

**BY ORDER OF THE SECRETARY
OF THE AIR FORCE, THE ARMY, THE
NAVY, THE MARINE CORPS AND THE
DEFENSE LOGISTICS AGENCY**



**DEPARTMENT OF THE AIR FORCE
MANUAL 24-210
AR 700-143
NAVSUPINST 4030.55E
MCO 4030.40D
DLAR 4145.41**

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Transportation

**PACKAGING OF
HAZARDOUS MATERIALS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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In accordance with the authority of DoDM 4140.01, DAFMAN 24-210 establishes uniform guidance 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 700-143/NAVSUPINST 4030.55E/AFMAN 24-210/MCO 4030.40D/DLAR 4145.41 and Defense Transportation Regulation (DTR) 4500.9-R-Part II, Cargo Movement. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See DAFI 90-160, Publications and Forms Management, for a description of the authorities associated with the Tier numbers. Processes and authorities to waive requirements identified within this publication take precedence over Tier waiver authorities. This applies to Air Force units only. Ensure all Department of the Air Force (DAF) records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, Records Management and Information Governance Program, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR), using the DAF Form 847, Recommendation for Change of Publication; route DAF Form 847 from the field through the appropriate functional’s chain of command.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. It has been revised from DLAR 4145.41/ AR 700-143/ NAVSUPINST 4030.55E/ DAFMAN 24-210/ MCO 4030.40C, Packaging of Hazardous Material, dated April 21, 2015.

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Chapter 1

GENERAL GUIDANCE

1.1. Applicability. This regulation is applicable to the Military Services and the Defense Logistics Agency (DLA), referred to as Department of Defense (DoD) components in this regulation. The term “Military Services,” as used herein, refers to the Army, the Navy, the Air Force, the Marine Corps, and the Space Force.

1.1.1. In accordance with Title 49 Code of Federal Regulations (CFR), Section 173.7(a), 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 reshipe any shippers certified shipment to any consignee provided the original packaging has not been damaged or altered in any manner.

1.1.2. Hazardous Materials (HAZMAT) packaging, which has been tested and passed the United Nations (UN) Performance Oriented Packaging (POP) standards, will be applied to HAZMAT for domestic shipments consistent with Title 49 CFR, Parts 100-185. **(T-0)**.

1.1.3. DoD-managed HAZMAT shall be provided packaging protection at the lowest overall cost without compromising established DoD safety standards. Packaging shall provide adequate continuous protection to the packaged HAZMAT and shall prevent any release of the HAZMAT.

1.1.4. When HAZMAT is prepared for international shipment, the packaging and marking shall conform to the applicable modal regulations; i.e., International Civil Aviation Organization (ICAO) or International Maritime Organization (IMO)/International Maritime Dangerous Goods (IMDG) Code. The International Air Transport Association (IATA) Dangerous Goods Regulations (DGR) contains all ICAO Technical Instructions and is used by the airline industry; therefore, shippers must use the IATA DGR when shipping commercial air to ensure unique airline restrictions are adhered to. When shipping military air, AFMAN 24-604/TM 38-250/NAVSUP PUB 505/MCO P4030.19/DLAI 4145.3, *Preparing Hazardous Materials for Military Air Shipments* shall be followed. **(T-0)**.

1.2. Internal Controls. Each DoD component will review their component specific 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 regulation. **(T-0)**.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Commanders, Directors, or Heads of DoD Components will.

2.1.1. Comply with the policies, procedures objectives, and guidelines in this regulation publication and DoD Manual 4140.01, DoD Manual 4140.70, DoD Manual 4140.65, AR 700-15/NAVSUPINST 4030.28/AFMAN 24-206/MCO 4030.33/DLAR 4145.7, Military Standards 2073-1, 1904, 648, 129, 147, and 3028, and ASTM D3951.

2.1.2. Designate individual Service focal points to coordinate the following:

2.1.2.1. Coordinate purchase requests for UN testing that are performed by a DOT-approved third party test facility.

2.1.2.2. Coordinate purchase requests for UN testing that are performed by a DOT-approved third party test facility.

2.1.2.3. Ensure that copies of all hazardous materials packaging test reports are forwarded to DLA Distribution as outlined in [paragraph 2.4.1](#).

2.1.2.4. Develop internal operating procedures to handle organizational needs concerning proper HAZMAT packaging.

2.2. DoD Service Components Focal Points will.

2.2.1. Participate in the DoD Hazardous Materials Packaging Working Group (HMPWG) as defined in [Attachment 5](#). Service Focal Points jointly establish procedures and prepare any documentation necessary to implement this manual. Users contact their Service Focal Points for all clarifications and waivers. Service Focal Points are:

2.3. Assistant Secretary of Defense for Sustainment will.

2.3.1. In accordance with Volume 9 of DoD Manual 4140.01, DoD Supply Chain Materiel Management Procedures, Material Programs, develops packaging programs for DoD materiel and oversees the Defense Packaging Policy Group. (T-0).

2.4. Defense Logistics Agency (DLA), (J344) will: (T-0).

2.4.1. Manage and maintain the POP Program, 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 DLA Distribution, located at: DLA Distribution HQ J4 (POP Team), 430 Mifflin Ave, New Cumberland, PA 17070. (T-0).

2.4.2. Provide, through DLA Distribution J1 packaging training on the use of the POP Program 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.

2.5. Surface Deployment and Distribution Command (SDDC).

2.5.1. SDDC will coordinate with the U.S. Department of Transportation to incorporate by reference this manual in 49 CFR 173.7. (T-0).

2.6. Surface Deployment and Distribution Command Safety Office, (AMSD-SA):

2.6.1. SDDC Safety Office will maintain the SafetyNet web site available through the SDDC Electronic Transportation Portal. (TEAMS). **(T-0)**.

TOM D. MILLER, Lieutenant General, USAF
DCS/Logistics, Engineering
& Force Protection

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFMAN 24-604/TM 38-250/NAVSUP PUB 505/MCO 4030.19K/DLAI 4145.3, *Preparing Hazardous Materials for Military Air Shipments*, 9 October 2020

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AR 700-15/NAVSUPINST 4030.28D/AFMAN 24-206_IP/MCO 4030.33E/DLAR 4145.7, *Packaging of Materiel*, 28 July 2020

ASTM D4919-17, *Standard Specification for Testing of Hazardous Material Packagings (Dangerous Goods) Packagings*, 12 July 2017

DLM 4000.25, Volume 2, *Supply Standards and Procedures, Chapter 17, Supply Discrepancy reporting*, Change 14, 9 April 2022

DoDM 4140.01, Volume 9, *DoD Supply Chain Materiel Management Procedures, Material Programs*, 16 February 2018

MIL-STD-129R, *Standard Practice, Military Marking for Shipment and Storage*, 27 September 2019.

Surface Deployment and Distribution Command (SDDC) *SafetyNet Program*

TB 700-2, NAVSEAINST 8020.8B, TO 11A-1-47, DLAR 8220.1, *DoD Ammunition and Explosive Hazard Classification Procedures*, 30 July 2012

49 CFR Parts 100-185, *Transportation*

Prescribed Form

None

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFMAN—Air Force Manual

AMCOM—Aviation and Missile Command

APPX—Appendix

ARDEC—Armament Research, Development and Engineering Center

ASTM—American Society for Testing and Materials

CAA—Competent Authority Approval

CAGE—Commercial and Government Entity

CCN—Certification Control Number

CECOM—Communications-Electronics Command
CFR—Code of Federal Regulations
CIDS—Commercial Item Descriptions
COE—Certificate of Equivalency
CONOPS—Concept of Operations
DGR—Dangerous Goods Regulation
DLA—Defense Logistics Agency
DoD—Department of Defense
DOT—Department of Transportation
DPPG—Defense Packaging Policy Group
DTR—Defense Transportation Regulation
DTS—Defense Transportation System
ECBC—Edgewood Chemical-Biological Center
EX Letter—Explosives Letter
EXECSEC—Executive Secretary
FHC—Final Hazard Classification
FMS—Foreign Military Sales
FY—Fiscal Year
GFE—Government Furnished Equipment
HAZMAT—Hazardous Material
HMPWG—Hazardous Materials Packaging Working Group
HQ—Headquarters
IATA—International Air Transport Association
ICAO—International Civil Aviation Organization
IAW—In Accordance With
IBC—Intermediate Bulk Container
IHC—Interim Hazard Classification
IMDG—International Maritime Dangerous Goods
IMO—International Maritime Organization
LP—Large Packaging
LTLP—Larger than Large Packaging
MOU—Memorandum of Understanding

OCONUS—Outside Continental United States

OPR—Office of Primary Responsibility

POP—Performance Oriented Packaging

PG—Packing Group

PPI—Provisional Packaging Instructions

POI—Program of Instruction

RH—Relative Humidity

SDDC—Surface Deployment and Distribution Command

SME—Subject Matter Expert

SP—Special Permit

SPI—Special Packaging Instruction

UN—United Nations

USADACS—US Army Defense Ammunition Center and School

Terms

Accountable Forms—Forms that the Air Force stringently controls and which cannot be released to unauthorized personnel, since their misuse could jeopardize DoD security or result in fraudulent financial gain or claims against the government

Certification—The act of confirming and verifying the completed package meets the requirements of the applicable modal regulation.

Certifier Preparer—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.

Closures—A device which closes an opening in a receptacle or a package.

Container—A single Packaging, usually metal, intended as a long-life shipping and storage container for a item.

Excepted Quantities—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.

In-House Testing—HAZMAT packaging testing conducted at a DoD packaging test facility.

Larger than Large Packaging—A packaging that exceeds the maximum volumetric limit of 3 m³ for large packagings, but otherwise meets the definition of a Large Packaging in 49 CFR 171.8.

Level 3 Technical Data Package (or Product Design Data (ref. MIL-STD-31000))—Engineering design data which describes the complete physical and/or performance characteristics of an item or component in sufficient detail to ensure that an item or component produced in accordance with this data will be essentially identical to the original item or component. For example, a final production-level packaging drawing (to include SPs), released for contractual use, for a long-life container.

Special Packaging Instruction—A SPI drawing illustrates packaging requirements for one item or a limited group of items of the same size and shape. SPI drawings detail special requirements for cushioning, blocking, bracing, and constructing containers. A bill of materials may also be included in an SPI drawing.

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

Attachment 2 PROCEDURES

A2.1. Contract Requirements. DoD components will specify packaging and labeling requirements in solicitations and contracts based upon UN POP unless the HAZMAT is excepted from the requirements in this Attachment 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 hazard classification and packaging requirements as specified in referenced documents. **(T-0).**

A2.2. Multi-application HAZMAT Packaging. 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. Explosives containers with Level 3 Technical Data Packages, designed for multiple configurations of explosive articles, may be tested and certified to the configuration of maximum gross mass, irrespective of variations in inner article shape or orientation so long as these variables do not affect containment. **(T-0).**

A2.3. Marking of HAZMAT Packaging. Marking of HAZMAT packaging will be in accordance with the applicable modal regulation(s) and the latest revision of MIL-STD-129R "*Military Marking for Shipment and Storage.*"

A2.3.1. Packaging that successfully passes DoD hazardous materials packaging testing will be marked with the logo "USA/DoD". Activity-specific logos in **Attachment 6** 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.

A2.3.2. 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 **Attachment 6**). 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.

A2.3.3. 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 (GFE), or if the containers are strictly controlled by configuration control drawings (including SPIs), first article tests are performed, and inspection procedures are followed by Government quality assurance personnel that validate compliance.

A2.3.4. In instances where the manufacturing date of a packaging cannot be determined on packaging design which has successfully passed performance testing, the year the packaging was filled may be used in lieu of the manufacturing date.

A2.3.5. English Language Marking Requirement. Manufacturer's packages, certified to UN specifications by a nation other than the United States, may be accepted into the DTS when the package markings are in English.

A2.4. HAZMAT Packaging Testing. 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. **(T-0)**. Use of ASTM D4919, *Standard Specification for Testing of Hazardous Materials (Dangerous Goods) Packagings* is encouraged to ensure test repeatability. This publication can be found at <https://www.astm.org/>. 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). **(T-0)**. Any other HAZMAT that is within the test parameters may be shipped in that certified container.

A2.4.1. DoD components shall ensure that HAZMAT are in containers that have successfully passed the required test standards, unless that packaging is exempt from the requirement. **(T-0)**. 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 (Performance Oriented Packaging Test) 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. **(T-0)**.

A2.4.2. HAZMAT packaging testing shall include all Title 49 CFR requirements or the applicable Competent Authority decisions for the affected item's hazard class. **(T-0)**. The following guidance applies to DoD component hazardous materials packaging testing:

A2.4.2.1. 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. **(T-0)**.

A2.4.2.2. DoD components shall 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. **(T-0)**.

A2.4.2.3. 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. **(T-0)**.

A2.4.2.4. UN POP tests will be conducted on affected HAZMAT packaging, in addition to tests that may be required by the Federal or Military container specification. If the specification test requirements meet or exceed 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. **(T-0)**.

A2.4.2.5. 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 AFMAN 24-604, Preparing Hazardous Materials for Military Air Shipments, **Attachment 19. (T-0)**.

A2.4.2.6. 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.

A2.4.2.6.1. 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.

A2.4.2.6.2. 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 shall not be previously tested packagings. All stack tests shall 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. **(T-0)**.

A2.4.2.6.3. 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.

A2.4.2.6.4. 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.

A2.4.2.6.5. Periodic retesting of explosives containers with a Level 3 Technical Data Package. The package will undergo an initial periodic retest within the prescribed period in 49 CFR, with subsequent retesting at a maximum 5 year periodicity. The periodicity of the retest will be at the discretion of the responsible Military Service/Agency packaging authority. **(T-0)**.

A2.4.2.6.6. If the capability exists to test a Larger than Large Packaging (LTLP) to the requirements of 49 CFR Part 178, Subpart Q, these tests may be performed as for an LP, and a large packaging UN marking may be applied to the packaging. The testing activity may use a vibration test method that is equally effective as 49 CFR Part 178.985, if necessary. In accordance with (IAW) 49 CFR Part 178.910(a)(1)(ii), the LTLP shall be marked with the letter “W” immediately following the Large Packaging code letter. **(T-0)**.

A2.4.2.6.7. DoD certification for one manufacturer does not apply to other manufacturers. Each manufacturer must obtain separate certification for their containers. **(T-0)**.

A2.4.2.6.8. All POP reports submitted to the DoD Packaging Engineering Activity shall be in accordance with DI-PACK-81059.

A2.5. DoD Testing/Retesting. The following applies to hazardous materials packaging testing/retesting:

A2.5.1. 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.

A2.5.2. For reparable hazardous items, the cognizant packaging design activity is responsible for the development of Special Packaging Instructions (SPI) or configuration control drawings and the required hazardous materials packaging testing of the reusable packaging.

A2.5.3. Periodic retesting will be accomplished on packaging configurations in production by DoD activities as required by 49 CFR, Part 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. **(T-0)**.

A2.5.4. Specification Cylinder and UN Pressure Receptacle requalification and maintenance shall be accomplished IAW 49 CFR, Part 107, Subpart I, and Part 180, Subpart C. **(T-0)**.

A2.6. DoD HAZMAT packaging test reports will not be provided to vendors except as otherwise provided in this manual. (T-0).

Attachment 3

CONTAINER USAGE

A3.1. Reuse/Refilling of Containers. The reuse of tested packages is authorized contingent upon the requirements of 49 CFR, Part 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.

A3.1.1. **Exempt Items.** The following materials are exempt from UN performance specification packaging test requirements. The packaging paragraph from AFMAN 24-604, **Table A4.1.** will specify required packaging. While UN specification packaging is not required, material may be subject to package performance tests.

A3.1.1.1. 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 49 CFR, Part 173.28 are complied with and the closure must be consistent with the original closing instructions. (T-0).

A3.1.1.2. 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 49 CFR, Part 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). (T-0).

Attachment 4**EXCEPTIONS AND SPECIAL APPROVALS**

A4.1. Hazardous Materials Packaging Testing Exceptions. The following HAZMAT does not require testing to UN POP standards provided the provisions of the applicable modal regulations are met:

A4.1.1. Carbon Dioxide, Solid (Dry Ice).

A4.1.2. Magnetized material with a field strength of less than 0.00525 gauss at 4.527 meters (15 feet).

A4.1.3. Life Support Equipment.

A4.1.4. Class 2 Compressed Gas Cylinders.

A4.1.5. Class 7 Radioactive Material.

A4.1.6. Except for IBCs and LPs, 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.

A4.1.7. Limited quantities.

A4.1.8. Excepted quantities.

A4.1.9. Consumer commodities.

A4.1.10. Items, by modal regulations, requiring only a strong outer packaging.

A4.1.11. Larger than Large Packagings (LTLP). Containers, which exceed the 3 cubic meters limit for Large Packagings, and do not lend themselves to be practically subjected to performance testing due to excessive size, weight, or unique design characteristics, shall be qualified for shipment by the responsible Service's packaging authority. Qualification shall include testing to 49CFR 178.900 when possible, military container standards (e.g., MIL-STD-1660 or MIL-STD-648), and or engineering analysis that demonstrates the adequacy of the shipping configuration to withstand forces normally incident to the intended mode(s) of transportation and shall satisfy the applicable requirements of 49 CFR Part 173.24 and 178.900. **(T-0)**.

A4.1.12. Large & robust articles. If the responsible Service Safety Office classifies an item as a large & robust explosive on an IHC or FHC, the item may be transported unpackaged IAW the conditions of 49 CFR 173.60(b)(14). A COE will be issued by the responsible Service for large & robust items with an IHC. A container, cradle, or other suitable handling device must demonstrate by testing and or analysis, that the item will not become loose during normal conditions of transport and is in accordance with DoD-approved procedures. Approved containers for items with a FHC will be identified by a packaging note. **(T-0)**.

A4.2. 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 49 CFR 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. **(T-0).**

A4.3. Provisional Packaging Instructions (PPI). 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 [Attachment 6](#) 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.

A4.4. DOT-Special Permits (DOT-SP). 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 [Attachment 7](#) who, in-turn, will submit the request to the SDDC Safety Office, (AMSD-SA). The application requirements for submitting a DOT-SP are specified in 49 CFR; Section 107.105 and requirements outlined in [Attachment 8](#). Shipping papers shall be annotated with the DOT-SP number. If required by the DOT-SP, the number shall also be marked on shipping container. DOT-SP number must be marked on the shipping container for hazard Class 1. A copy of the DOT-SP shall accompany the shipment. DOT-SPs may be used for international shipments if the modal regulation is listed in regulations exempt from paragraph of the DOT-SP. A new DOT-SP application requires a minimum of 120 days for routine DOT processing and 30 days for an emergency DOT-SP. The holder of the DOT-SP must file for a renewal no less than 60 days prior to expiration of the existing DOT-SP in accordance with 49 CFR Part 107.109. Approved DOT-SPs are available on the DOT web site or SDDC SafetyNet. In accordance with DTR 4500.9-R, Part II, Chapter 204, a quarterly usage report of DOT-SPs must be submitted to the Service/Agency Component focal point. **(T-0).**

A4.5. 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 [Attachment 7](#) containing the information outlined in [Attachment 9](#). A CAA issued for international shipments may also be used for domestic shipments. SDDC shall maintain copies of all CAAs in an electronic file in the SafetyNet System. 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 shall be annotated with the CAA number. If required by the CAA, the number shall also be marked on the shipping container. CAA must be marked on shipping containers for hazard Class 1. A CAA requires a minimum of 120 days for routine processing and 30 days for an emergency CAA (See [Attachment 9](#)). The holder

of the CAA must file for a renewal no less than 60 days prior to expiration of the existing CAA in accordance with 49 CFR; Section 107.705. A copy of the CAA shall 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. Explosive approval letters with packaging notes are considered CAA's. **(T-0)**.

A4.6. Certificate of Equivalency (COE). A COE is a certification issued by DoD to authorize transport of HAZMAT (including ammunition and explosives) using packaging that differ from the prescribed regulations in 49 CFR. A COE certifies that the selected packaging design meets or exceeds the requirements of 49 CFR for the commodity being shipped. A COE shall specify the approved packaging within the document or refer to separate packaging document (PPI, SPI, drawings, etc.). Requests for COE's must be submitted to the DoD Service/Agency focal point listed in [Attachment 7](#) 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:

A4.6.1. COE is required, but not limited to, the below general situations:

A4.6.1.1. Packaging instruction per 49 CFR is specified, but the packaging used is different, or Packaging used is different than specified by a Packaging Instruction.

A4.6.1.2. The 49 CFR United Nations Identification Number assigned by an authorized DoD Safety Office on an IHC, or on the DOT Explosive Letter, corresponds to packaging instruction "PI-101" for explosives (see 48CFR 173.62).

A4.6.1.3. Any item classified by the DoD on an IHC if the specified Packaging differs from 49 CFR and cannot be issued a CAA or DOT-SP.

A4.6.1.4. Contains compressed gas cylinder that is not constructed and/or tested per 49 CFR standards.

A4.6.1.5. Packagings that exceed the 3 m3 volume limit for Large Packagings, qualified for use per A4.1.11.

A4.6.1.6. Large and robust explosive articles as defined in [paragraph A4.1.12](#) of this regulation.

A4.6.1.7. A COE is not required when the packaging deviates from 49 CFR if the package has a DOT-SP, CAA or if the packaging has been approved and listed on the DOT EX letter in the notes. In this case, the DOT-SP, CAA or EX number issued by the DOT Competency Authority should be used. The exception would be when these documents specifically reference the use of a COE in conjunction with them.

A4.7. 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 co-located activities to include operations in theater locations. A COE will not otherwise be acceptable for use to transport an item in a host country.

A4.8. A request for a COE must include the requirements defined in [Attachment 10](#). examples of supporting data required for a COE are also included in [Attachment 10](#). A Certification Control Number (CCN) will be issued to identify the service issuing the COE using the following prefixes: **(T-0)**.

A4.8.1. DLA–DL

A4.8.2. Army–AY

A4.8.3. Air Force–AF

A4.8.4. Navy–NA

A4.8.5. Marine Corps–MC

A4.8.6. 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. **(T-0).**

A4.9. Packaging Waiver for Military Air. DoD Services/Agency focal points listed in [Attachment 7](#) may issue packaging waivers for DoD military controlled airlift in accordance with AFMAN 24-604/TM 38-250/NAVSUP PUB 505/MCO 4030.19K W/ERRATUM/DLAI 4145.3, Preparing Hazardous Materials for Military Air Shipments.

A4.10. Opening Non-Bulk Packages for Inspection. DoD components may open, inspect and subsequently reshipe packages only when the configuration of HAZMAT remains unchanged and the package is closed using manufacturer or shipper provided instructions. See AFMAN 24-604 for additional restrictions for military airlift.

A4.11. 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 (SPI), 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 shall be packaged IAW the applicable NSN item drawing in order to maintain compliance with the assigned DoD Final Hazard Classification. **(T-0).**

A4.12. Noncompliant Hazardous Materials Packaging.

A4.12.1. 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 materiel condition code (CC) "L." Follow the procedures in DoD 4000.25-M, Defense Logistics Management System (DLMS), Volume II (Supply Standards and Procedures) 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. (T-0).

A4.12.2. Station Returns and Receipts from Other DoD Activities. When DoD components determine that another DoD Activity's certified HAZMAT packaging does not comply with 49 CFR and/or modal requirements, suspend the receipt in materiel CC "J" or "K" 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. (T-0).

A4.12.3. Foreign Military Sales (FMS). Approved COE/CAA documents shall 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. (T-0).

Attachment 5

DOD HAZARDOUS MATERIAL PACKAGING WORKING GROUP CHARTER

A5.1. Objective. 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.

A5.2. Functions. 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:

A5.2.1. 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 individual Component policies align to require proper packaging and preparation methods for the safe and efficient storage, handling, and transport of hazardous materials.

A5.2.2. 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.

A5.2.3. Compliance. Review and recommend changes to regulatory requirements. Develop and coordinate recommendations to ensure compliance with DoD and commercial modal regulations.

A5.2.4. Training and Course Development. Evaluate and approve proposed training courses, curriculum, delivery, and resources on the preparation and shipment of hazardous materials. See [Attachment 11](#) for further details.

A5.2.5. Communication. Develop effective means to distribute hazardous material packaging requirements to operational personnel.

A5.2.6. Process Improvement. Strive for continuous improvement through implementation of new packaging materials, processes, and procedures.

A5.3. Procedures. The HMPWG will work together to ensure safe packaging of hazardous materials throughout the logistics cycle.

A5.3.1. Organization. The HMPWG will consist of primary and advisory members. Primary members will include packaging policy representatives from each Military Service and DLA. Members of the HMPWG will rotate duties as executive secretary (EXECSEC) and then chair every two years in the order listed below. After serving a 2-year period as the EXECSEC, the EXECSEC will assume the duties of Chair for a 2-year period. In the absence of the Chair, the EXECSEC will assume the Chair's duties during HMPWG meetings. Advisory members will include General Services Administration, DLA Distribution and representatives of activities performing hazardous materials packaging testing. **(T-0)**.

A5.3.1.1. Primary Members

A5.3.1.1.1. Air Force Materiel Command (AFMC), Transportation and Packaging Policy.

A5.3.1.1.2. Army Sustainment Command Packaging, Storage, and Containerization Center (ASC-PSCC).

A5.3.1.1.3. United States Marine Corps, Deputy Commandant for Installation and Logistics.

A5.3.1.1.4. Naval Supply Systems Command, Weapon Systems Support.

A5.3.1.1.5. DLA Logistics Operations (J3).

A5.3.2. Guests. Members are 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 EXECSEC in the absence of the Chair.

A5.3.3. Meeting. The HMPWG will as a minimum meet annually during the fourth 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. **(T-0)**.

A5.3.4. Agenda. Members will provide proposed agenda topics, with talking papers, to the Chair and EXECSEC by the designated time established by the meeting announcement. The EXECSEC will develop and distribute a final agenda with supporting talking papers to members prior to the meeting. **(T-0)**.

A5.3.5. Travel Funds. Participating organizations provide travel funds for members to attend HMPWG meetings.

Attachment 6

PERFORMANCE ORIENTED PACKAGING IDENTIFICATION CODES

A6.1. Package Design Activity Codes. 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.

Table A6.1. Packaging Design Activity Code.

Defense Logistics Agency Fort Belvoir, VA	USA/DoD/DLA
Defense Logistics Agency- Land & Maritime Columbus, OH (CAGE 16236 & 14933)	USA/DoD/DLC
Defense Logistics Agency- Energy Fort Belvoir, VA (CAGE 52838)	USA/DoD/DLF
Defense Logistics Agency- Aviation Richmond, VA (CAGE 13873)	USA/DoD/DLG
Defense Logistics Agency- Troop Support Philadelphia, PA (CAGE 14153)	USA/DoD/DLI
Armament, Research, Development and Engineering Center (ARDEC) (RDAR-EIL-P) Picatinny Arsenal, NJ (CAGE 19200)	USA/DoD/AYD
Armament, Research, Development and Engineering Center (ARDEC) (RDAR-EIL-TP) Rock Island, IL (CAGE 59678)	USA/DoD/AYA
Army Edgewood Chemical-Biological Center (ECBC) (AMSRD-ECB-END) Rock Island IL, (Cage 5B5M3)	USA/DoD/AYR
Army Edgewood Chemical-Biological Center (ECBC) (AMSRD-ECB-ENA-P) Aberdeen Proving Ground, MD (Cage 39KG1)	USA/DoD/AYE
Army Defense Ammunition Center and School (USADACS) McAlester AAP, OK (CAGE 28620)	USA/DoD/DEV
Army Communications-Electronics Command (CECOM) Aberdeen Proving Ground, MD (CAGE 80063)	USA/DoD/AYC
Army Medical Materiel Agency Frederick, MD (CAGE 66732)	USA/DoD/AYS
Soldier Systems Center Natick, MA	USA/DoD/AYN
Army Aviation and Missile Command (AMCOM) Huntsville, AL (CAGE 18876)	USA/DoD/AYM
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	USA/DoD/AF17

Griffiss AFB, NY (CAGE 07877)	
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 03950)	USA/DoD/NAF

Attachment 7

RESPECTIVE MILITARY SERVICE/AGENCY WHEN SUBMITTING REQUESTS FOR CERTIFICATE OF EQUIVALENCIES (COE), DOT-SPECIAL PERMITS (DOT-SP), AND COMPETENT AUTHORITY APPROVALS (CAA)

A7.1. When a DOT-SP, CAA, COE or hazard classification is required. The managing activity for the affected item will prepare the request and submit it to the military service/agency focal point listed in [Table A7.1](#) For a hazard classification contact the respective military service/agency identified below: (T-0).

A7.2. COE and interim hazard classification (IHC) procedures. A COE requires documented (IHC) information for the packaged item(s). If a packaging DOT-SP or CAA is required, the requester must prepare the package identified in [Attachment 10](#). 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. **(T-0)**. 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 classification (IHC) to allow the transportation of explosive materials that has not been assigned a final hazard classification. An IHC will be used for a COE 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). See [Attachment 10](#) for the procedures to request a COE.

Table A7.1. Service/Agency Addresses.

AIR FORCE/SPACE FORCE	
<p>COE/CAA/DOT-SP HQ AFMC/A4RT 4375 Chidlaw Rd Wright Patterson AFB, OH 45433 Attn: Mr. Joshua Hawkins or Mr. William Heineman Commercial: 937-257-1984/4503 DSN: 257-1984/4503 Email: joshua.hawkins.13@us.af.mil Email: william.heineman@us.af.mil</p>	<p>Explosive Classification CAAs/DOT-SP HQ AFSEC/SEWC 9700 G Ave SE Kirtland AFB, NM 87117-2662 Attn: Mr. Rodolfo Ramos Commercial: 505-846-1386 DSN: 246-1386 Email: rodolfo.ramos@us.af.mil</p>

ARMY	
<p>Chief Army Sustainment Command Packaging, Storage, and Containerization</p> <p>Attn: AMAS-SPI-P (Mr. Jacob Gogno) 11 HAP Arnold Blvd. Tobyhanna, PA 18466-5097 Commercial: 570-615-8845 DSN: 795-8845 Email: Jacob.b.gogno.civ@mail.mil</p>	<p>Explosive Hazard Classification (CAA)/DOT-SP SJMACE-ES Defense Ammunition Center Technical Center for Explosive Safety 1 C Tree Road, Building 35 McAlester, OK 74501-9053 DSN: 956-8919</p>
	<p>COE/PPI for Ammunition/Explosives US Army Armaments Center Attn: FCDD-ACE-LP (Mr. Jack Lam) Bldg. 455 Picatinny Arsenal, NJ 07806-5000 Commercial: 973-724-2220 DSN: 880-2220 Email: yuen.h.lam.civ@mail.mil</p> <p>Mr. Joseph Hanssen Rock Island Arsenal, IL 61299-5000 Attn: FCDD-ACE-LT Commercial: 309-782-8203 DSN: 793-8203 Email: joseph.w.hanssen.civ@mail.mil</p>

NAVY	
<p>COE/CAAs (Ordnance)/DOT-SP Director Naval Surface Warfare Center Indian Head Division Picatinny Detachment Code G13 – Michael Kelly Picatinny Arsenal, NJ 07806-5000 Commercial: 973-724-3388 DSN: 880-3388 Email: michael.l.kelly@navy.mil</p>	<p>COE/CAA/DOT-SP NAVSUP Weapon Systems Support Code N242 – Susan Starks 5450 Carlisle Pike Mechanicsburg, PA 17055 Commercial: 717-605-5520 DSN: 430-5520 Email: susan.e.starks1@navy.mil Email: hazmat.navsupwss@navy.mil</p>
<p>Explosive Hazard Classification CAA/DOT-SP Commanding Officer Naval Ordnance Safety and Security Activity Attn: Code N82 Farragut Hall, Building D323 23 Strauss Avenue Indian Head, MD 20640-5555 Commercial: 301-744-6021 DSN: 354-6021 Email: ed.walseman@navy.mil</p>	
U.S. MARINE CORPS	
<p>COE/CAA/DOT-SP Commandant of the Marine Corps I&L Code LPD-1 Attn: Mr. Oliver Bell Headquarters, United States Marine Corps, Pentagon Rm 2E211 Washington, D.C. 20350-3000 Commercial: 703-695-7930 Email: oliver.j.bell@usmc.mil</p>	<p>Explosive Hazard Classification Commanding Officer Naval Safety and Security Activity Attn: Code N9E Farragut Hall, Building D323 23 Strauss Avenue Indian Head, MD 20640-5555 Commercial: 301-744-2929 DSN: 354-2929 Email: pedro.a.rodriquez1@navy.mil</p>

DEFENSE LOGISTICS AGENCY	
<p>COE/CAA/DOT-SP Defense Logistics Agency Attn: J344 (Ms. Jennifer Smith) 430 Mifflin Ave Room 1249 New Cumberland, PA 17070 Commercial: 717-770-4492 DSN: 771-4492 Email: jennifer.smith2@dla.mil</p>	
SURFACE DEPLOYMENT & DISTRIBUTION COMMAND (SDDC)	
<p>Attn: AMSSD-SA (Mr. Jeffrey M. Leitschuh or Mr. Thomas M. Kudasz) 1 Soldier Way Building 1900 Scott AFB, IL 62225-5006 Email: jeffrey.m.leitschuh.civ@mail.mil Commercial: 618-220-5040/ DSN: 770-5040 Email: thomas.m.kudasz.civ@mail.mil Commercial: 618-220-5899/DSN: 770-5899</p>	

Attachment 8

PROCEDURES TO SUBMIT DOT-SP

A8.1. General Procedures. Comply with 49 CFR Section 107.105 and the requirements below when requesting a DOT-SP. Requests for a packaging CAA or DOT-SP for Class 1 items must be directed to the Service focal points in [Table A7.1](#). The focal points will work with HQ SDDC and 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. (T-0).

A8.1.1. 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 A8.2 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.

A8.1.2. Each request will include a cover letter, which states why the DOT-SP is being requested and identifies the mode(s) of transportation affected. (T-0).

A8.2. Data Package. Collect the supporting technical data required from the appropriate sources (i.e., manufacturer, program offices, etc.) and attach these data as [attachments 1](#) through [attachment 7](#) described below as part of requesting a DOT-SP. The supporting technical data accompanies the request. NOTE: When the information requested does not apply, write N/A on that line; e.g., ‘Actual Item Drawings – N/A.’

A8.3. Example of Completed Package.

A8.3.1. **Attachment 1** –Information to Support Special Permit:

A8.3.1.1. Product Nomenclature, National Stock Number(s), Part Number(s), and EX-number (if assigned).

A8.3.1.2. Hazard Class/Division. For Class 1 material, include the Storage Compatibility Group.

A8.3.1.3. UN Identification Number.

A8.3.1.4. UN Proper Shipping Name (ICAO and IMDG).

A8.3.1.5. Item Description and Drawing Number. Include the item net and gross weight. For Class 1 material, also include the net explosive weight.

A8.3.1.6. Packaging Description and Instructions/Drawing Numbers. If a COE and/or DOT-SP have been issued, include the number and description.

A8.3.1.7. Include COE transport documents, if applicable.

A8.3.1.8. Difference between DOT and DoD containers.

A8.3.1.9. 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.). If POP tests or equivalent tests have been conducted, provide report with POP marking container.

- A8.3.2. Attachment 2–Approved item drawings.
- A8.3.3. Attachment 3–Approved item test reports.
- A8.3.4. Attachment 4–Approved container drawings.
- A8.3.5. Attachment 5–Approved container test.
- A8.3.6. **Attachment 6**–Certification of Equivalency (if applicable).
- A8.3.7. Attachment 7–Hazard Classification (if applicable).
- A8.3.8. Submit a usage report quarterly to SDDC including all DOT-SP renewal requests.
- A8.3.9. **Figure A8.1** depicts an approved DOT-SP from the Department of Transportation.

Figure A8.1. Special Permit Sample - Remainder of document can be viewed on SafetyNet.

October 24, 2018



U.S. Department
of Transportation

East Building, PH130
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

Pipeline and Hazardous
Materials Safety Administration

DOT-SP 7573
(TWENTIETH REVISION)

EXPIRATION DATE: 2022-09-30

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Department of Defense (Military Surface
Deployment & Distribution Command)
Scott AFB, IL
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of hazardous materials by cargo-only aircraft as authorized by paragraph 8.a. in conformance with AFMAN 24-204 and the Defense Transportation Regulations (DTR). This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) 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. Party status will not be granted to this special permit.
 - d. This special permit serves as an "exemption" as defined in 1;3.1.1 of ICAO TI and as a "Competent Authority Approval" as defined in 49 CFR §107.1.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

Attachment 9

PROCEDURES FOR SUBMITTING REQUESTS FOR COMPETENT AUTHORITY APPROVAL (CAA)

A9.1. General Procedures. Comply with 49 CFR Part 107 Subpart H and the requirements below when requesting a CAA. The managing activity for the affected item will prepare the request and submit all documents in A9.2 to the applicable Military Service/Agency focal point listed in Attachment 7. Military Service/Agency focal points will submit completed packages to SDDC for submission to DOT. (See Figure A9.1 for Sample). (T-0).

A9.2. Data Package. Collect the supporting technical data required from the appropriate sources (i.e., manufacturer, program offices, etc.) and attach these data as **attachments 1** through **attachment 8** described below as part of requesting a CAA. The supporting technical data accompanies the request.

A9.3. Example of Completed Package. When the information requested does not apply, write N/A on that line; e.g., ‘Actual Item Drawings – N/A.’

A9.3.1. **Attachment 1** - Information to Support Competent Authority Approval:

A9.3.1.1. Product Nomenclature, National Stock Number(s), Part Number(s), and EX-number (if assigned).

A9.3.1.2. Hazard Class/Division. For Class 1 material, include the Storage Compatibility Group.

A9.3.1.3. UN Identification Number.

A9.3.1.4. UN Proper Shipping Name (ICAO and IMDG).

A9.3.1.5. Item Description and Drawing Number. Include the item net and gross weight. For Class 1 material, also include the net explosive weight.

A9.3.1.6. Packaging Description and Instructions/Drawing Numbers. If a COE and/or a DOT-SP have been issued, include the number and description.

A9.3.1.7. Difference between DOT and DoD containers.

A9.3.1.8. 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.).

A9.3.1.9. Attachment 2–Approved item drawings.

A9.3.1.10. Attachment 3–Approved item test reports.

A9.3.1.11. Attachment 4–Approved container drawings.

A9.3.1.12. Attachment 5–Approved container test reports.

A9.3.1.13. Attachment 6–Department of Transportation Special Permit (if applicable)

A9.3.1.14. Attachment 7–Certification of Equivalency (if applicable).

A9.3.1.15. Attachment 8–Hazard Classification (if applicable).

A9.3.1.16. Previous CAA revisions/changes must be included in the package

A9.3.1.17. Submit a usage report quarterly to the applicable military service/agency focal point, including all CAA renewal requests.

A9.3.1.18. Military service/agency focal point will submit quarterly usage reports to SDDC (T-0).

A9.3.1.19. **Figure A9.1 depicts an approved CAA from the Department of Transportation.**

Figure A9.1. Competent Authority Approval Sample -Remainder of document can be viewed on SafetyNet.



APPROVAL CA2009070007
(THIRD REVISION)
ISSUED BY THE COMPETENT AUTHORITY OF THE UNITED STATES
EXPIRATION DATE: July 31, 2020

1. APPROVAL HOLDER: Department of Defense
(Military Surface Deployment &
Distribution Command)
Scott AFB, IL
United States

2. REGULATORY AUTHORITY:
 - a. 49 CFR § 173.185(e)(6); and
 - b. International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) Special Provision A88 and State Variation US 3.
 - c. For shipments outside the U.S., see paragraph 7.f. of this approval.

3. SYNOPSIS: The Department Defense (Military Surface Deployment & Distribution Command) is authorized to offer for transportation low production (no more than 100 batteries per year) lithium ion batteries (identified in paragraph 5.b.(1) below) that have not passed the required tests in the UN Manual of Tests and Criteria. See paragraph 7.d. below, which authorizes Yardney Technical Products, Inc. to offer for transportation low production (no more than 100 batteries per year) lithium ion batteries (identified in paragraph 5.b.(1) below) that have not passed the required tests in the UN Manual of Tests and Criteria under the direct authority and direction of the Department of Defense if all requirements and conditions of this approval are met. The most recent revision supersedes all previous revisions.

Attachment 10**PROCEDURES TO SUBMIT CERTIFICATE OF EQUIVALENCY (COE) REQUESTS**

A10.1. General Procedures. 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 49 CFR requirements. The COEs are submitted to the Service focal points for approval. The Military Service focal points are identified in **Attachment 7**. Shippers must provide the following information (as applicable) (see **Figure A10.1** for sample):

A10.2. Hazardous Materials Data Package. Include the following in the COE package. When the information requested does not apply, write N/A on the line.

A10.3. Example of Completed Package. Include the following in the COE package. When the information requested does not apply, write N/A on the line.

A10.3.1. Requester or petitioner:

A10.3.2. Name.

A10.3.3. Company or activity and location.

A10.3.4. Business telephone number.

A10.3.5. Proposed dates of initial shipment.

A10.3.6. 49 CFR provisions:

A10.3.7. Identify all regulatory provisions involved.

A10.3.8. Justify request for COE and specify why DoD and public interest is served by granting a COE.

A10.3.9. Identify why standard provisions of 49 CFR are not appropriate.

A10.3.10. Identify how the proposed deviation provides an adequate and reasonable degree of safety.

A10.3.11. Item description:

A10.3.12. Product nomenclature, national stock number(s), part number(s), and EX-number or IHC (if assigned)

A10.3.13. Proper shipping name and UN ID number

A10.3.14. Chemical Name.

A10.3.15. Common name.

A10.3.16. Hazard classification.

A10.3.17. Form (radioactive materials only).

A10.3.18. Quantity.

A10.3.19. Properties and characteristics.

A10.3.20. Composition and percentage (by volume and weight) of each chemical, if a solution or mixture.

A10.3.21. Igniter ground procedures.

A10.3.22. Net explosive weight.

A10.3.23. Whether or not rocket motor is in a propulsive state.

A10.4. Packaging Data. 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. **(T-0).**

A10.4.1. Number of items per inner package/quantity per unit pack.

A10.4.2. Number of inner packages per exterior pack or container.

A10.4.3. DOT specification number for containers (Class 2 or 7).

A10.4.4. Dimensional size of pack and/or container.

A10.4.5. Marking and labeling.

A10.4.6. Container data that reflect relevant shipping or accident experience.

A10.4.7. Center of gravity.

A10.4.8. Packaging procedures.

A10.4.9. Test results. State the regulation specifying the tests required and procedures to conduct these tests.

A10.4.10. Previous analogous permits, certificate or approvals.

A10.4.11. Calculations or, preferably, test results of bursting strength and shatter characteristics of pressure vessels.

A10.4.12. Provisions for electrical grounding. **(T-0).**

A10.5. Transportation Description. 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:

A10.5.1. Identify modes of transportation.

A10.5.2. Provide drawings, sketches, or schematics showing different configurations:

A10.5.3. Blocking and bracing.

A10.5.4. Tie-down or restraint.

A10.5.5. Location of center of gravity.

A10.5.6. Consolidation on pallets or/in exterior shipping containers.

A10.5.7. Identify the most probable hazards involved with each handling operation, each mode, or each different type of carrier equipment. Show the need for:

- A10.5.7.1. Briefing crews.
- A10.5.7.2. Escorts (technical, security police, etc.).
- A10.5.7.3. Personnel protective equipment.
- A10.5.7.4. Protective environmental equipment/personnel.
- A10.5.7.5. Alerting state, military, or government offices of incident or accident.
- A10.5.7.6. Exclusive use of carrier equipment.
- A10.5.7.7. Specialized materials, equipment, or procedures (non-sparking materials, explosive-proof motors, etc.).
- A10.5.7.8. Arms, ammunition and explosives (AA&E) transportation security category if applicable as specified in DoD 4500.9R.
- A10.5.7.9. State what specific action is planned to satisfy each requirement.
- A10.5.7.10. Provide reports of tests conducted to verify movement and handling safety.
- A10.5.7.11. State what deviations or modifications or 49 CFR requirements are needed.
- A10.5.7.12. Examples of data item descriptions that may be used to acquire information for substantiating data required in the hazardous materials data package are:
 - A10.5.7.12.1. DI-L-3311 Explosive hazard classification data.
 - A10.5.7.12.2. DI-PACK-80880 Transportability report.
 - A10.5.7.12.3. DI-L-1903 Part, component or subsystem test plan.
 - A10.5.7.12.4. DI-PACK-81059 Hazardous material POP test report format.

A10.6. Items With No Equivalent 49 CFR Packaging. If the item/material has no 49 CFR packaging requirements identified on which to base equivalency whether due to size, design, or being items with no commercial use, the packaging standard may be based on the following minimum means of evaluation.

A10.6.1. Large packagings not authorized in 49 CFR for the item/material to be transported. COEs for large packagings tested in accordance with 49 CFR requirements are considered acceptable for most materials if determined to be adequate by service packaging personnel.

A10.6.2. Larger-than-large packagings (LTLP), (packagings that exceed the 49 CFR large packaging volume limit of 3 cubic meters). Items/materials requiring packagings exceeding the definitions of 49 CFR, and or their components, may have been built to military standards. The packagings themselves were likely designed and built to a military standard, and tested to verify its ability to protect and contain the item during shipping and storage. These standards may include:

- A10.6.2.1. MIL-STD-331, Fuzes, ignition safety devices and other related components, environmental and performance tests;
- A10.6.2.2. MIL-STD-648, Specialized Shipping Containers;
- A10.6.2.3. MIL-STD-810, Environmental Engineering Considerations and Laboratory Tests;

A10.6.2.4. MIL-STD-1522, General Requirements for Safe Design and Operation of Pressurized Missile and Space Systems;

A10.6.2.5. MIL-STD-1660, Ammunition Unit Loads;

A10.6.2.6. MIL-STD-1791, Designing for Internal Aerial Delivery in Fixed Wing Aircraft;

A10.6.2.7. MIL-STD-2105, Hazard Assessment Tests For Non-Nuclear Munitions

A10.6.2.8. Industry standards may be acceptable after test methods and results are fully analyzed by service packaging personnel.

A10.6.3. Class 1 items requiring LTLP should be classified as “large and robust” if possible, IAW 49 CFR 173.60(b)(14). Classification as “large and robust” is an explosive classifier function and occurs when the UN Manual of Test and Criteria, Test Series 4 testing is completed on an item (or relevant components), with negative test results. Identification as large and robust allows the most OCONUS shipping possibilities. Container testing required for large and robust items are limited to large packaging as possible, qualification, engineering analysis, and any other tests necessary to protect the asset.

A10.6.3.1. When UN Test Series 4 testing of a Class 1 item is not complete or has not been performed, the classifier may state in an IHC that the item (or relevant components), as part of its operational safety and suitability tests, has been subjected to testing that met the intentions of UN Test Series 4. When the classifier determines the item may be classifiable by DOT as large and robust, container approval for these items may be indicated by packaging personnel issuing a COE based on a selection of the minimum acceptable tests (or proven equivalents) listed in **Table A10.1** below. Additional tests may be required at the discretion of packaging personnel.

A10.6.3.2. If UN Manual of Test and Criteria, Test Series 4 testing was completed with negative test results, then no additional container testing to meet 49 CFR Part 178 requirements is required. The classifier applies for DOT Associate Administrator approval of an FHC, classifying the item as large and robust and describing its container; this is a CAA and its number is used in lieu of a COE number or UN marking on the container.

A10.6.3.3. Larger-than-large packagings (LTLPs), for items that cannot be classified as large and robust, must still have undergone container testing in order to obtain a COE. Packaging personnel will base the COE on a selection of the minimal container tests in **Table A10.1** below. **(T-0)**. Additional or alternate tests may be required if indicated by the intended shipping method, environment, or other factors. Required tests to support a COE should be selected by packaging focal points based on the planned transportation modes, configurations, and environments. It is not usually necessary to perform both 49 CFR and MIL-STD-648 tests in order to prove a packaging’s ability to perform its function, but it may be necessary to perform some combination of both for particular packagings.

Table A10.1. Acceptable Tests-Larger-than-Large Packaging.

49 CFR 178.950-985 Large package testing	MIL-STD-648 (Qualification and item protection tests)	Comparison of MIL-STD-648 tests to 49 CFR tests
<p>Drop test, 178.965, 1 drop on most vulnerable part of container bottom.</p> <p>PG I 1.8m (5.9 ft)</p> <p>PG II 1.2m (3.9 ft)</p> <p>PG III 0.8m (2.6 ft)</p>	<p>-Corner & Edgewise Drop tests, 5.2.4 & 5.2.5, 8 drops at Level A drop height (12 inches).</p> <p>-Transfer-at-sea Shock, 5.2.7, 18-inch flat drop Shipboard shock test, 5.2.9, 18-inch flat drop (when specified in the CIDS).</p> <p>- - Conditioned to -20°F or lower, pre-test, if the container, key structural components, or cushioning, is plastic.</p>	<p>MIL-STD-648 drops not equivalent but still severe, and places more torque and bending stresses on the container base.</p> <p>- - Flat 648 drops may be more realistic.</p> <p>- A PG II flat drop on container side or bottom edge may still be required if containers are to be transported in a side-by-side configuration.</p> <p>- Cold conditioning increases test severity for plastic components.</p>
<p>Bottom Lift, 178.970. Loaded at 1.25 x intended weight, ¾ fork penetration; 5 minute hold time.</p> <p>Lift twice, all openings</p>	<p>-Forklift truck (fully captive fork tine enclosures) compatibility test, Para 5.8, Appx P. Loaded at the intended weight.</p> <p>-Forklift truck, (non-captive lift) compatibility test, Para 5.8.1, Appx P. Loaded at intended weight.</p>	<p>-49 CFR lift 2x, all openings; easily performed during any testing.</p> <p>-648 forklift truck tests more demanding and all (Appx P.5.2, P.5.3, P.5.4 and P.5.4.1) may be advisable unless impractical due to container design or CONOPs.</p>
<p>Top Lift, 178.970 (using base tiedown rings or other designated whole container lifting points).</p> <p>Loaded 2 x capacity</p> <p>Lift and hold for 5 minutes</p>	<p>-Hoisting Fittings, Para. 5.7.3, Appx P. Loaded 5 x capacity lifted 5 min. by intended lifting devices and fittings.</p> <p>-Hoisting Fittings, Para. 5.7.4, Appx P. Planned gross weight, and lift by each individual hoisting point for 5 minutes.</p>	<p>Note: - For many/most military containers the tiedowns are also the only available hoisting fittings; containers should not be lifted by devices on the lids unless they are specifically designed and labeled for this.</p>

<p>49 CFR 178.950-985 Large package testing</p>	<p>MIL-STD-648 (Qualification and item protection tests)</p>	<p>Comparison of MIL-STD-648 tests to 49 CFR tests</p>
<p>Stacking 178.980 1.8 x weight of the number of packagings that may be stacked during transportation only. Stacked for 5 min - Test rigid plastic containers at 104°F for 20 days [no RH rqmt]</p>	<p>Load test (<u>like</u> containers) [stack test], 5.6.2; S x wt x # of containers that may be stacked to 16 feet (storage), held for one hour; OR 200 x top area x S. (use the largest calculated load). The number of stacked containers may be less if a 16 foot stack is unrealistic in storage. =2 for metal containers; S=1.5 for plastic or other nonmetallic support structure affected by T/RH (and test performed at 120°F/90% RH for 168 hrs (1 wk))</p>	<p>The MIL-STD-648 stack load is typically much higher, and test period of 1 hour is longer. Load may be lower than 49 CFR test if storage stack is only 2 containers high. The temperature requirement for plastic containers is much higher than 49 CFR, & additional RH magnifies the effects of time. Plastic containers typically fail much sooner than 20 days in these conditions (usually 1-24 hours).</p>
<p>Vibration 178.985 Vertical or rotary double amplitude peak to peak displacement of 1” for one hour</p>	<p>Repetitive Shock, Para. 5.2.2 (ASTM D999, Method A1 or A2) -Resonance survey & dwell, 5.3.3.1 -Random vibration, Para. 5.3.2 -Sinusoidal cycling test, Para, 5.3.4</p>	<p>Both methods are the same Resonance dwell is the most severe vibration test of the shock system (cradle, coil-mounts, cushioning, possibly the base, etc.)] -Random vibration may be more severe depending on selected profile.</p>
<p>None</p>	<p>Pendulum Impact tests, 5.2.6: -Truck transport, 5.2.6.1, using 5 ft/s or 7 ft/s -Rail transport (containers over 9.5 ft long, using 11.88 ft/s - Conditioned to -20°F or lower if plastic</p>	<p>Not directly comparable to any 49 CFR test but more realistic for truck and rail ground transport. Both item and container must pass. Depending on container size, impacted on shortest side. Typically only the base wall is impacted, sometimes the lower portion of the lid wall also; the smaller impact area concentrates the force of the impact. Tests restraint of the item. (T-0).</p>

A10.7. COEs prepared by Service packaging personnel shall provide the following information. Hard copy COEs must accompany shipments of its subject item/container, along with referenced IHCs, FHCs, DOT-SPs, or CAAs. An example is noted in [Figure A10.1](#) below. (T-0).

A10.7.1. CCN.

A10.7.2. Authority.

A10.7.3. Issued by, with signature.

A10.7.4. Basis for certification (test reports and or engineering analyses (by reference)).

A10.7.5. Packaging description.

A10.7.6. Mode(s) of authorized transportation.

A10.7.7. Interim Hazard Classification, when applicable.

A10.7.8. DOT-SP by reference when applicable; **Note:-** if the DOT-SP authorizes the packaging, the COE is not necessary.

A10.7.9. CAA(s), when applicable.

A10.7.10. DOT hazard classification (Proper Shipping Name, Label, Marking).

A10.7.11. DoD hazard classification (Security Classification Guide, Division, UN Identification Number) (if different than DOT information).

A10.7.12. Expiration date The Military Service/Agency that authorizes COEs may specify expiration date on COEs.

A10.7.13. Requirements of this Attachment 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. **(T-0)**.

Figure A10.1. Certificate of Equivalency Sample - Remainder of document can be viewed on SafetyNet.



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE LIFE CYCLE MANAGEMENT CENTER
WRIGHT-PATTERSON AIR FORCE BASE OHIO

CERTIFICATE OF EQUIVALENCY
AF 16-54 FIFTH REVISION

1. **AUTHORITY:** Certificate of Equivalency (COE) is issued pursuant to Title 49 CFR 173.7(a) of the Department of Transportation hazardous materials regulation and authority established in AFMAN 24-210 (DLAR 4145.41), Packaging of Hazardous Materials.
2. **COMMODITY:** Small Diameter Bomb Increment II (SDB-II) All-up Round (AUR) Vehicle Configurations, IHC Log No. 19-181
 - a. **Small Diameter Bomb Increment II (SDB-II) All Up Round (AUR), GBU-53/B, P/N 2302351-2, -4 and -5; Vehicle Qual, P/N 2302351-8; and Captive Carry Reliability Test Vehicle (CCRTV), P/N 2302351-9.**

DOD Class/Division/SCG:	1.4C
DOT Proper Shipping Name:	Cartridges, Power Device
UN Serial Number:	UN 0276
DOT Label:	Explosive 1.4C
 - b. **SDB-II Guided Test Vehicle (GTV), Subassembly – Build 2, with Inert Fuze and without Flight Termination Explosives, P/N 2323749-3.**

DOD Class/Division/SCG/SG:	1.4C
DOT Proper Shipping Name:	Cartridges, Power Device
UN Serial Number:	UN 0276
DOT Label:	Explosive 1.4C
 - c. **Small Diameter Bomb Increment II (SDB II) Bomb, Guided, Practice (PRIDE Vehicle), P/N A8676770, -1, and -2.**

DOD Class/Division/SCG/SG:	1.4C
DOT Proper Shipping Name:	Cartridges, Power Device
UN Serial Number:	UN 0276
DOT Label:	Explosive 1.4C
3. **PACKAGING DESCRIPTION:** The CNU-714/U Shipping and Storage Container is a sealed reusable aluminum extruded sidewall (ESW) container with helicoil shock mounts to support a two part (upper and lower) cradle assembly. The container is constructed in accordance with Raytheon Drawing (15090) 2239994. The container features integrated side entry fork pockets, four (4) cover lift handling cutouts, breather valve, desiccant port, BIT access with integrated BIT cable and insensitive munitions (IM) protection via the upper cradle assembly. Closure is by means of ten (10) latches in the container base. The commodity is configured within the container in accordance with T.O. 11K53-2-7 or Raytheon Equivalent Document: General Packaging/Unpacking Instructions for Special Test Vehicles (STVs) and CNU-714/U Container. Two variants of the container exist (2239994-1 and 2239994-2); the maximum gross packaged

Attachment 11

PROCEDURES FOR ADDING HAZARDOUS MATERIALS TRAINING CLASSES

A11.1. General Procedures. All personnel involved with the preparation and shipment of HAZMAT for transportation must receive training in accordance with the Defense Transportation Regulation (DTR) 4500.9-R, Part II, Chapter 204; 49 CFR 172.704, Training Requirements; and DoD Component/Service/Agency HQ regulations. Training for military air shipments must be in accordance with AFMAN 24-604. In addition, 49 CFR 172.704, states that there are pre-transportation function specific, safety and security training requirements that DoD personnel must meet. **(T-0).**

A11.2. Approved Schools. Schools, other than those identified in the DTR, are not authorized to provide instruction on behalf of an approved training school. Delegation of training development and delivery of instruction requires submission of formal written request through the Service Focal Point and approval by the HMPWG. Transfer of Program of Instruction (POI), for the purpose of delivering instruction to a school not approved in the DTR is not permitted. Schools and courses published prior to the date of this publication are excepted based on prior criteria, including technical specialist courses.

A11.3. Evaluation Process. This process defines the requirements for DoD entities to submit requests to provide an additional resource for the current 80 hr HAZMAT training course. It also outlines the process for new technical specialist or function-specific training being used in place of the current 80 hr HAZMAT training class as allowed in the DTR training. Each request should provide justification regarding why the course is required, the business case to support the justification and the administrative process that will be used to track and verify registration, and training, testing and record retention. If an additive training provider of the 80 hr HAZMAT course is approved, it will be added to the DTR and available for all DoD personnel to attend. The school/source must be willing to be a signatory to the existing DoD Memorandum of Understanding (MOU) managed by the Hazardous Materials Training Working Group (HMTWG). If the new course is an alternate to the current 80-hr on-site certification course, the Service Focal Point must maintain oversight of the course and review/verify its content every five years. The DoD Hazardous Material Packaging Working Group (HMPWG) is the official reviewer and approving entity for all proposed courses. **(T-0).**

Table A11.1. Course Justification/Approval.

Command Name/POC	
Title of proposed training course	
49 CFR 172.704 -Define the training requirement General awareness/familiarization training Function-specific training Safety training Security awareness training In-depth security training	
Explain why the new course is required and provide a Business Case Analysis to support the requirement.	
Explain why current courses do not meet the training need (i.e., limited availability of existing course seats, specific process not detailed in existing course, limited shipping requirements, location/commodity specific requirements, others, etc)	
Pre-evaluation/approval of the course- Provide copies of the below documents	Check if included
Program of Instruction (POI)	
Practical exercises and how they are presented	
Handouts that will be provided to the students	
Course Sustainment - Provide copies of the below documents	
Process to update the POI and the intervals this will be done	
Plan for instructor training/retention going forward	

A11.3.1. Please complete the above and allow four (4) months for the HMPWG members to review. If the content and justification is approved, a pilot class will be conducted and attended by HMPWG members or designated subject matter experts. **(T-0)**.

A11.3.2. If a pilot course for the 80 hr HAZMAT course is approved, the requesting Command funds the travel costs of HMPWG members/Subject Matter Experts to attend and review the pilot course. A 60-day notice of the class dates should be given to the HMPWG in order to ensure a majority of the members are able attend. The HMPWG provides any deficiencies to the requesting Command for correction within 30 days following the pilot. The requesting Command has 30 days to make those corrections. The HMPWG recommendation for approval or disapproval is presented to the Defense Packaging Policy Group (DPPG) within 30 days after the corrections are reviewed. If approved as an additional provider of the 80 hr HAZMAT course, the provider is added to the DTR.

A11.3.3. If a pilot course for a new technical specialist or function-specific training being used as an alternative to the current DTR training course is approved, the requesting Command funds the travel costs of HMPWG members/Subject Matter Experts to attend and analyze the pilot course. The number of members is determined based on the course and content. The HMPWG provides any deficiencies to the requesting Command for correction within 30 days following the pilot. The requesting Command has 30 days to make those corrections.

A11.3.4. Each school that is authorized to provide HAZMAT training, will provide the HMPWG with the number of students trained (by DoD Component), failure rate, student course critique rating, list of new and current instructors (to include credentials), and an POI updates annually. Every five years the Command will provide funding for a HMPWG members/Subject Matter Experts member to re-evaluate the course. **(T-0)**.