and Storage Container	7 Nov 02
NA-02-513A	Detonators/Datasheet Boosters Packaged in the Mk 663 Mods Container	3 Sep 03
NA-02-514	Continuous Rod Warhead in Aluminum Shipping and Storage Container	6 Dec 02
NA-03-500	SM-3 JCR Full Scale Loaded Case Rocket Motor Packaged in a Wooden Shipping and Storage Container	22 Jan 03
NA-03-501A	RAM Guided Missile Round Packs Packaged in Mk 749 Mod 0 Container	19 Sep 03
NA-03-502	STANDARD (SM-2) SMIP Guided Missile in Mk 372 Mod 7 Container	19 Mar 03
NA-03-503 (Rescinded per PHST ltr 5600 Ser E421/847 of 1 Mar 07)	TRIDENT I (C4) First Stage or Second Stage Rocket Motors Loaded in a Special Environmentally Controlled Van (TARVAN)	30 Apr 03
NA-03-505	Mk 70 Mod 1 Rocket Motor for GQM Development or Production Flights in Mk 200 Mods or Mk 722 Mod 0 Container	30 May 03

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-03-506	High Velocity Linear Shaped Charge Packaged in a Pelican Case - (two 2 x 6 charges, or one 2 x 12 charge)	29 Mar 02
NA-03-507	High Velocity Linear Shaped Charge Packaged in a Pelican Case - (one 8 x 12 charge)	8 Aug 03
NA-03-509A	Cancelled	6 Apr 04
NA-03-510F (Exp 31 Oct 13)	Mk 54 Mod 0 Exercise Torpedo Variants Packaged in an EX 792 Mod 0 or Mk 792 Mod 0 Shipping and Storage Container	21 Jan 09
NA-03-511	Mk 46 Mods Exercise Torpedo (Expended) Variant Packaged in a Mk 535 Mod 0 Shipping and Storage Container	18 Jul 03
NA-03-512A (Expired)	Mk 50 Exercise Torpedo Variants Packaged in Mk 714 Mod 0 or 1 Shipping and Storage Container	10 Mar 05
NA-03-514	PCBS Destruct Los Harness with Confining Caps Installed Packaged in P57417 Aluminum Container	12 Sep 03
NA-03-515	First Stage/Second Stage Forward/Aft Destruct Los Harness#1/ Harness#2 with Confining Caps Installed Packaged in P57423 Aluminum Container	12 Sep 03
NA-03-516	High Voltage Detonators Packaged in P57323 Aluminum Container	12 Sep 03
NA-03-517	PCBS Destruct Assembly Packaged in P57351 Aluminum Container	12 Sep 03
NA-03-518A (Expired)	D5 Nose Fairing Section Packaged in P57110 Aluminum Container	24 Aug 06
NA-03-523	Steel Drum Combination Container for Nitrate Esters in Composite Steel Drum Shipping Container	18 Nov 03
NA-04-501	Unencapsulated/Unencanistered TOMAHAWK Missile w/o Warhead and Rocket Motor in Modified CNU-308/E Container	15 Mar 04
NA-04-503C (Expired)	HyFly Test Vehicle in Wooden Shipping Container	12 Oct 10
NA-04-505B (Expired)	Anti-Personal Obstacle Breaching System (APOBS) Packaged in Aluminum Container	14 Jun 05

Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-04-506	Ceramic Shaped Charges Packaged in a Steel Container	20 Apr 04
NA-04-507D (Exp 31 Oct 12)	Mobile, Experimental or General Test Vehicle Packaged in an Aluminum Test Vehicle Container	25 Oct 07
NA-04-508	POSEIDON (C3) Second Stage or TRIDENT I (C4) First or Second Stage Rocket Motors in Containers Loaded on Special Heavy Duty Flatcars	28 Apr 04
NA-04-509	Detonating Fuzes Packaged in a Pallet Box	4 May 04
NA-04-510 (Expired)	Bulgarian KO-7V Rocket Propelled Grenades in Wooden Box	11 May 04
NA-04-511 (Expired)	Bulgarian OG-7VMZ Rocket Propelled Grenades in Wooden Box	11 May 04
NA-04-512 (Expired)	Bulgarian OG-7V, OG-7VM, OG-7VE Rocket Propelled Grenades in Wooden Box	11 May 04
NA-04-513 (Expired)	Bulgarian OG-9VM Rocket Propelled Grenades in Wooden Box	11 May 04
NA-04-514 (Expired)	Bulgarian PG-7VL Rocket Propelled Grenades in Wooden Box	11 May 04
NA-04-515 (Expired)	Bulgarian PG-7VLT Rocket Propelled Grenades in Wooden Box	11 May 04
NA-04-516	Mk 54 Exercise Torpedo Fleet Exercise Section (FES) Packaged in a Steel Drum	21 May 04
NA-04-517	Mk 54 Exercise Torpedo Expended Fuel Tank Packaged in a Steel Drum	21 May 04
NA-04-518	Mk 54 Exercise Torpedo Expended Afterbody Packaged in a Steel Drum	21 May 04
NA-04-519	Mk 54 Exercise Torpedo Inert Warhead Containing an Expended Practice Exploder Packaged in a Steel Drum	21 May 04
NA-04-520A (Expired)	Mk 107 Warheads Packaged in a Steel Pallet	17 Aug 06
NA-04-521 (Expired)	Pike ALT-1 Shaped Charge Packaged in a Shipping and Storage Container	25 Aug 04

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-04-522B (Exp 31 May 13)	Mk 11 Mod 6 Autopilot Battery Section for SM-2 BLK III B RIM-66M-7 Packaged in Container Mk 683 Mod 0	28 May 08
NA-04-523B (Exp 19 Jan 16)	Pressure Vessel in STANDARD Missile Mk 87, Mk 94, Mk 95, Mk 96 and Mk 97 Mod 0 Guidance Section	19 Jan 11
NA-04-524C (31 Aug 13)	Mk 149 Mod 0 Fletchette Warhead Packaged in a Modified PA92 Container	25 Aug 08
NA-04-525 (Expired)	SPARROW Missile Guidance Section (AIM-7 Series) in CNU-379/E Container, Shipping and Storage	10 Sep 04
NA-04-527C (Expired)	NAS Fallon Range Residue in ISO 1CX Half Height Cargo Container, Shipping and Storage	17 Jul 08
NA-04-528D (Expired)	NAS Fallon Range Residue in ISO Full Height Cargo Container, Shipping and Storage	17 Jul 08
NA-05-500F (Exp 30 Nov 18)	Explosive Powders Packaged in Combination Fiber Drum Shipping Container	9 Dec 10
NA-05-501C (Exp 31 Jan 16)	SM-3 Guided Missiles Variants Packaged in Mk 21 Mod 2 Vertical Launching System (VLS) Canister	31 Jan 11
NA-05-502B (Exp 31 Jul 13)	Mk 30 Mod 1 Target	22 Jul 08
NA-05-504A (Exp 2 Feb 14)	Joint Stand-off Weapon (JSOW) AGM-154 Series Variants Packaged in CNU-672/E Shipping and Storage Container	2 Feb 09
NA-05-506A (Exp 30 April 13)	Torpedo Fuel Tank Packaged in Mk 689 Mod 1 Container	11 Apr 08
NA-05-507B (Exp 30 Jun 13)	Pressure Vessels for Mk 1 EOD Drysuit and Mk 16 UBA	16 Jun 08
NA-05-508A (Exp 31 May 13)	Steering Control Unit Packaged in Mk 510 Mod 0 Shipping and Storage Unit	23 May 08
NA-05-509A (Exp 31 May 13)	Mk 12 Mods Autopilot Battery Section Packaged in Mk 772 Mods 0 and 1 Shipping and Storage Container	28 May 08
NA-05-511D (Exp 31 Mar 15)	Mk 48 Mods Torpedo Variants Packaged in Mk 746 Mod 0 Shipping and Storage Container	11 Mar 10
NA-05-513A (Exp 30 Jun 13)	Mk 48 Mods Exercise Torpedo Variants on Wooden Chocks	30 Jun 08

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-05-514 (Expired)	Mobile Test Vehicle or Experimental Test Vehicle on Wooden Chocks	27 Jun 05
NA-05-515A (Exp 31 Jul 13)	TOMAHAWK Cruise Missile in Container, Shipping and Storage Container, CNU-308/E	22 Jul 08
NA-05-516A (Exp 29 Nov 12)	TOMAHAWK Cruise Missile in Mk 14 Mods 0 and 1 Canister	29 Nov 07
NA-05-518A (Exp 31 Aug 13)	Compressed Nitrogen in Mk 17 Mod 0 Fuse Ejector and Pressure Release Assembly for Mk 67 Mod 2 Mine	6 Jun 08
NA-05-522 (Expired)	Foreign Torpedo on Wooden Chocks	9 Sep 05
NA-05-523 (Expired)	Foreign Torpedo Packaged in Extended Container Assembly	9 Sep 05
NA-05-524 (Expired)	Upper Stage Spacecraft Packaged in Shipping Container Assembly	5 Oct 05
NA-06-501 (Expired)	Steel Drum Combination Container for Liquid Explosives Packaged in Fiberboard Overpack Box	4 Apr 06
NA-06-502 (Expired)	Gas Generator Subassembly (for Mk 56 Mine) Packaged in Mk 2 Mod 0 Ammunition Box	7 Apr 06
NA-06-503 (Expired)	L-PEMBS/H-PEMBS in MIL-B-2427 Wooden Box	18 Apr 06
NA-06-504A (Exp 31 May 16)	Mk 26 Mods Exercise or Warshot Fuel Tank in Mk 530 Mods Shipping & Storage Container	26 Apr 11
NA-06-505A (Exp 31 May 16)	Mk 27 Mods Extended Range Exercise Fuel Tank in Mk 680 Mod 0 Shipping & Storage Container	26 Apr 11
NA-06-506 (Expired)	HyFly Nitrogen Tank Assembly in Fiberboard Box	1 Jun 06
NA-06-507 (Expired)	Mk 107 Warhead in Mk 532 Mods Shipping and Storage Container	5 Jul 06
NA-06-508B (Expired)	EM-76 D5 Development Insulation Grain Assembly on Transportation/Storage Chock	1 Oct 08
NA-06-509A (Exp 31 Mar 12)	EDM-1 Countermeasure, Anti-Torpedo (CAT) Configured with Internal Pressure Vessels	25 May 11

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-06-510A (Exp 31 Dec 13)	Vertical Launch Anti-Submarine Rocket (VLA) in Mk 15 Mod 0 Container	17 Dec 08
NA-06-511A (Exp 30 Jun 12)	Mk 46 Mods Exercise Torpedoes, Mk 46 Torpedo Main Assemblies or Mk 54 Torpedo Main Assemblies on Pallet Assembly	15 Jun 07
NA-06-513 (Expired)	Kit, Artillery, 155MM Packed in Joint Modular Intermodal Container (JMIC)	20 Sep 06
NA-06-515A (Exp 31 Mar 15)	Mk 48 Mods Torpedo Variants Packaged in Mk 481 Mod 0 or 1 Shipping and Storage Container	11 Mar 10
NA-07-501	MJU-55/B Decoy Devices in M548 Shipping and Storage Container	15 Feb 07
NA-07-502B (Exp 28 Jan 13)	Compressed Helium in Cryoengine (P/N 2212772)	28 Jan 09
NA-07-503 (Exp 30 Apr 12)	Mk 46 Mods Exercise Torpedo Variants Packaged in Mk 535 Mod 0 Shipping and Storage Container	5 Apr 07
NA-07-504D (Exp 15 Dec 13)	Vertical Launch Anti-Submarine Rocket (VLA) 54 Missile Packaged in Mk 15 Mod 1 Canister	15 Dec 08
NA-07-505 (Exp 31 May 12)	Explosive Articles Packaged in DOS Warhead Wooden Box	24 May 07
NA-07-506 (Exp 31 May 12)	Explosive Articles Packaged in Wooden Box	24 May 07
NA-07-508 (Exp 30 Jul 12)	High Speed Anti-Radiation Demonstration (HSAD) Control Test Vehicle (CTV) Packaged in Shipping and Storage Container	16 Jul 07
NA-07-509B (Exp 4 May 15)	Oriole Rocket Motor in Steel Shipping and Storage Container	4 May 10
NA-07-510 (Exp 1 Nov 12)	Pressure Vessel in Mk 82 Mod 2 RAM Guidance Section	1 Nov 07
NA-07-511 (Expired)	Foreign 93mm Projectile Packaged in Wooden Box	27 Aug 07
NA-07-512A (Expired)	Foreign Rocket Propelled Grenades Packaged in Wooden Box	5 Dec 08

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**Table D-2. Certificates of Equivalency (COE's) (Continued)**

COE #	COMMODITY	DATE OF ISSUE
NA-07-513A (Exp 30 Sep 12)	TOMAHAWK D Version Payload Section Packaged in CNU-308/E Shipping and Storage Container	10 Sep 07
NA-07-514A (Exp 31 May 13)	EX 64 AMNS Expandable Mine Neutralizer or AMNS Warhead Test Vehicle in EX 812 Shipping and Storage Container	5 May 08
NA-08-500 (Expired)	STANDARD Missile Motor Test Configuration in Mk 21 Mod 1C VLS Canister	28 Jan 08
NA-08-501A (Expired)	GOLAN Vehicle Reactive Armor Tile (G1) in Wooden Container	19 Feb 08
NA-08-502A (Expired)	GOLAN Vehicle Reactive Armor Tile (G2) in Wooden Container	19 Feb 08
NA-08-503A (Expired)	GOLAN Vehicle Reactive Armor Tile (G3) in Wooden Container	19 Feb 08
NA-08-505 (Expired)	Foreign Surface-to-Air Missiles Packaged in a Steel Container	28 Apr 08
NA-08-506 (Exp 31 May 13)	Mk 30 Mod 2 Target Undersea Vehicle (TUV) Packaged in Shipping and Storage Container	9 May 08
NA-08-507A (Exp 25 Sep 13)	Cluster Pierogi Test Vehicle Packaged in Mk 792 Mod 0 Shipping and Storage Container	22 Sep 08
NA-08-508 (Exp 31 May 13)	Compressed Helium in Cryoengine (P/N 2212772) for the Sidewinder Missile CATM Guidance Section	21 Apr 08
NA-08-509 (Exp 31 May 13)	NWC Light Buoyant Vehicle Packaged in Modified Mk 746 Mod 0 Shipping and Storage Container	21 May 08
NA-08-510 (Expired)	NAS Fallon Range Residue in ISO Roll-On Roll-Off Style Cargo Container, Shipping and Storage	17 Jul 08
NA-09-511 (Exp 12 Feb 14)	Warheads in Wooden Storage Pallet	12 Feb 09
NA-09-512A (Exp 4 May 14)	Compressed Helium in Cryoengine (P/N 2212772)	4 May 10
NA-09-513 (Exp 24 Feb 13)	AN/SSQ-101 or AN/SSQ-101A Sonobuoys in a Unitized Container	24 Feb 09
NA-09-514B (Exp 31 Jan 16)	BQM-34S Target Drone Installed on a 107889 Transportation Trailer	9 Feb 11

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Table D-2. Certificates of Equivalency (COE's) (Continued)

COE #	COMMODITY	DATE OF ISSUE
NA-09-515A (Expired)	Mk 48 Mods Torpedo Exercise Variants Packaged in Mk 746 Mod 0 Shipping Storage Container	5 Jun 09
NA-09-516 (Expired)	Mk 4A Mod 1 Re-entry Body Assembly (Inert Head) Packaged in H1514 Shipping and Storage Drum Container	14 Apr 09
NA-09-522A (Expired)	Mk 48 Mod 7 Torpedo Exercise Variants with Fiber Optic Upgrades Packaged in Mk 746 Mod 0 Shipping and Storage Container	5 Jun 09
NA-09-523 (Exp 2 Jun 14)	Canadian Mk 48-4M Extended Range Exercise Torpedo in Extended Range Container	2 Jun 09
NA-09-525 (Exp 3 Jun 14)	Electronic Test Vehicle (ETV) Packaged in Extended Range Container	3 Jun 09
NA-09-526 (Exp 23 Jun 14)	Advanced Anti-Radiation Guided Missiles Packaged in a CNU-698/E Shipping and Storage Container	24 Jun 09
NA-09-527 (Exp 10 Jul 15)	Compressed Helium in Cryoengine (P/N 2212772)	10 Jul 09
NA-09-528 (Exp 25 Aug 15)	Compressed Nitrogen in Gas Supply Assembly (P/N 2276490)	25 Aug 09
NA-09-532 (Exp 30 Nov 14)	M5A1 Non-Lethal Modular Crowd Control Munition Packaged in a Wirebound Box	30 Nov 09
NA-10-500 (Exp 30 Jan 15)	SM-3 Block 1A KW Seeker Assembly Containing Compressed Nitrogen	13 Jan 10
NA-10-501A (Exp 30 Apr 15)	SM-3 Block 1A Kinetic Warhead Kit Containing Compressed Nitrogen	13 Apr 10
NA-10-503 (Exp 31 Mar 15)	Mk 48 Mod 4M Torpedo Variant Packaged in Mk 481 Mod 0 or 1 Shipping Storage Container	11 Mar 10
NA-10-506 (Expired)	TMETN Packaged in a 5 Gallon Composite Container	23 Sep 10
NA-10-507 (Expired)	TMETN Packaged in a Steel Drum	17 May 10
NA-10-508 (Expired)	TMETN Packaged in a 30 Gallon Combination Container	23 Sep 10

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**Table D-2. Certificates of Equivalency (COE's) (Continued)**

<b>COE #</b>	<b>COMMODITY</b>	<b>DATE OF ISSUE</b>
NA-10-509 (Expired)	Rocket of Foreign Origin in Wooden Shipping Container	26 May 10
NA-10-510 (Expired)	Cartridge of Foreign Origin in Steel Shipping Container	27 May 10
NA-10-513 (Expired)	Mk 103 Mod 1 Warheads Packaged on a Steel Pallet	9 Sep 10
NA-10-514 (Exp 30 Sep 15)	Cryogenic Pressure Vessels Contained within Seeker Section	20 Sep 10
NA-11-500 (Exp 18 Jan 16)	TRIDENT II (D5) First Stage Rocket Motors Loaded in a Special Environmentally Controlled Common Stage (Armored) Motor Rail Transporter	18 Jan 11
NA-11-501 (Exp 8 Mar 16)	TRIDENT II (D5) Second Stage Rocket Motors Loaded in a Special Environmentally Controlled Common Stage (Armored) Motor Rail Transporter	28 Mar 11
NA-11-504 (Exp 7 Mar 16)	Compressed Helium in the Pressure Vessel for the Joint Standoff Weapon (JSOW) Wing Deployment Driver (WDD)	7 Mar 11
NA-11-506 (Exp 31 Mar 16)	End of Run Reservoir Containing Compressed Nitrogen	28 Mar 11
NA-11-507 (Exp 31 Mar 16)	Mk 30 Target Transducer Hull in Modified Mk 532 Container	31 Mar 11
NA-11-508 (Exp 30 Apr 16)	Mk 50 Gas Injection Assembly	28 Apr 11

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