









Joint Service **REGULATION**

Defense Logistics Agency Department of the Army Department of the Navy Department of the Air Force United States Marine Corps

Defense Logistics Agency Regulation (DLAR) 4145.41
Department of Army Regulation (AR) 700-143
Naval Supply Corps System Command Instruction
(NAVSUPINST) 4030.55D
Air Force Manual (AFMAN) 24-210_IP
Marine Corps Order (MCO) 4030.40C
Effective April 21, 2015

J34 (TQ)

Packaging of Hazardous Material

References: See Enclosure 1

- 1. <u>PURPOSE</u>. In accordance with the authority of Department of Defense Manual 4140.01 (Reference (a)), this regulation reissues Reference (b) and establishes uniform policy for packaging Hazardous Materials (HAZMAT) for safe, efficient, and legal storage, handling, and transportation, to include Department of Transportation Special Permit (DOT-SP), Competent Authority Approval (CAA), Certificate of Equivalency (COE) and Packaging Waivers for Military Air in accordance with AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7 (Reference (c)) and Defense Transportation Regulation (DTR) 4500.9-R-Part II, Cargo Movement (Reference (d)).
- 2. <u>APPLICABILITY</u>. This regulation is applicable to the Military Services and the Defense Logistics Agency (DLA), referred to as DOD components in this regulation. The term "Military Services," as used in this Regulation, refers to the Army, the Navy, the Air Force, and the Marine Corps.
- 3. <u>DEFINITIONS</u>. See Glossary.

- 4. <u>POLICY</u>. In accordance with Title 49 Code of Federal Regulation (CFR), Section 173.7 (Reference (e) and under this regulation, DOD has the authority to certify for transport packagings equal to or greater in strength and efficiency than packagings meeting Title 49 CFR requirements. DOD also has the authority to reship any shipper-certified shipment to any consignee provided the original packaging has not been damaged or altered in any manner.
- a. Hazardous Material (HAZMAT) packaging, which has been tested and passed the United Nations (UN) Performance-Oriented Packaging standards (reference (f)), will be applied to HAZMAT for domestic shipments consistent with Title 49 CFR, Parts 100-180.
- b. DOD-managed HAZMAT must be provided packaging protection at the lowest overall cost without compromising established DOD safety standards. Packaging must provide adequate continuous protection to the packaged HAZMAT and must prevent any release of the HAZMAT.
- c. When HAZMAT is shipped, the packaging and marking must conform to the applicable modal regulations. Modal regulations include the International Civil Aviation Organization (ICAO) Technical Instructions, the International Air Transport Association (IATA) Regulations (Reference (g)), the International Maritime Dangerous Goods (IMDG) Code/International Maritime Organization (IMO) (Reference (h)), Title 49, Code of Federal Register (49 CFR) (Reference (e)) and AFMAN 24-204_IP/TM 38-250/NAVSUP PUB 505/MCO P4030.19/DLAI 4145.3, Preparing Hazardous Materials for Military Air Shipments (Reference (i)).

5. RESPONSIBILITIES.

- a. The Office of the Assistant Secretary of Defense, Logistics & Material Readiness, OASD(L&MR), will act as the Program Manager for DOD HAZMAT Packaging program.
 - b. The Commanders or Directors of DOD Components will:
 - (1) Comply with the policies, objectives, and guidelines in this regulation.
 - (2) Designate individual Service focal points to coordinate the following:
- (a) Coordinate purchase requests for UN testing that are performed by a DOT-approved third party test facility.
- (b) Coordinate HAZMAT packaging testing to avoid redundant testing and to maintain DOD component serialization of Tests:
- (c) Ensure that copies of all HAZMAT packaging test reports are forwarded to the Defense Distribution Center as outlined in paragraph 3.b.
- (d) Develop internal operating procedures to handle organizational needs concerning proper HAZMAT packaging.
 - (3) Participate in the DOD Hazardous Materials Packaging Working Group (HMPWG)

as defined in Enclosure 3.

- c. The Defense Logistics Agency (DLA), (J-344) will:
 - (1) Publish and keep this regulation current.
- (2) Manage and maintain Reference (f), including pertinent information related to HAZMAT packaging testing. Activities will ensure that copies of all test reports, whether developed in-house or on behalf of the DOD by a DOT-approved third party test facility, are forwarded to the Defense Distribution Center located at: DLA DISTRIBUTION, ATTN: J3/4-TPR (POP Team), 2001 Mission Drive, Building 81, New Cumberland, PA 17070
- (3) Provide, through DLA Distribution-J4, DLA HAZMAT packaging training on the use of the Reference (f) to Military Services and DLA activities. Military Services' training may involve a cost to the requesting activity for materials and travel for the DLA instructors.
- d. <u>Surface Deployment and Distribution Command (SDDC) Safety Office, (AMSSD-SA).</u> SDDC Safety Office will maintain the SafetyNet web site available through the SDDC ETA Portal (Reference (j)).
- 6. PROCEDURES. See Enclosure 2.

7. <u>INFORMATION REQUIREMENTS</u>.

- Data Item Description DI-PACK-81059 (Hazardous Materials Performance-Oriented Packaging (POP) Test Report Format) may be required when non-government agency provides POP test data under contract.
- b. Data to support submission of DOT-SPs, CAAs, and COEs are defined in Enclosures 2 and 6 through 8.
- 8. <u>INTERNAL CONTROLS</u>. DLA J34 will review DLA Distribution packaging systems and procedures for compliance during hazardous material packaging field assistance visits, either with a technical assistance and operational review program, or separately, on an as-needed basis to evaluate the adequacy of field packaging operations, and conformance to this issuance.
- 9. <u>RELEASABILTIY</u>. UNLIMITED. This instruction is approved for public release and is available on the DLA Issuances Internet Website.

10. <u>EFFECTIVE DATE</u>. This Issuance:

a. Is effective on April 21, 2015.

b. Must be reissued, cancelled, or certified current within 5 years of its publication in accordance with DLAI 5025.01, DLA Issuance Program. If not, it will expire effective April 21, 2025 and be removed from the DLA Issuances Website.

PHYLLISA S. GOLDENBERG Director, DLA Strategic Plans and Policy

Enclosures(s)

- Enclosure 1 References
- Enclosure 2 Procedures
- Enclosure 3 DOD Hazardous Material Packaging Working Group Charter
- Enclosure 4 Performance-Oriented Packaging Identification
- Enclosure 5 Respective Military Service When Submitting Requests for DOT Special Permits (SP) Certificate of Equivalency (COE) and Competent Authority Approval (CAA)
- Enclosure 6 Procedures for Submitting Requests for Department of Transportation Special Permit (DOT-SP)
- Enclosure 7 Procedures for Submitting Requests for Competent Authority Approval_(CAA)
- Enclosure 8 Procedures for Submitting Requests for Certificate of Equivalency (COE) Glossary

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- Special Permit Sample
 Competent Authority Approval (CAA) Sample
 Certificate of Equivalence (COE) Sample

REFERENCES

- (a) Department of Defense Manual 4140.01, (Volume 9), "DoD Supply Chain Materiel Management Procedures: Material Programs", February 10, 2014
- (b) DLAD 4145.41/AR 700-143/AFI 24-210_IP/NAVSUPINST 4030.55C/MCO 4030.40B, October 22, 2007, superseded.
- (c) AR 700-15/NAVSUPINST 4030.28D/AFMAN 24-206_IP/MCO 4030.33E/DLAR 4145.7, "Packaging of Materiel", January 12, 2004
- (d) Defense Transportation Regulation (DTR) 4500.9-R-Part II, Cargo Movement
- (e) Title 49, Code of Federal Register, Parts 100-180, "Transportation"
- (f) DOD Performance-Oriented Packaging (POP) Program²
- (g) International Civil Aviation Organization (ICAO) Technical Instructions/International Air Transport Association (IATA) Regulation³
- (h) International Maritime Dangerous Goods (IMDG) Code⁴
- (i) AFMAN 24-204_IP/TM 38-250/NAVSUP PUB 505/MCO 4030.19K/DLAI 4145.3, "Preparing Hazardous Materials for Military Air Shipments", December 12, 2012
- (j) Surface Deployment and Distribution Command (SDDC) SafetyNet Program⁵
- (k) MIL-STD-129R, "Standard Practice, Military Marking for Shipment and Storage", February 18, 2014
- (l) ASTM D4919-03 (2008) Standard Specification for Testing of Hazardous Material Packagings⁶
- (m) Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration Website⁷
- (n) DOD 4000.25-M, Defense Logistics Management System (DLMS), Volume II (Supply Discrepancy Reporting), July 18, 2014
- (o) TB 700-2, NAVSEAINST 8020.8B, TO 11A-1-47, DLAR 8220.1, DOD Ammunition and Explosive Hazard Classification Procedures

¹Copies of Title 49 CFR may be obtained: http://www.ecfr.gov/cgi-bin/ECFR?page=browse

²Copies of DOD POP Program may be obtained: https://dod.distribution.dla.mil/pop/

³Copies of IATA publication may be obtained: http://www.iata.org/Pages/default.aspx

⁴Copies of IMDG publication may be obtained: http://www.imo.org/Publications/IMDGCode/Pages/Default.aspx

⁵Copies of SDDC Safety Net Program may be obtained: https://eta.sddc.army.mil/ETASSOPortal/SSO/PortalLogin.aspx

⁶Copies of ASTM D4919-03 may be obtained: http://www.astm.org

⁷Copies of CAA and SP may be obtained from DOT/PHMSA: http://www.phmsa.dot.gov/hazmat/regs/sp-a

PROCEDURES

- 1. <u>Contract Requirements</u>. DOD components will specify packaging and labeling requirements in solicitations and contracts based upon UN POP unless the HAZMAT is excepted from the requirements under paragraphs 9 and 10 of this enclosure or as directed by the DOD component Headquarters. It's vital that all worldwide and modal regulations are identified during procurement of HAZMAT. Explosive items procured must be properly classified under the UN system in order to ensure safe storage and shipment to CONUS and OCONUS points of use. These shipments must meet DOD/DOT transportation hazard classification and packaging requirements as specified in referenced documents.
- 2. <u>Multi-application HAZMAT Packaging</u>. Containers designed for multiple inner components will be tested and certified to their maximum capacity as stated in the applicable regulation. This testing will be sufficient for the containers when loaded to less than their maximum capacity. Any void space must be completely filled with approved cushioning material to prevent their breakage or leakage and control their shifting within the outer packaging under conditions normally incident to transportation.
- 3. <u>Marking</u>. Marking of HAZMAT packaging will be in accordance with the latest revision of MIL-STD-129 "Military Marking for Shipment and Storage" (see Reference (k)), and the applicable modal regulation(s).
- a. Packaging that successfully passes DOD HAZMAT packaging testing will be marked with the logo "USA/DOD". Activity-specific logos in Enclosure 4 may be used by DOD test activities if directed by the owner of the code. "USA/DOD" and activity specific logos may be added to large packaging performance markings.
- b. DOD components are authorized to mark the applicable DOD UN POP logo on Federal, Military or well established industrial (e.g., ASTM International) specification containers that pass UN POP testing (see Enclosure 4). DOD may test vendor-manufactured packages and apply the DOD UN POP logo. Contractors, who perform the packaging and certification process for the DOD, may be authorized to use the DOD UN POP logo when stated in their contract.
- c. DOD logos and test reports may be provided to vendors, at the discretion of the procuring activity, only if the containers are Government Furnished Equipment, or if the containers are strictly controlled by configuration control drawings, first article tests are performed, and inspection procedures are followed by Government quality assurance personnel that validate compliance.
- d. In instances where the manufacturing date of a packaging cannot be determined on a packaging design which has successfully passed performance testing, the year the packaging was filled may be used in lieu of the manufacturing date.
- 4. English Language Marking Requirement. All manufacturers exporting to the United States

and utilizing packages certified to UN specifications by a nation other than the United States may be accepted into the Defense Transportation System when the packaged markings are in English.

- 5. Testing Requirements for HAZMAT Packaging. Testing of HAZMAT packaging will be in accordance with Title 49 CFR, instructions authorized by the Competent Authority, and any differences designated by ICAO, IMDG, and IATA. Use of ASTM D4919, Standard Specification for Testing of Hazardous Materials Packaging (see Reference (l)) is recommended to ensure that tests can be repeated. HAZMAT packaging testing will be conducted according to the mode of transport, physical state of material, packing groups, weight, and container configuration rather than National Stock Numbers (NSN). Any other HAZMAT that is within the test parameters may be shipped in that certified container.
- a. DOD components must ensure that HAZMAT are in containers that have successfully passed the required test standards, unless that packaging is exempt from the requirements under paragraph 9 and 10 of this enclosure. This may be accomplished by procuring the HAZMAT in certified containers, by performing in-house testing through the use of a DOD test facility, or by the use of a DOT-approved third-party contractor certified by DOT to perform UN Certified 3rd party testing of non-bulk POP. DOD components may require vendors to submit test reports and configuration control drawings when procuring HAZMAT in packaging conforming to UN specifications. Vendors may be asked to submit test reports by Data Item Description DI-PACK-81059 (Hazardous Materials POP Test Report Format) or other applicable contractual packaging requirements. The decision to procure test data from a vendor is at the discretion of the Program Manager/Requirement Owner. An example of when procurement of vendor test data may be appropriate is when the packaging data for the item is also being procured.
- b. HAZMAT packaging testing must include all Title 49 CFR requirements or the applicable Competent Authority decisions for the affected item's hazard class. The following guidance applies to DOD component HAZMAT packaging testing:
- (1) Prior to initiating a request for HAZMAT packaging testing, DOD components will research the DOD POP program to determine if a tested package/configuration already exists.
- (2) DOD components must identify like items; e.g., acids, bases, etc., of HAZMAT and use a single test report to package and certify a related family to the maximum extent possible in accordance with the instructions published and authorized by the Competent Authority.
- (3) In order to qualify for air shipment, inner receptacles of a combination packaging containing liquids must be capable of withstanding without leakage an internal pressure differential standard and all other requirements of all air modal regulations, as applicable. Inner receptacles that do not meet this requirement must be packed in supplementary packaging that meets the pressure differential requirement, as well as all other requirements of the applicable modal regulation. Mark the outer pack or overpack "Air Eligible" in accordance with references (i) and (k).
- (4) UN POP tests will be conducted on affected HAZMAT packaging, regardless of tests that may be required by the Federal or Military container specification. If the specification

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requires the same tests as those required for UN testing specifications, the tests need not be duplicated if documented test results are available. UN POP standards tests will be conducted to the requirements of the most stringent mode of transportation anticipated.

- (5) Limited quantities, to be offered for air shipment, while not requiring UN Specification packaging must successfully pass tests required by ICAO, Technical Instructions, Part 3, Chapter 4 and Attachment 19 of reference (i).
- (6) In lieu of using multiple samples of the same configuration in testing, the same packaging(s) (container(s)) may be used to perform all required stack, drop, vibration, pressure, and any other required tests, provided that no damage or other changes have occurred to the packaging that would make it more likely to pass a test. If the same test package (packaging and contents, prepared as for shipment) passes one, but fails the next test, it is permissible to replace it with a test package of identical configuration, repeat the failed test, and continue testing.
- (a) If a test package passes the first drop, but fails after any one of the following drops, it is permissible to replace it with an identical test package, repeat the failed drop, and continue testing. If, however, a package fails after only one drop, this constitutes a test failure.
- (b) One sample packaging may be used to perform stack testing, provided that the test duration is a minimum of 72 hours. Packagings used in stack testing must not be previously tested packagings. All stack tests must be performed using empty packaging(s). Packagings that were used in stack testing (when empty) may be used as test samples in drop and vibration testing provided that no damage or other changes have occurred to the packaging that would make it more likely to pass a test.
- (c) One sample package may be used to perform vibration testing, provided that the test duration is a minimum of 3 hours. If a sample package, not previously used in testing, fails the vibration test, this constitutes a test failure.
- (d) Packagings that have passed First Article testing may also be used to satisfy the multiple container test sample requirements by using a single packaging throughout all tests, under the above conditions.
- 6. <u>DOD Testing/Retesting</u>. The following applies to HAZMAT packaging testing/retesting:
- a. The United States DOT is the US Competent Authority and considers all of DOD as one entity; (i.e., container manufacturer). Therefore, once a HAZMAT packaging configuration has been tested by one DOD activity, other DOD shippers do not need to test the same package configuration.
- b. For reparable hazardous items, the cognizant packaging design activity is responsible for the development of Special Packaging Instructions or configuration control drawings and the required hazardous materials packaging testing of the reusable packaging.
 - c. Periodic retesting will be accomplished on packaging configurations in production by

DOD activities as required by Title 49 CFR, Section 178.601(e) or the Competent Authority. The Military Service/Agency having item management responsibility for the hazardous item is responsible for ensuring the periodic retesting is performed as required.

- d. Specification Cylinder and UN Pressure Receptacle requalification and maintenance must be accomplished IAW Title 49 CFR, Part 107, Subpart I, and Part 180, Subpart C.
- 7. <u>Providing Test Reports to Vendors</u>. DOD HAZMAT packaging test reports will not be provided to vendors except as otherwise provided in paragraph 3.c.
- 8. Reuse/Refilling of Containers.
- a. The reuse of tested packages is authorized contingent upon the requirements of Title 49 CFR, Section 173.28. Reuse is authorized for domestic, international air, and military air. For international surface shipments, reusable fiberboard containers may not be used unless they are shipped inside intermodal transport containers.
- b. Packaging may be reused if free from incompatible residue, rupture, or other damage (e.g., tears, cuts, etc.) that would reduce structural integrity, other requirements of Title 49 CFR, Section 173.28 are complied with and the closure must be consistent with the original closing instructions.
- c. Single containers and/or single packaging of HAZMAT where a portion of the contents have been consumed must be repackaged as prescribed by original closing instructions. Comply with Title 49 CFR, Section 173.28 prior to re-filling single containers (except UN Specification jerricans shipped by military vehicles or aircraft may continue to be reused/filled provided they are otherwise serviceable)
- 9. Exceptions to HAZMAT Packaging Testing. The following HAZMAT does not require UN POP standards provided the provisions of the applicable modal regulations are met:
 - a. Carbon Dioxide, Solid (Dry Ice).
- b. Magnetized material with a field strength of less than 0.00525 gauss at 4.527 meters (15 feet).
 - c. Life Support Equipment.
 - d. Class 2 Compressed Gas Cylinders.
 - e. Class 7 Radioactive Material.
- f. A packaging with a capacity over 450L (119 gallons) as a receptacle for liquids or items weighing over 400 kg (882 pounds) and a capacity greater than 450L as a receptacle for solids (except intermediate bulk containers or large packaging as defined in 49 CFR Section 171.8.
 - g. Limited quantities.

- h. Excepted quantities.
- i. Consumer commodities.
- j. Items, by modal regulations, requiring only a strong outside packaging.
- k. Large and robust explosive articles whose shipping configurations do not lend themselves to be practically subjected to the performance testing due to excessive size, weight, or unique design characteristics must be qualified for shipment by the responsible Service's packaging authority. Qualification must include testing that demonstrates the adequacy of the shipping configuration to withstand forces normally incident to the intended mode(s) of transportation and must satisfy the applicable requirements of 49 CFR Section 173.24 and 49 CFR Section 173.60. A COE will be issued by the responsible Service to endorse shipment under as a large and robust explosive article. All explosive items shipped as a large and robust article must be classified and approved in accordance with the provisions of 49 CFR Section 173.56 and TB 700-2/NAVSEAINST 8020.8/TO 11A-1-47/DLAR 8220.1 (See Reference (o)).
- 10. Class 1 (explosives) Exceptions. Class 1 (explosives) materials owned by the DOD, packaged prior to January 1, 1990, as described in 49 CFR Section 173.7(e), are excepted from the UN POP standards of 49 CFR Section 173.62 and the associated packaging and marking requirements of Part 178. The packaging must have maintained their integrity. Shipping papers must identify the material as government owned goods packaged prior to 1990 as required by the Defense Transportation Regulation (DTR), 4500.9R, Part II. Marking and labeling requirements of the most current 49 CFR Part 172 must be complied with except that marking boards may be used for palletized loads in lieu of remarking and re-labeling each individual item/package. When an individual item/package is removed from the palletized load and offered for transport, it must be marked and labeled as required by 49 CFR Part 172.
- 11. <u>Provisional Packaging Instructions (PPI)</u>. A PPI is the detailed packing instructions in accordance with 49 CFR specifically designed to package a small quantity of particular explosive/ammunition item that has not had a final hazard classification assigned during the research and development phase for domestic shipments. Only the designated DOD packaging research and development activities listed in Enclosure 4 are authorized to prepare and approve PPIs. A PPI may be required when applying for an interim hazard classification for an explosive/ammunition item in the research and development phase.
- 12. <u>DOT Special Permits (DOT-SP)</u>. A DOT-SP, grants administrative authority to deviate from specific requirements, e.g. alternative packaging, testing procedures, etc. of 49 CFR. The government or commercial shipping activities must submit DOT SP requests to the DOD Service/Agency focal point listed in Enclosure 5 who in-turn, will submit the request via Safety Net to the SDDC Safety Office, (AMSSD-SA). The application requirements for submitting a SP are specified in Title 49 CFR; Section 107.105 and requirements outlined in Enclosure 6. Shipping papers must be annotated with the SP number. If required by the SP, the number must also be marked on shipping container. A copy of the SP must accompany the shipment. DOT SPs may be used for international shipments if the item is listed in paragraph 10. A new DOT-SP application requires a minimum of 120 days for routine DOT processing and 30 days for an

emergency DOT-SP. A DOT-SP expires 2-years from the date of issue, unless renewed (See Enclosure 6). The holder of the SP must file for a renewal no less than 60 days prior to expiration of the existing SP in accordance with 49 CFR; Section 107.109. Approved DOT-SPs are available on the DOT web site (see Reference (m)) or SDDC SafetyNet (Reference (j)). In accordance with DTR 4500.9-R, Part II, Chap 204, a quarterly usage report of SPs must be submitted to the Service/Agency Component focal point.

- 13. Competent Authority Approvals (CAA). A CAA is a written approval for specific hazardous material which by modal directive requires approval of the hazard classification or the packaging by a National Competent Authority prior to shipment. The shipping activity that requires a packaging CAA must forward the CAA request to their DOD Military Service/Agency focal point listed in Enclosure 5 containing the information outlined in Enclosure 7. A CAA issued for international shipments may also be used for domestic shipments. SDDC must maintain copies of all CAAs in an electronic file in the SafetyNet System (See Reference (j)). A CAA issued for approval of a hazard classification may also be used as a packaging approval if the packaging description/method is included in the document. Shipping papers must be annotated with the CAA number. If required by the CAA, the number must also be marked on the shipping container. A CAA requires a minimum of 120 days for routine processing and 30 days for an emergency CAA (See Enclosure 7). A copy of the CAA must accompany all shipments. In accordance with DTR 4500.9-R, Part II, Chap 204, a quarterly usage report of CAAs must be submitted to the Service/Agency Component focal point.
- 14. <u>Certificate of Equivalency (COE)</u>. A COE is an approval issued by DOD for packaging designs that differ from the prescribed regulations in 49 CFR. A COE certifies that the proposed packaging design equals or exceeds the comparable requirements of 49 CFR for the commodity being shipped. Requests for COE's must be submitted to the DOD Service/Agency focal point listed in Enclosure 5 who will review and approve the COE. Authorized COE writers are appointed in writing by the appropriate service authority and are listed in the DTR 4500.9-R, Part II, Chapter 204. The following information applies to COEs:
- a. COEs are used on a limited basis for domestic shipments of HAZMAT. A COE is authorized for use on international shipments if moved on a military controlled airlift (i.e.) DOD chartered commercial aircraft under a DOD contract, and the movement is between DOD colocated activities to include operations in theater locations.
- b. A request for a COE must include the requirements defined in Enclosure 8. Examples of supporting data required for a COE are included in Enclosure 8. A Certification Control Number (CCN) will be issued to identify the service issuing the COE using the following prefixes:

DLA - DL Army - AY Air Force - AF Navy - NA Marine Corps - MC Combine these prefixes with the current calendar year to construct the CCN; for example, DL-12-XXX. The CCN must be annotated on shipping papers according to the DTR, Part II and the exterior of the containers. A copy of the COE must also accompany the shipment.

- 15. <u>Packaging Waiver for Military Air</u>. DOD Services/Agency focal points listed in Enclosure 5 may issue packaging waivers for DOD military controlled airlift in accordance with AFMAN 24-204_IP/TM 38-250/NAVSUP PUB 505/MCO 4030.19K W/ERRATUM/DLAI 4145.3, Preparing HAZMAT for Military Air Shipments.
- 16. Opening Non-Bulk Packages for Inspection. DOD components may open, inspect and subsequently reship packages only when the configuration of HAZMAT remains unchanged and the package is closed using manufacturer or shipper provided instructions. See AFMAN 24-204_IP for additional restrictions for military airlift.
- 17. Repackaging. Items removed from original UN POP for distribution in different quantities or packaging configurations must be packaged using the DOD POP program in conjunction with a Special Packaging Instruction, the applicable NSN packaging drawing or approved packaging drawing issued by the responsible service. DOD shippers may apply UN Specification markings specified in the instruction being used to prepare or package the HAZMAT. When commercial packaging (authorized for the material being packaged) is used, the manufacturer provided packing or closing instructions must be used. Services and DOD agencies may not repackage an item IAW a CAA or DOT-SP unless the DOD is a party to the CAA or DOT-SP. Ammunition items must be packaged IAW the applicable NSN item drawing in order to maintain compliance with the assigned DOD Final Hazard Classification.

18. Noncompliant HAZMAT Packaging.

- a. New Procurement. When DOD components determine that a vendor's certified HAZMAT packaging does not comply with contractual HAZMAT packaging requirements, suspend the receipt in material condition code "L." Follow the procedures in DOD 4000.25-M, Defense Logistics Management System (DLMS), Volume II (Reporting of Supply Discrepancies) (see Reference (n)), and promptly notify the applicable procuring activity. The procuring activity will coordinate a review of the discrepancy report and provide written disposition instructions to the activity holding the discrepant material.
- b. Station Returns and Receipts from Other DOD Activities. When DOD components determine that another DOD Activity's certified HAZMAT packaging does not comply with Title 49 CFR and/or modal requirements, suspend the receipt in material condition code (CC) "J" or "K". Follow the procedures in Reference (n) and promptly notify the applicable managing activity. The managing activity will coordinate a review of the discrepancy report and provide written disposition instructions to the activity holding the discrepant material.
- 19. <u>Foreign Military Sales (FMS)</u>. Approved COE/CAA documents must not be utilized by foreign nation(s) to return items to CONUS for weapon system modifications or repairs. The foreign nation assumes ownership and responsibility for acquiring proper HAZMAT transport documents after accepting final delivery of weapon system(s). Note: A COE is not valid for movement of HAZMAT over international roads or via overseas commercial air.

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20. <u>SafetyNet System (SNS)</u>. SNS is the official repository for document management containing DOT HAZMAT transportation authorities. SNS may be accessed through the SDDC ETA Portal (see reference (j)).

DOD Hazardous Material Packaging Working Group Charter

- 1. <u>Objective</u>. The DOD Hazardous Material Packaging Working Group (HMPWG) is a subcommittee of the Defense Packaging Policy Group (DPPG) as authorized by the DPPG Charter. The HMPWG is a decision-making team responsible for developing, recommending, and implementing changes to ensure the most efficient procedures, policy, and standardization of hazardous material packaging throughout the Military Services and Defense Agencies.
- 2. <u>Functions</u>. The HMPWG will develop and coordinate hazardous material packaging policy. The HMPWG members will provide and exchange information to modify/establish policies and procedures for the most effective use of DOD resources. Recommendations will be forwarded to the DPPG or applicable Service/DLA headquarters as required. Areas of primary interest include:
- a. Hazardous Material Packaging. Modify or establish hazardous material packaging policies and procedures to meet military operational requirements while ensuring compliance with applicable modal regulatory directives. Ensure proper packaging and preparation methods for the safe and efficient storage, handling, and transport of HAZMAT.
- b. Testing. Establish testing procedures to ensure UN POP standards are met for Service/DLA managed items. Coordinate testing to prevent redundancy and provide the most efficient use of testing resources. Support and advise the DOD POP program as it pertains to each Service's requirements.
- c. Compliance. Review and recommend changes to regulatory requirements. Develop and coordinate recommendations to ensure compliance with DOD and commercial modal regulations.
 - d. Training. Evaluate hazardous material packaging training issues.
- e. Information. Develop effective means to distribute hazardous material packaging requirements to operating personnel.
- f. Quality. Strive for continuous improvement through implementation of new packaging materials, processes, and procedures.
- 3. <u>Procedures</u>. The HMPWG will work together to ensure safe packaging of HAZMAT throughout the logistics cycle.
 - a. Organization. The HMPWG will consist of primary and advisory members. Primary members will include packaging policy representatives from each Military Service and DLA. The Chair position will rotate between the Services/Agency every two years. The Chair will assign a member as the Secretary. Advisory members will include GSA, DLA Distribution and representatives of activities performing HAZMAT packaging testing.

- b. Guest. Members must be responsible for the invitation of their respective Military Department and/or Agency guests. To maintain the effectiveness of the HMPWG, guests should be limited to those who may contribute significantly to the established agenda. Guest attendance is subject to approval by the Chair, or the Secretary in the absence of the Chair.
- c. Meeting. The HMPWG will as a minimum meet annually during the second quarter (FY) or as required by determination of the members. The Chair, in coordination with the primary members, will designate the dates and location of the meeting.
- d. Agenda. Members will provide proposed agenda topics, with talking papers, to the Chair by the designated time established by the meeting announcement. The Chair will develop and distribute a final agenda with supporting talking papers to members prior to the meeting.
- e. Travel Funds. Participating organizations will provide travel funds for members to attend HMPWG meetings.

Performance-Oriented Packaging Identification Codes

NOTE: These codes are for the identification of the activities listed and are not to be applied to any packaging unless directed by the specific activity represented by the code.

Packaging Design Activity Code

Defense Logistics Agency	USA/DOD/DLA
Fort Belvoir, VA	
Defense Logistics Agency- Land & Maritime	USA/DOD/DLC
Columbus, OH (CAGE 16236 & 14933)	
Defense Logistics Agency- Energy	USA/DOD/DLF
Fort Belvoir, VA (CAGE 52838)	
Defense Logistics Agency- Aviation	USA/DOD/DLG
Richmond, VA (CAGE 13873)	
Defense Logistics Agency- Troop Support	USA/DOD/DLI
Philadelphia, PA (CAGE 14153)	
Armament, Research, Development and Engineering Center (ARDEC)	USA/DOD/AYD
(RDAR-EIL-P)	
Picatinny Arsenal, NJ (CAGE 19200)	
Armament, Research, Development and Engineering Center (ARDEC)	USA/DOD/AYA
(RDAR-EIL-TP)	
Rock Island, IL (CAGE 59678)	
Army Edgewood Chemical-Biological Center (ECBC) (AMSRD-ECB-END)	USA/DOD/AYR
Rock Island IL, (Cage 5B5M3)	
Army Edgewood Chemical-Biological Center (ECBC) (AMSRD-ECB-ENA-P)	USA/DOD/AYE
Aberdeen Proving Ground, MD (Cage 39KG1)	
Army Defense Ammunition Center and School (USADACS)	USA/DOD/DEV
McAlester AAP, OK (CAGE 28620)	
Army Communications-Electronics Command (CECOM)	USA/DOD/AYC
Aberdeen Proving Ground, MD (CAGE 80063)	
Army Medical Materiel Agency	USA/DOD/AYS
Frederick, MD (CAGE 66732)	
Soldier Systems Center	USA/DOD/AYN
Natick, MA	
Army Aviation and Missile Command (AMCOM)	USA/DOD/AYM
Huntsville, AL (CAGE 18876)	

Army Logistics Support Activity, Packaging, Storage and Containerization Center, Tobyhanna, PA	USA/DOD/AYP
Air Armament Complex Eglin AFB, FL (CAGE 32231)	USA/DOD/AF18
Rome Research Site Griffiss AFB, NY (CAGE 07877)	USA/DOD/AF17
Space and Missile Systems Center Los Angeles AFB, CA (CAGE 07868)	USA/DOD/AF19
Ogden Air Logistics Complex Hill AFB, UT (CAGE 98747)	USA/DOD/AF70
Oklahoma City Air Logistics Complex Tinker AFB, OK (CAGE 98748)	USA/DOD/AF71
Warner Robins Air Logistics Complex Robins AFB, GA (CAGE 98752)	USA/DOD/AF84
AF Packaging Technology and Engineering Facility Wright-Patterson, AFB, OH (CAGE 0B275)	USA/DOD/AF69
Marine Corps, Washington, DC (CAGE 80372)	USA/DOD/MCH
Marine Corps Research, Development and Acquisition Command Quantico, VA (CAGE 5N998)	USA/DOD/MCQ
Naval Air Systems Command Washington, DC (CAGE 30003)	USA/DOD/NAA
Space and Naval Warfare Systems Command Washington, DC	USA/DOD/NAB
Naval Facilities Engineering Command Washington, DC (CAGE 80091)	USA/DOD/NAC
Naval Sea Systems Command Washington, DC (CAGE 53711)	USA/DOD/NAD
Naval Supply Systems Command/Weapon Systems Support (RIC N32) Philadelphia, PA (CAGE 80132)	USA/DOD/NAE
Naval Supply Systems Command/Weapon Systems Support (RIC N35) Mechanicsburg, PA (CAGE 67991)	USA/DOD/NAF

Respective Military Service/Agency When Submitting Requests for DOT Special Permits (SP)

Certificate of Equivalency (COE) and Competent Authority Approval (CAA)

1. When a SP/COE/CAA is required, the managing activity for the affected item will prepare the request and submit it to the Military Service/Agency focal point listed below. For a hazard classification contact the respective Military Service/Agency identified below:

Air Force				
COE/CAA/DOT-SP AFSC/LOET 5215 Thurlow St., STE 5 Wright Patterson AFB, OH 45433 Attn: Mr. James Frank or Mr. William Heineman Commercial: 937-903-1984/4503 DSN: 674-1984/4503 Email: james.frank@wpafb.af.mil Email: William.heineman@wpafb.af.mil	Explosive Classification CAAs/DOT-SP HQ AFSEC/SEW 9700 G Ave SE Kirtland AFB, NM 87117-2662 Attn: Mr. Michael Cutter Commercial: 505-846-1386 DSN: 246-1386 Email: Michael.cutter@afmc.af.smil.mil			
Army				
Chief US Army Logistics Support Activity Packaging, Storage, and Containerization Center Attn: AMXLS-AT-P (Mr. Craig Coffman or Mr. Matthew Ober) 11 HAP Arnold Blvd. Tobyhanna, PA 18466-5097 Commercial: 570-615-7070/7144 DSN: 795-7070 / 7144 Email:craig.coffman.civ@mail.mil Email: matthew.ober.civ@mail.mil COE/PPI for Ammunition/Explosives US Army Armament Research, Development and Engineering Center	Explosive Hazard Classification (CAA)/DOT-SP SJMAC-ES Defense Ammunition Center Technical Center for Explosive Safety 1 C Tree Road, Building 35 McAlester, OK 74501-9053 DSN: 956-8919			
Attn: RDAR-EIL-P (Mr. Jack Lam or Mr. Mark Rehmstedt) Bldg. 455 Picatinny Arsenal, NJ 07806-5000 Commercial: 973-724-2220 DSN: 880-2220 Email: jack.lam@us.army.mil Email: mark.j.rehmstedt.civ@mail.mil				

Navy				
COE/CAAs (Ordnance)/DOT-SP	DOT-SP			
Director	Commanding Officer			
Naval Surface Warfare Center	Naval Ordnance Safety and Security			
Indian Head Division	Activity			
Picatinny Detachment	Attn: Code N55			
Code G13 – Michael Kelly	Farragut Hall, Building D323			
Picatinny Arsenal, NJ 07806-5000	23 Strauss Avenue			
Commercial: 973-724-3388	Indian Head, MD 20640-5555			
DSN: 880-3388	Commercial: 301-744-6066			
Email: michael.l.kelly@navy.mil	DSN: 354-6066			
	Email: Mario.harley@navy.mil			
COE/CAAs (Non-Ordnance)/DOT-SP	Explosive Hazard Classification			
NAVSUP Weapon Systems Support	CAA/DOT-SP			
Code M0772 – Susan Starks	Commanding Officer			
5450 Carlisle Pike	Naval Ordnance Safety and Security			
Mechanicsburg, PA 17055-0788	Activity			
Commercial: 717-605-3598	Attn: Code N82			
DSN: 430-3598	Farragut Hall, Building D323			
Email: susan.e.starks@navy.mil	23 Strauss Avenue			
	Indian Head, MD 20640-5555			
	Commercial: 301-744-6021			
	DSN: 354-6021			
	Email: ed.walseman@navy.mil			
U.S. Marir	ne Corps			
COE/CAA/DOT-SP	Explosive Hazard Classification			
Commandant of the Marine Corps	Commanding Officer			
I&L Code LPD-1	Indian Head Division			
Attn: Ms. Oliver Bell	Naval Ordnance Safety and Security			
Headquarters, United States Marine Corps,	Activity			
Pentagon Rm 2E227	Attn: Code N714			
2 Navy Annex	Farragut Hall, Building D323			
Washington, D.C. 20380-1775 Commercial:	23 Strauss Avenue			
703-695-7930	Indian Head, MD 20640-5555			
Email: oliver.j.bell@usmc.mil	Commercial: 301-744-6021			
	DSN: 354-6021			
	E-Mail: ed.walseman@navy.mil			
Defense Logistics Agency				
COE/CAA/DOT-SP				
Defense Logistics Agency				
Attn: J-344 (Ms. Jennifer Smith)				
· · · · · · · · · · · · · · · · · · ·				
Attn: J-344 (Ms. Jennifer Smith) 8725 John J. Kingman Rd., Suite 4330 Fort Belvoir, VA 22060-6221				
8725 John J. Kingman Rd., Suite 4330				
8725 John J. Kingman Rd., Suite 4330 Fort Belvoir, VA 22060-6221				

Surface Deployment & Distribution Command (SDDC)

SDDC

Attn: AMSSD-SA (Mr. Elias Cantu or Mr.

Marcus Boasso) 1 Soldier Way

Building 1500 WestScott AFB, IL 62225-

5006

FAX: 618-220-8205

Email: elias.v.cantu@mail.mil

Commercial: 618-220-5041 - DSN: 770-

5041

Email: Marcus.boasso@mail.mil

Commercial: 618-220-5040 - DSN: 770-

5040

2. <u>Interim Hazardous Classification Procedures.</u> DOD agencies listed in the Department of Defense Explosives classification Procedures (TB 700-2/T.O. 11A-1-47/NAVORDINST 8020.3/DLAI 8220.1) are authorized to assign Interim Hazard Classifications (IHC) to allow the transportation of explosive materials that has not been assigned a final hazard classification. The IHC will be used until a final classification is established. In some cases, the DOT will not issue a packaging CAA or DOT-SP until a final hazard classification is assigned. If a packaging CAA is required, the requester must prepare the package identified in Enclosure 7. The request must include a copy of the IHC and supportive data used to determine that classification. The requester must validate the need for an IHC and indicate why the final hazard classification has not been established. Requests for a packaging CAA or DOT-SP for Class 1 items must be directed to the Service focal points identified in paragraph 1, above. The focal points will work with HQ SDDC to the DOD Explosive Safety Board to obtain a CAA or DOT-SP from DOT. However, when contingency or mission critical operations exist, the HQ Military Services reserve the right to work directly with DOT.

Procedures for Submitting Requests for Department of Transportation Special Permit (DOT-SP)

- 1. Comply with 49 CFR Section 107.105 and the requirements below when requesting a DOT-SP. Shippers who have authority to upload data into SafetyNet may submit a request for a DOT-SP or forward a request to their Service/Agency focal point (item manager). All documents defined in section 2 of this enclosure must be uploaded in the required SafetyNet fields. Any request that does not contain all of the required documents will be rejected and returned to the requestor for resubmission. Each request will include a cover letter, which states why the DOT-SP is being requested and identifies the mode(s) of transportation affected
- 2. Collect the supporting technical data required from the appropriate sources (i.e. manufacturer, program offices, etc.) and attach these data as Attachments 1 through 7 described below as part of requesting a DOT-SP. The supporting technical data must accompany the request.

NOTE: When the information requested does not apply, write N/A on that line; e.g., 'Actual Item Drawings – N/A.'

Attachment 1 – Information to Support Special Permit:

- a. Product Nomenclature, National Stock Number(s), Part Number(s), and EX-number (if assigned).
 - b. Hazard Class/Division. For Class 1 material, include the Storage Compatibility Group.
 - c. UN Identification Number.
 - d. UN Proper Shipping Name (ICAO and IMDG).
- e. Item Description and Drawing Number. Include the item net and gross weight. For Class 1 material, also include the net explosive weight.
- f. Packaging Description and Instructions/Drawing Numbers. If a COE and/or /DOT-SP have been issued, include the number and description.
 - g. Include COE transport documents, if applicable.
 - h. Difference between DOT and DOD containers.
- i. Reports of Test(s) Conducted. List and provide a short description of the tests conducted on the container (i.e. MIL-STD-648, FED-STD-101C, MIL-R-8583A, Hazardous Materials Packaging Tests, Transportation and Handling Vibration Test, etc.).

Attachment 2 – Approved item drawings.

Attachment 3 – Approved item test reports.

Attachment 4 – Approved container drawings.

Attachment 5 – Approved container test.

Attachment 6 – Certification of Equivalency (if applicable).

Attachment 7 – Hazard Classification (if applicable).

- 3. Submit a usage report quarterly to SDDC including all DOT-SP renewal requests.
- 4. Figure 1 depicts an approved DOT-SP from the Department of Transportation.

April 29, 2011



East Building, PHH – 30 1200 New Jersey Avenue, Southeast Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 10247 (TENTH REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

- 1. GRANTEE: (See individual authorization letter)
- PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of certain small quantities of Divisions 2.1, 2.2, 2.3 and 6.1. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
 - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
- REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR \$\\$ 173.4(a)(1)(iii), in that Class 2 materials are not authorized and Division 6.1, PG I, Hazard Zone A and B materials are limited to 1 gram; 173.4a(b), in that Division 6.1, PG I, Hazard Zones A and B and Divisions 2.1 and 2.3 materials are not authorized; and 173.4a(c)(1) Division 6.1, PG I and II materials are limited to 1 gram for solids or 1 milliliter for liquids; except as authorized herein.
- BASIS: This special permit is based on the Pipeline and Hazardous Materials Safety Administration's (PHMSA) editorial review under § 107.121 initiated on December 4, 2008.

Figure 1 - Special Permit Sample Refer to Reference (j) or (m) for a copy of this entire document - DOT-SP 10247

Procedures for Submitting Requests for Competent Authority Approval (CAA)

- 1. Comply with 49 CFR Part 107 Subpart H and the requirements below when requesting a CAA. Shippers who have authority to upload data into SafetyNet may submit a request for a CAA or forward a request to their Service/Agency focal point (item manager). Ensure all required fields are complete in SafetyNet. Requests that do not contain all mandatory documents as described herein will be rejected for resubmission. Each request will include a cover letter, which states why the CAA is being requested and identifies the mode(s) of transportation affected (See Figure 2 for Sample).
- 2. Collect the supporting technical data required (see below Attachments 1-8) from the appropriate sources (i.e. manufacturer, program offices, etc.) This supporting technical data must include the appropriate certification, test data, illustrations, signatures, etc. and a cover letter.

NOTE: When the information requested does not apply, write N/A on that line; e.g., 'Actual Item Drawings – N/A.'

Attachment 1 - Information to Support Competent Authority Approval:

- a. Product Nomenclature, National Stock Number(s), Part Number(s), and EX-number (if assigned).
 - b. Hazard Class/Division. For Class 1 material, include the Storage Compatibility Group.
 - c. UN Identification Number.
 - d. UN Proper Shipping Name (ICAO and IMDG).
- e. Item Description and Drawing Number. Include the item net and gross weight. For Class 1 material, also include the net explosive weight.
- f. Packaging Description and Instructions/Drawing Numbers. If a COE and/or a DOT-SP have been issued, include the number and description.
 - g. Difference between DOT and DOD containers.
- h. Reports of Test(s) Conducted. List and provide a short description of the tests conducted on the container (i.e. MIL-STD-648, FED-STD-101C, MIL-R-8583A, Hazardous Materials Packaging Tests, Transportation and Handling Vibration Test, etc.).
- Attachment 2 Approved item drawings.
- Attachment 3 Approved item test reports.
- Attachment 4 Approved container drawings.
- Attachment 5 Approved container test reports.
- Attachment 6 Department of Transportation Special Permit (if applicable)
- Attachment 7 Certification of Equivalency (if applicable).
- Attachment 8 Hazard Classification (if applicable).
- 3. Previous CAA Revisions/Changes must be included in the package.
- 4. Submit a usage report quarterly to SDDC including all CAA renewal requests.
- 5. Figure [2] depicts an approved CAA from the Department of Transportation.



1200 New Jersey Avenue, Southe Pipeline and Hazardous **Materials Safety Administration**

APPROVAL CA2014030023 ISSUED BY THE COMPETENT AUTHORITY OF THE UNITED STATES EXPIRATION DATE: April 01, 2019

APPROVAL HOLDER: 1. U.S. Department of Defense

Surface Deployment and Distribution

East Building, PHH - 32

Washington, D.C. 20590

Command

One Soldier Way

Scott Air Force Base IL 62225 United

States

2. **REGULATORY AUTHORITY:** 49 CFR § 180.213 (d) (1)

- 3. SYNOPSIS: U.S. Department of Defense is authorized a variation from the marking requirements in Section 180.213.
- 4. BASIS: This approval is issued in response to Department of Defense's application dated 03-26-2014, requesting approval to use pressure sensitive labels on 16 DOT Specification cylinders being used as part of U.S. Air Force aircraft fire suppression systems in lieu of requalification markings by stamping, engraving, or scribing.
- PERIOD OF VALIDITY AND CONDITIONS OF APPROVAL: This approval does not provide relief from any requirements of the Hazardous Materials Regulations except as stated herein. This approval is valid for five (5) years or until terminated by the Associate Administrator for Hazardous Materials Safety.

Under the provisions of this approval, U.S. Department of Defense may use pressure sensitive labels on cylinders which have been requalified in accordance with 49 CFR and are used as fire extinguishers.

CA2014030023 Page 1 of 3 Tracking Number: 2014031360

Figure 2. Competent Authority Approval (CAA) Sample Refer to Reference (j) for a copy of this entire document - CAA 2014030023

> 25 **ENCLOSURE 7**

Procedures for Submitting Requests for Certificate of Equivalency (COE)

1. Shippers requesting a COE must submit a 'Hazardous Material Data Package' to the Military Services responsible for preparing COEs. A COE is required for domestic and/or international (DOD owned activity) shipments of a packaged design that equals or exceeds Title 49 CFR requirements. The COEs are submitted to the Service focal points for approval. The Military Service focal points are identified in Enclosure 5. Shippers must provide the following information (see Figure 3 for Sample):

HAZARDOUS MATERIALS DATA PACKAGE

NOTE: When the information requested does not apply, write N/A on the line.

- a. Requester or Petitioner:
 - (1) Name.
 - (2) Company or activity and location.
 - (3) Business telephone number.
- b. Proposed Dates of Initial Shipment.
- c. <u>Title 49 CFR Provisions:</u>
 - (1) Identify all regulatory provisions involved.
- (2) Justify request for COE and specify why DOD and public interest is served by granting a COE.
 - (3) Identify why standard provisions of Title 49 CFR are not appropriate.
- (4) Identify how the proposed deviation will provide an adequate and reasonable degree of safety.
 - d. Item Description:
- (1) Product Nomenclature, National Stock Number(s), Part Number(s), and EX-number or IHC (if assigned)
 - (2) Proper Shipping Name.
 - (3) Chemical Name.
 - (4) Common Name.
 - (5) Hazard Classification.
 - (6) Form (radioactive materials only).
 - (7) Quantity.
 - (8) Properties and characteristics.
- (9) Composition and percentage (by volume and weight) of each chemical, if a solution or mixture.
 - (10) Igniter ground procedures.
 - (11) Net Explosive weight.
 - (12) Whether or not rocket motor is in a propulsive state.

e. Packaging Data:

- (1) How the item is packed (drawing showing item/packaging interface) showing any containers, associated fill and relief valves, suspension system, cushioning media, shock indicators, amount of explosives and internal safety features, cutters, dimensions, materials, etc. Drawings must contain enough information to permit engineering comparison between proposed item and the specification requirements or to permit evaluation of the proposed container or shipping configuration.
 - (2) Number of items per inner package/quantity per unit pack.
 - (3) Number of inner packages per exterior pack or container.
 - (4) DOT specification number for containers (Class 2 or 7).
 - (5) Dimensional Size of pack and/or container.
 - (6) Marking and labeling.
 - (7) Container data that reflect relevant shipping or accident experience.
 - (8) Center of Gravity.
 - (9) Packaging procedures.
- (10) Test results. State the regulation specifying the tests required and procedures to conduct these tests.
 - (11) Previous analogous permits, certificate or approvals.
- (12) Calculations or, preferably, test results of bursting strength and shatter characteristics of pressure vessels.
 - (13) Provisions for electrical grounding.
- f. <u>Transportation Description</u>: If the item, as packaged, is a transportability problem item, data required by a transportability report will form a part of this report. Where data are not generated by a transportability report, the following minimal action is required:
 - (1) Identify modes of transportation.
 - (2) Provide Drawings, sketches, or schematics showing different configurations:
 - (a) Blocking and bracing.
 - (b) Tie-down or restraint.
 - (c) Location of center of gravity.
 - (d) Consolidation on pallets or/in exterior shipping containers.
- (3) Identify the most probable hazards involved with each handling operation, each mode, or each different type of carrier equipment. Show the need for:
 - (a) Briefing crews.
 - (b) Escorts (technical, security police, etc.).
 - (c) Personnel protective equipment.
 - (d) Protective environmental equipment/personnel.
 - (e) Alerting state, military, or government offices of incident or accident.
 - (f) Exclusive use of carrier equipment.
- (g) Specialized materials, equipment, or procedures (non-sparking materials, explosive-proof motors, etc.).
- (h) Arms, Ammunition and Explosives (AA&E) transportation security category if applicable as specified in DOD 5100.76-M.
- (4) State what specific action is planned to satisfy each requirement identified in paragraph 6c.
 - (5) Provide reports of tests conducted to verify movement and handling safety.
 - (6) State what deviations or modifications or Title 49 CFR requirements are needed.

- 2. Examples of data item descriptions that may be used to acquire information for substantiating data required in the HAZMAT data package are:
 - a. DI-L-3311 Explosive Hazard Classification Data
 - b. DI-PACK-80880 Transportability Report
 - c. DI-L-1903 Part, Component or Subsystem Test Plan
 - d. DI-PACK-81059 Hazardous Material POP Test Report Format
- 3. The following information is required when the Military Service focal points prepares the COE for use by the shipper. The hard copy COE must accompany the shipment. An example is noted in Figure 2 below.
 - a. CCN.
 - b. Authority
 - c. Issued by, with signature.
 - d. Basis for certification.
 - e. Packaging description.
 - f. Mode(s) of transportation authorized.
 - g. Interim Hazard Classification
 - h. DOT-SP
 - i. CAA

The following are additional recommended items, but are not required:

- a. DOT hazard classification (Proper Shipping Name, Label, Marking).
- b. DOD hazard classification (Security Classification Guide, Division, UN Identification Number).
 - c. Expiration date.
- 4. Requirements of this enclosure are considered minimum essential information to substantiate issuing a COE. When any of the information changes or is revised, the COE must be amended at the time such information becomes available.



DEPARTMENT OF THE NAVY

NAVAL SURFACE WARFARE CENTER INDIAN HEAD DIVISION DETACHMENT EARLE **201 HIGHWAY 34** COLTS NECK, NJ 07722-5023

13 January 2010

CERTIFICATE OF EQUIVALENCY NA-10-500 SM-3 BLOCK 1A KW SEEKER ASSEMBLY CONTAINING COMPRESSED NITROGEN

- 1. AUTHORITY. 49 CFR 173.7(a) and NAVSUPINST 4030.55.
- 2. COMMODITY. The SM-3 Kinetic Warhead (KW) Seeker Assembly configured with a cryogenic bottle assembly pressurized with nitrogen. The KW Seeker Assembly (P/N 2237622) was assigned the following hazard classification by the U.S. Department of Transportation (DOT) letter dated 9 July 2008, reference number EX2008060039:

a. Proper Shipping Name

Nitrogen Compressed

b. UN Hazard Classification:

2.2

c. UN Identification Number:

1066

3. PACKAGING DESCRIPTION. The cryogenic bottle assembly, conforming to Raytheon Drawing (15090) 2237675, is an integral part of the KW Seeker Assembly. The bottle assembly is a toroidal design having a volume of 8.51 cubic inches. The bottle assembly contains a quantity of 58 grams of nitrogen pressurized to a maximum operating pressure of 8525 psig at 129 degrees F (54 degrees C). The KW Seeker Assembly is packaged for shipment in either the MK 808 Shipping and Storage Container conforming to Raytheon Drawing SMH811570 or the KW Transportation Container conforming to Boeing Drawing 7R107590A1. Required markings on the outer shipping containers shall include:

a. DOT Marking:

NITROGEN, COMPRESSED

UN 1066

CCN NA-10-500

b. DOT Label:

NON-FLAMMABLE GAS

4. BASIS. This Certificate of Equivalency (COE) is based upon supporting technical documentation and test data which is on file at the Naval Surface Warfare Center, Detachment Earle. This includes Raytheon SM-3 Seeker Cryo Bottle Pressure Test Procedures dated 27 August 2003 and production lot sampling data from 2005 through 2009 demonstrating acceptable material tensile strength and burst test values.

Page 1 of 2

Figure 3. Certificate of Equivalence (COE) Sample Refer to Reference (j) for a copy of this entire document – COE NA-10-500

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

ASD(L&MR) Assistant Secretary of Defense for Logistics and Materiel

Readiness

AFMAN Air Force Manual

CAA Competent Authority Approvals
CCN Certification Control Number
CFR Code of Federal Register
COE Certificate of Equivalency
CONUS Continental United States

DID Data Item Description
DLA Defense Logistics Agency

DTR Defense Transportation Regulation

FMS Foreign Military Sales

International Air Transport Association

IATA

ICAO International Civil Aviation Organization IMDG International Maritime Dangerous Goods

POP Performance Oriented Packaging

SDDC Surface Deployment and Distribution Command

SNS SafetyNet System SP Special Permit

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this Manual.

<u>Certification.</u> The act of confirming and verifying the completed package meets the requirements of the applicable modal regulation.

<u>Certifier (Preparer)</u>. One who physically recognizes the correctness of a package construction or has access to test data for that package and who then verifies in writing that it will perform to the level required. A certifier may perform one or more of the following acts of certification:

- a. Performs a packaging operation in compliance with instructions prepared by a package designer.
- b. Determines that the packaging and/or container has been manufactured, assembled, and marked in accordance with requirements.

<u>Closures</u>. A device which closes an opening in a receptacle.

<u>Excepted Quantities</u>. A small amount of a certain HAZMAT that is not subject to all of the regulatory requirements of 49 CFR Part 173, when they meet the criteria of 49 CFR Section 173.4a.

<u>In-House Testing</u>. HAZMAT packaging testing conducted at a DOD packaging test facility.

See 49 CFR Section 171.8 for definitions and abbreviations provided by the DOT.