BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND

AIR FORCE MATERIEL COMMAND
INSTRUCTION 24-201

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Transportation

PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION ACQUISITION AND SUSTAINMENT PRODUCT SUPPORT INSTRUCTION

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This instruction implements Air Force Manual (AFMAN) 24-206, *Packaging of Materiel*, and aligns with Air Force Policy Directive (AFPD) 24-6, *Distribution and Traffic Management*. This instruction clarifies Acquisition roles and responsibilities for packaging, testing, planning, documentation, materiel handling, and provides guidance for Headquarters Air Force Materiel Command (HQ AFMC), Life Cycle Center and Air Force Sustainment Center (AFSC) packaging personnel. **Attachment 1** contains a glossary of references and is not mandatory for compliance. Attachments **2**, **3**, **4**, and **5** are mandatory base on type of procurement. 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 DAFMAN 90-161, *Publishing Processes and Procedures*, 14 April 2022, Table 1.1. for a description of the authorities associated with Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requesters commander for non-tiered compliance items. This instruction applies to AFMC Regular Air Force (RegAF). This publication applies to all military and civilian members of the United States Air Force (USAF), Air Force Reserve (AFR) units/personnel when assigned or associated where AFMC where AFMC is the lead, United States Space Force (USSF) units/personnel when associated with AFMC where AFMC is the servicing command, and those with contractual obligations to comply with Department of the Air Force/Air Force publications. This publication does not apply to Air National Guard (ANG) and the Air Reserve Component (ARC). Ensure that all records created as a result of processes prescribed in this publication are maintained In Accordance With (IAW) Air Force Instruction (AFI) 33-322,

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SUMMARY OF CHANGES

This document has been revised and needs to be completely reviewed. Major changes includes higher level policy requirements, Stock Control System (SCS) D035T procedures, Item Type Storage Codes, Special Packaging Instruction (SPI) procedures, Computer Aided Design System (CADS) responsibility, and Contract Organic and Support of Security Assistance (SA) and Security Cooperation (SC) Programs procedures.

Chapter 1

RESPONSIBILITIES:

1.1. Purpose. This instruction delineates Packaging, Handling, Storage, and Transportation (PHS&T) procedures and processes required to support the Adaptive Acquisition Framework and Acquisition Category (ACAT) Programs. Consistent with Department of Defense Manual (DoDM) 4140.01, Volume 9, Department of Defense Supply (DoD) Chain Materiel Management Procedures: Materiel, Air Force Manual (AFMAN) 24-206, Packaging of Materiel, Programs, AFI24-602V2, Cargo Movement, and in direct support of Air Force Instruction (AFI) 63-101/20-101, Integrated Life Cycle Management objectives.

1.2. Applicability. This instruction applies to the Regular Air Force (HQ AFMC) and United States Space Force (USSF) Life Cycle & Sustainment packaging offices and program offices requiring organic weapons systems product support. The primary responsibility of AFMC PHS&T is to provide product support to Life Cycle and Sustainment of ACAT Programs. AFMC packaging offices are a pillar of the integrated product support management team.

1.3. Responsibility. HQ AFMC/A4RT, Transportation and Packaging Policy Branch. AFPD 24-6, *Distribution and Traffic Management*, AFMAN 24-206, contains information regarding packaging product support requirements.

1.3.1. Follow policies and procedures set forth by DoD and Headquarters Air Force. **(T-2)**

1.3.2. Establish and/or monitor HQ AFMC procedures on packaging procurement, with emphasis on standardizing procedures, cost effectiveness, and overall improvement/simplification weapon systems integrated life cycle management (ILCM). Coordinate procedures with appropriate Air Force (AF) organizations and military services/agencies. Participate in the development of AF packaging policies and procedures.

1.3.3. Exercise staff management over AFMC packaging programs. Provide technical directions, plans, and programs for the life cycle of AF materiel. Develop proactive procedures to ensure AFSC implements new DoD or AF directives quickly.

1.3.4. Participate on military service/agency and industry packaging groups to develop regulatory, procedural, or standardized efforts to enhance the AFSC packaging mission.

1.3.5. Evaluate and implement AFSC field recommendations for changes or improvements to AF packaging policies when appropriate.

1.3.6. Participate in the development, revision, and implementation of packaging training programs to maintain a proficient HQ AFMC packaging capability.

1.3.7. Promote HQ AFMC use of environmentally sound packaging practices and reusable containers.

1.3.8. Evaluate HQ AFMC recommendations for standard material and container sizes based on factors such as anticipated use, projected need and availability at AF installations, cost savings, existing sizes and materials, etc.

1.3.9. Serve as command focal point for lessons learned in the area of packaging.

1.3.10. Evaluate requests for new HQ AFMC packaging data system applications, keeping DoD, Defense Logistics Agency (DLA), and AF initiatives in mind prior to approval.

1.3.11. Serve as the OPR for the Stock Control System (SCS) D035T Shipping Information System (SIS). Update common item and clear text database tables in the SCS D035T SIS.

1.4. Air Force Materiel Command Life Cycle Centers and United States Space Force Packaging Specialist. Provides comprehensive processes and procedures required to deliver and sustain weapon systems throughout their life cycle. IAW DoD 4140.01, and AFMAN 24-206, acquisition programs contact their Life Cycle Packaging Specialist (LCPS) to provide input into basic contract solicitations. See definition and list of Life Cycle centers in **Attachment 1**.

1.5. Air Force Sustainment Center. Provides integrated logistics and sustainment to the Air Force through depot maintenance, and supply chain management. IAW DoD 4140.01, and AFMAN 24-206, Air Force Sustainment Center Packaging Specialists (AFSCPS) provide input into Purchase Instruments, manage packaging systems data, while effectively protecting assets on hand from the environment and degradation during storage and shipment.

1.6. AFMC Requirements Owner/Program Manager. The submitter of the Purchase Request (PR) package to the contracting office shall ensure the package includes an AFMC Form 158, Packaging Requirements, for supplies solicitations.

1.7. Air Force Test, Design, and Evaluation Activities. The AF maintains in-house packaging design, prototype test, and evaluation capabilities. This capability can be used developmentally or to solve packaging engineering problems.

1.7.1. The Air Force Packaging Technology and Engineering Facility (AFPTEF), AFLCMC/EN-EZPAA, 5215 Thurlow Street, Suite 5, Wright-Patterson AFB, OH 45433-5547; 937-257-3362, or DSN 787-3362, (**http://www.aflcmc.af.mil/afptef**), is the central packaging engineering organization for the AF. AFPTEF acts as the primary technical resource for packaging engineering development, investigation, test, evaluation of specialized containers, materials, methods and techniques and performs UN specification packaging testing as needed for DoD activities.

1.7.1.1. AFPTEF maintains & develops assigned packaging-related DoD and Federal Standards and technical orders, and other pertinent documents. AFPTEF coordinates these documents with HQ AFMC/A4RT packaging specialists, as well as other DoD services and Federal agencies, as required.

1.7.1.2. AFPTEF manages the Container Design Retrieval System (CDRS), and maintains its associated DIDs (DI-PACK-80683 & DI-PACK-80684). As lead service for metal containers, they specialize in the design, prototyping, and testing of reusable shipping and storage containers, and can assist with container contracting efforts.

1.7.1.3. The CDRS is a computerized data record of existing specialized containers, their design drawings, and other information. These are used for technical analysis and container reuse applications, thus reducing acquisition costs and increasing the options available to the procurement activity. Additionally, it acts as a central focal point for DoD container information. The CDRS is accessible at URL: **https://cdrs.wpafb.af.milmanagement**; by email at: **CDRS@us.af.mil**; or phone 937-904-0710; or by mail (AFPTEF address above).

1.7.2. The Air Transportability Test Loading Activity (ATTLA) is the DoD agency responsible for the approval of airlift cargo. ATTLA certification is required if the cargo exceeds set requirements identified in MIL-STD-1791, *DESIGNING FOR INTERNAL AERIAL DELIVERY IN FIXED WING AIRCRAFT*. The air transport certification process is found with a detailed description in documents posted to the ATTLA Share Point site at **https://intelshare.intelink.gov/sites/attla/**. ATTLA may be contacted by email to **attla@us.af.mil** or mail addressed to: AFLCMC/EZFC (ATTN: ATTLA), Building 28, 2145 Monahan Way, Wright-Patterson Air Force Base OH 45433-7017.

1.7.2.1. Additional information on test and design capabilities, and assistance is found in **Chapter 7**.

1.8. Life Cycle Center and United States Space Force Packaging Specialist. The LCPS and USSF packaging specialists are responsible for identifying and submitting packaging requirements into new contract solicitations when program offices purchase new weapon systems. The LCPS when requested by the Program Office shall: **(T-2)**

1.8.1. Participate in program data calls to help programs identify packaging requirements, standards, request for proposals databases or conduct analysis. A data call may be initiated in preliminary planning activities requiring specific collection of data and information , analysis, and documentation prior to the public announcement for a competition.

1.8.2. Develop and institute procedures consistent with DoD, AF, and AFMC policies. Review higher HQ and local directives to determine application to the packaging program. Implement applicable higher HQ directives, policies, and procedures through local supplements or operating instructions.

1.8.3. Serve as technical advisor for AF packaging matters for the Life Cycle centers. Assist program managers to ensure AF packaging objectives are met during data review, research, development, test, and production.

1.8.4. Provide applicable PHS&T information to planning and program documents. Utilize AFMC Form 158, to specify contractual packaging data requirements. Review operational concepts to ensure that packaging objectives have been identified. Provide PHS&T inputs to Request For Proposal (RFP), Statement Of Objectives (SOO) Statement Of Work (SOW), Contract Data Requirements Lists (CDRL), and Instructions to Offerer (ITO) for life cycle phases.

1.8.5. Support Data Requirements Review Boards (DRRB) to ensure packaging DIDs are included in contractual documents when it has been determined it is advantageous to procure packaging data from contractors.

1.8.6. Assist AFSCPS when required by preparing specifications guidance (e.g., SOW, SOO, and test plans for specialized containers).

1.8.7. Evaluate and approve contractor PHS&T proposals during source selection. Develop, obtain, and maintain procedures to ensure that adequate, cost-effective packaging is developed/provided for new systems and equipment. Coordinate with the responsible AFSCPS as necessary.

1.8.8. Evaluate PHS&T during the weapon system's technology-development phase and continue to review and monitor throughout the life cycle of the program.

1.8.9. Participate in program reviews and audits, such as PDRs, CDRs, CAs, CRTs and other committees/meetings as appropriate to ensure adequate packaging coverage. Participate in field visits to using commands and industrial facilities during research, development, and test, as appropriate.

1.8.10. Establish and maintain liaison with commercial packaging industry. Evaluate commercial packaging methods and materials to determine adaptability. Exchange packaging information with the sustainment packaging specialists, other commands, military services/agencies, and industry to advance the state-of-the-art packaging and to promote understanding of policies and procedures related to military packaging. Send requests for evaluation, development, and possible AF application of new materials and containers to AFPTEF. Prior to sending requests, research the joint service document AFMAN24-206, to determine the lead activity responsible for the material or container.

1.8.11. Establish and manage a method of packaging cost analysis to ensure economical, yet adequate, protection throughout the life cycle of the material. Investigate the potential applications for standardized containers to keep costs down, consulting with AFPTEF, as appropriate. When requested by contracting personnel, other commands, or military services/agencies, obtain estimated packaging costs from Defense Logistics Agency.

1.8.12. Coordinate with the center career development office to ensure effective training is provided (or a local training program is established) for packaging personnel.

1.8.13. Coordinate Life Cycle packaging requirements for new systems and equipment with the AFSCPS when necessary.

1.8.14. Advise AFMC/A4RT of any packaging problems/solutions.

1.8.15. Comply with the hazardous materials requirements identified in **Chapter 4** of this instruction.

1.8.16. The Contractor Inventory Control Point (C-ICP) shall gain and maintain access to CSWS Data Exchange (CSWS DE)/D375 to load required data as identified in the CSWS DE Student Training Course Guide and the CSWS DE Checklists on the Training & Documentation page within D375. This includes, but is not limited to, basic management data, asset data, item management and equipment specialist data, packaging and transportation data, logistics reassignment data, and spares computation data.

1.9. Air Force Sustainment Center Packaging Specialists. AFSCPS are responsible for supply chain management, provisioning, D035T data input, spare part purchase requests, and new sustainment procurements. The packaging specialist when requested by the Sustainment Program Office shall: **(T-2)**

1.9.1. Establish management procedures consistent with DoD, AF, AFMC policies and procedures to accomplish the assigned mission. Review higher level and local directives to determine their application to the packaging program. Implement applicable higher HQ directives, policies, and procedures through local supplements or operating instructions.

1.9.2. Develop, obtain, and maintain packaging data for assigned items. Provide technical assistance to **LCPS when requested** and user commands. Approve contractor-prepared packaging data for use when acceptable.

1.9.3. Provide Packaging, Handling, Storage, and Transportation (PHS&T) input to planning and program documents. Review operational concepts to ensure packaging considerations have been addressed. Provide PHS&T input to RFP, SOW, SOO, CDRL, and ITO for all acquisition phases. AFSC packaging specialists are responsible for furnishing contractual packaging data for each replenished item. However, MIL-STD-2073-1, *Standard Practice for Military Packaging*, shall be used to develop packaging requirements when current approved packaging data is not available in local data files or by reviewing item drawings or technical data, or from physically examining items currently in stock. The AFMC Form 158, *Packaging Requirements* shall be utilized to specify contractual packaging requirements.

1.9.4. Support data call requirements and DRRB to ensure packaging Data Item Descriptions (DID) are included in contractual documents when it has been determined to be advantageous to procure packaging data from contractors.

1.9.5. Coordinate with the LCPS on requirements for acquisition contracts.

1.9.6. Serve as the technical advisor for AF packaging matters at the Air Logistics Complexes (ALCs), and refer unresolvable technical matters to AFPTEF for resolution.

1.9.7. When requested the LCPS will evaluate contractor PHS&T proposals during source selection. Develop, obtain, and maintain procedures to ensure that adequate, cost-effective packaging is developed or provided for new systems and equipment. Assist program managers to ensure AF packaging objectives are met during research, development, test, and production.

1.9.8. Establish and maintain liaison with the commercial packaging industry. Evaluate commercial packaging methods and materials to reduce packaging costs. Maintain contact with the LCPS packaging specialist, other commands, military services/agencies, and industry to advance state-of-the-art packaging and to promote understanding of the policies and procedures related to military packaging. Send requests for evaluation, development, and possible AF application of new materials and containers to AFPTEF. Prior to sending requests, research the joint service document AFMAN 24-206_IP, *Packaging of Materiel*, to determine the lead activity responsible for the material or container.

1.9.9. Establish and maintain the ability to evaluate new or revised packaging methods and procedures for assigned items. Use the Computer Aided Design System (CADS) to assist in the development evaluation process. Send packaging design and application problems which exceed local capabilities to AFPTEF.

1.9.10. Establish and maintain a supply discrepancy reporting monitoring program in accordance with (IAW) DLM 4000.25, *Defense Logistics Management (DLM)* to minimize deficiencies that result from improper packaging of AF items. Analyze trends in *Supply Discrepancy Reports (SDR*), and Material Deficiency Reports (MDR), to determine if changes to the prescribed packaging requirements are needed.

1.9.11. Institute and manage a packaging program to ensure economic factors are considered. Investigate the potential applications for standardized containers or methods to maintain low expenditures. When requested by the contracting personnel, other commands and military services/agencies, obtain estimated costs from Defense Logistics Agency packaging operations. Send recommendations for standard packaging materials and containers (such as fast packs, standard packs, and standard container sizes) to AFPTEF. Include information that will assist their evaluation, such as anticipated usage, availability, costs savings, etc.

1.9.12. Coordinate packaging training with the installation AFSC career development office and/or establish local training program(s). Evaluate jointly with AFMC/A4RT to ensure DoD approved packaging courses meet AF packaging requirements.

1.9.13. Participate in program reviews and audits, such as Preliminary Design Reviews (PDR), Critical Design Reviews (CDR), Configuration Audits (CA), Contract Repair Teams (CRT), and other committees/meetings as appropriate to ensure adequate packaging coverage. Participate in field visits to using commands and industrial facilities during research, development, and test, as appropriate.

1.9.14. Act as a point of contact for projects and field investigations requested in support of AFMC/ A4RT.

1.9.15. Maintain graphics support capability, including drafting, technical illustration, CADS, and the Special Packaging Instruction Retrieval and Exchange System (SPIRES). Maintain responsibility for the local operation of the CADS.

1.9.16. Advise AFMC/A4RT of packaging problems/solutions throughout the life-cycle of the item.

1.9.17. Prepare specifications, SOW, SOO, and test plans for specialized containers.

1.9.18. Retain engineering authority and configuration management for those items transferred to DLA for integrated materiel and procurement management IAW DODI 4140.69, *Engineering Support Instructions for Items supplied by Defense Logistics Agency (DLA)*. See **Chapter 5**, **paragraph 5.7.2**, on SPI and packaging data updates.

1.9.19. See **paragraph 1.8.16** for D375 Contractor Supported Weapon Systems - Data Exchange (CSWS-DE).

Chapter 2

LIFE CYCLE AND SUSTAINMENT PRODUCT SUPPORT PACKAGING COORDINATION AND CONFERENCE PARTICIPATION

2.1. General. LCPS, USSF, and AFSCPS collaborate and coordinate efforts in order to sustain a robust AF weapon systems packaging program. Packaging specialist must comply with DOD 4100.39M, *Federal Logistics Information Systems*, Volume 10 to comply with organic contracted data items to support systems. Apply the following when required: **(T-2)**

2.1.1. MIL-STD-129, *DoD Standard Practice, Military Marking for Shipment and Storage*

2.1.2. MIL-STD 147, *Palletized Unit Loads*

2.1.3. MIL-STD 648, *Specialized Shipping Containers*

2.1.4. MIL-STD-1366, *Definition of Materiel Transportation System Dimensional and Weight Constraints*.

2.1.5. MIL-STD-2073-1, *Standard Practice for Military Packaging*. **Note:** Other acquisition-related documents for all new and modified systems, equipment, and materiel to ensure adequate packaging support throughout the Life Cycle.

2.1.6. ASTM 3951-18, *Standard Practice for Commercial Packaging*.

2.1.7. SAE GEIA-STD-0007-B, Logistics Product Data.

2.2. Air Force Life Cycle Center, United States Space Force, and Air Force Center Sustainment Packaging Product Support. LCPS and USSF support acquisition logistics by providing their expertise and developing and submitting packaging procedures, concepts, and objectives for AF systems and equipment during acquisition to support program managers IAW AFI 63-101/20-101, *Integrated Life Cycle Management*. The AFMC Form 158 is used in conjunction with paragraph **2.1** and **3.6** is the vehicle used to specify contractual packaging requirements. **(T-2)**

2.2.1. Packaging is a function which should be closely coordinated with the actual design and manufacture of an item. Proper PHS&T must be identified during acquisition as part of Integrated Logistics Support (ILS) planning. This identification must be made as early as possible in the acquisition life cycle.

2.2.2. Provide Program Manager support when notified and PHS&T problems are identified in the supply chain.

2.2.3. ATTLA is considered for new pieces of equipment. This will allow ATTLA to work directly with contractors and procurement offices to ensure the design of new pieces of equipment allows for air transportability.

2.2.4. AFSCPS are also responsible for furnishing contractual packaging data for each item being replenished. However, when current approved packaging data is not available in local data files, requirements can be determined from MIL-STD-2073-1, from reviewing item drawings or technical data, or from physically examining items currently in stock. The AFMC Form 158 is the vehicle used to specify contractual packaging requirements.

2.3. Air Logistics Complexes (ALCs). Immediately upon assignment of responsibility, an AFSCPS will be designated. The appropriate program manager will be advised of this assignment in writing to ensure coordination on matters relating to packaging and handling requirements for the system. **(T-3)**

2.3.1. A packaging specialist from the responsible AFSCPS shall be included as an active member of the ILS team to participate in the acquisition effort. This ensures that, during interim design and acquisition, proper consideration is given to factors which may create unnecessary packaging and handling problems during logistics support.

2.3.2. The prime AFSCPS assists the LCPS and reviews technical packaging and handling data. The LCPS and AFSCPS shall maintain communication and coordination with each other to ensure that optimum standardization and economy is achieved in the packaging and handling aspects of system development and acquisition.

2.4. Post –Award Part Participation. Packaging Specialists shall participate in committees or meetings when notified to ensure adequate packaging considerations IAW AFMCI 23-110, *Post-Award Part Verification and Approval*. When it increases the continuity of the AFMC packaging program, and representation will be encouraged by the LCPS, USSF and AFSCPS. These include, but are not limited to: **(T-2)**

2.4.1. First Article Testing (FAT), Production Part Approval (PPA), Specialized Inspection and Testing (SIT). A packaging specialist from the sustainment product support having life-cycle management responsibility shall participate in PDRs, CDRs, First Article Configuration Inspection (FACI), and test programs which impact upon the packaging and handling support required of AFMC. **(T-2)**

2.4.1.1. This is an area which requires continuous coordination between LCPS, USSF, and AFSCPS packaging specialists to ensure the appropriate packaging specialists are advised of, and actively participate in, these reviews whenever packaging or handling is involved.

2.4.1.2. Details concerning proposed preservation and packing are provided by the contractor in the preparation for delivery section of part II of the Configuration Item (CI) specification. These specifications are prepared for the more complex items of equipment and spares. CI specifications may also be required for containers which are not covered by existing military specifications or when they involve special requirements in terms of materials, added features, etc. The formal approval and acceptance of part two of the CI detail specification is a product of the FACI.

2.4.2. Critical Item Review (CIR) Committee. A packaging specialist from the AFSC having life-cycle management responsibility shall participate in CIRs to identify and prevent unfavorable conditions attributable to packaging and handling. Packaging and handling problem areas identified with a system shall be reported to a program manager, or Item Manager (IM), as appropriate. Participation is highly recommended on logistics support preliminary task groups.

2.4.3. Participation During Development, Test, and Technical Evaluation of Systems/Equipment. AFSCPS packaging specialists assigned life-cycle management responsibility provide packaging support for research and development. They also provide AFMC packaging requirements for installs and items bought for test purposes. The AFSCPS packaging specialists participate in the evaluation of systems, component design, and

performance during development, test, and production phases, as required, to ensure conformance to logistics transportability and mobility objectives, transportation plans, and logistics packaging handling requirements.

2.4.4. Operational Test and Evaluation (OT&E). Evaluation of the contractor's proposed preservation and packing is based upon AFMC PHS&T criteria previously established and incorporated into applicable contractual and planning documents. Special test requirements or requests for changes in AFMC or contractor test criteria are provided to the program office (or designated representative) for inclusion in contracts. To ensure proper coverage and evaluation during initial OT&E, the responsible AFSCPS packaging specialists supporting the program office shall prepare a preservation and packing checklist and participate in the evaluation as required. **(T-2)**

2.4.5. Reports/Evaluations. Evaluations of system components, support equipment design, or requested changes are developed in conjunction with inspections and tests. They are provided through established channels to the program office. Evaluations are based upon packaging requirements; and ease of handling, mobility, and transportability. Examples of factors to be considered during evaluations include, but are not limited to **(T-2)**

2.4.5.1. In the design effort, overall dimensions in the system and components will be minimized to reduce problems of PHS&T. Where practical, configuration must permit movement by alternate methods, and provisions must be made to permit disassembly of containers and equipment to reduce cube and tare for shipment.

2.4.5.2. All containers or handling devices for the systems or equipment will be compatible with related handling systems' loading requirements to allow for quick transfer between transportation modes, interchangeability, and standardization.

2.4.6. Participation in Provisioning Guidance Conferences. IAW AFMCMAN 20-106, *Provisioning*, AFSCPS packaging specialists actively participate in scheduled organic provisioning and support equipment guidance conferences. Their role is to provide general assistance that will help the contractor comply with the logistics packaging requirements for procured organic spare parts. Provide guidance concerning logistics requirements for packaging and handling of support equipment. **(T-2)**

2.4.7. The sustainment product support packaging specialists provide packaging support, as required, for items being acquired based on the spare and repair parts provisioning document(s) submitted by the contractor in accordance with the contract. **(T-2)**

2.4.7.1. When items are acquired through provisioning action, the AFMC Form 158 shall be completed when contacted prior to contract release indicating the contractor will develop and submit packaging data if DIDs DI-PACK-80120 (*Packaging Coded Data*) and DI-PACK-80121 (*Special Packaging Instruction*) have been included as part of the contractual agreement.

2.4.7.2. When economically feasible, the AFSCPS participate in source coding and provisioning meetings to establish detailed packaging requirements and to resolve problems concerning packaging of AF selected and managed items. These items are maintenance source-coded in the "P" series and parts kit-coded "D" or "F." Definitions of maintenance source codes are listed in TO 00-25-195, *Source, Maintainability, and Recoverability Coding of Air Force Weapons, Systems, and Equipment*. This support is

provided during meetings convened by the ALC and the Resident Provisioning Teams (RPT).

2.4.7.2.1. Responsibilities of Participating Specialists. Detailed packaging data should be developed by the responsible AFSCPS packaging specialists for all items expendability, recoverability, reparability category ERRC coded C, S, or T. Upon notification of a source coding conference, the responsible sustainment packaging office will notify other packaging and transportation specialists that manage items being considered, requesting participation or delegation of packaging responsibilities.

2.4.7.2.2. Source Coding by Depot Provisioning Committee. When source coding is accomplished by a depot provisioning committee, AFSCPS packaging specialists participating in the meeting, determine and specify packaging requirements for those managed items coded for acquisition.

2.4.7.2.3. Source Coding/Provisioning at Contractor Facilities. When provisioning for new items are held at the contractor's facility, the participating AFSCPS packaging specialists can develop and furnish detailed packaging data to the contractor on DD Form 2326, *Preservation and Packing Data*. Participation of the responsible AFSCPS in these meetings is essential. Post-provisioning meetings may be arranged for AFSC packaging specialist development of data if that alternative is more suitable to both the contractor and the ALC.

2.4.7.2.4. Provisioning Under (RPT) Procedures.

2.4.7.2.4.1. During the provisioning guidance meeting, representatives of the contract administration office, contractor, and sustainment arrange details concerning the scheduling of the participating packaging specialists' visits to the contractor's facility to develop packaging requirements.

2.4.7.2.4.2. Packaging specialists shall visit the contractor's facility as necessary to determine packaging requirements for items coded for AF management. Procedures must be established to ensure that the contractor is either provided with detailed packaging data or with authority to proceed with development of packaging data within mutually agreed upon time limits.

2.4.8. Funding for Provisioning Conference Attendance. Although the participation of the responsible packaging specialists in source coding and provisioning meetings is normally encouraged, there shall be some occasions when the small number of items involved may not justify attendance. Travel funds required to attend these meetings must be projected sufficiently by the prime Life Cycle and AFSC packaging offices in advance so that they can be included in the budget for the appropriate time period. **(T-3)**

Chapter 3

CONTRACT PACKAGING REQUIREMENTS

3.1. General. LCPS, AFSCPS, and USSF when contacted by the program are responsible for providing contractual packaging requirements for all procurement actions generated by ACAT programs. This includes, but is not limited to, initial systems and spares support acquisitions, overhaul/repair actions, modification programs and local purchase procedures. The Life Cycle and sustainment packaging personnel work together to ensure that packaging requirements provided for contracting purposes are complete, accurate, and in compliance with DoD, AF, AFMC packaging policies/procedures, international and federal law. **(T-2)**

3.1.1. PHS&T requirements for major systems and equipment acquired by AFMC are normally reflected in SOW and SOO and other contractual documents (e.g. AFMC Form 158).

3.1.2. Packaging requirements for the spare parts being acquired as part of the systems or equipment acquisition are established by LCPS or the AFSCPS and submitted for inclusion into SOW and SOO. Unless directed by the procuring country, provide MIL-STD 2073-1, "Level B" packaging to Foreign Military Sales materiel IAW AFI 24-602V2, *Cargo Movement*.

3.1.3. Standard instructions and specifications will be contractually invoked whenever they satisfy AF needs. Notify AFPTEF to update or revise any specification found to be inadequate or outdated. The preparing activity or AF custodian will be notified if specifications or standards are found to be outdated.

3.1.4. When packaging requirements cannot be satisfied through standard clauses and specifications, special requirements may be developed on a one-time basis and included in the SOW. Special requirements for contractual stipulation may include, but need not be limited to, the following:

3.1.4.1. Specific handling procedures to be provided (for example: lifting eyes, skids, fixtures for handling damaged aircraft, etc.).

3.1.4.2. Specific packaging, handling and transportation plan exhibits to be used as a basis for contractor transportability design considerations.

3.1.5. Military specifications, standards, and commercial standards referenced in AFMC or contractor prepared packaging documents shall be reviewed to ensure they contain adequate, but not excessive, provisions for packaging support.

3.1.6. Advise contracting officers to contact the prime packaging office prior to any packaging deviation/approval as required in the AFMC Form 158 or the SOW.

3.1.7. Production Quality and Manufacturing. Request contractor provide a copy of the Special Packaging Instruction on First Article Testing of materiel. **(T-2)**

3.1.8. Purchase Requests (PR), Military Interdepartmental Purchase Requests (MIPR), and other contractual documents for hardware, spares, supplies, etc., should be coordinated with the responsible sustainment product support packaging specialists for inclusion of packaging requirements. All contract changes, change orders, amendments, or supplemental agreements involving packaging must be coordinated with the responsible AFSC packaging specialists.

However, non-materiel purchases such as services, studies, and changes in funds do not need to be coordinated with the ALC's packaging specialists. Appropriate packaging forms shall be completed according to instructions contained herein, attached to the acquisition document, and forwarded to the appropriate PR/MIPR control office for inclusion in the contractual document. (This process may be automated if an automated purchase request system is used.)

3.2. Levels of Protection. Attachment 2, Recommended Preservation and Packaging Commercial (C) and/or Military (M), contains AF recommended packaging levels of protection for various distribution patterns. The table should be used as guidance only.

3.2.1. Sustainment packaging offices must use their expertise and personal knowledge of anticipated distribution patterns for the materiel when specifying levels of protection. Designation of improper level of packaging could result in unnecessarily increased costs due to over packing or damage caused by lack of adequate protection.

3.2.2. In some cases, complete information concerning destination or anticipated length of time in storage is not furnished to the AFSCPS with the contractual document. An example of this is when items are intended for installation, but it is not indicated whether the parts shall be installed within CONUS or overseas. When complete details are not furnished with the contractual document, AFSCPS shall conduct research to determine the most economical level of protection based on anticipated distribution/logistics conditions. Information pertaining to anticipated use, length of time in storage, and destination may be on the PR/MIPR or may be available from the program manager.

3.2.3. When stipulating packaging requirements for items that have been designated for immediate use, caution should be exercised to ensure that total storage time shall be less than 12 months.

3.3. Base Level Contracting. Upon request, AFSCPS assist and provide guidance to the base contracting personnel to ensure items acquired through local purchase procedures are provided economical and adequate protection. Commercial packaging may be adequate for items acquired through local purchase since they are intended for immediate consumption on base. In addition, ensure packaging complies with federal and international regulations, particularly in the hazardous materials area with regard to the mode(s) of transportation. **(T-3)**

3.4. Contract Requirements in Support of Security Assistance (SA) and Security Cooperation (SC) Programs. Emphasis on the support of the SA and SC is required to ensure that materiel is afforded adequate protection. SA Program's include the Foreign Military Sales (FMS) program, which is the government-to-government sale of defense articles from DoD stocks or through new procurements under DoD managed contracts, regardless of the source of financing. SC Program's include the Building Partner Capacity (BPC) program, which are activities that are funded with U.S. Government appropriations and administered as cases within the FMS infrastructure. Defense articles may originate from both DoD stocks or through new procurement under BPC programs.

3.4.1. Normally, materiel shipped in support of the SA/SC is given military preservation and no less than level B packing. The level of packaging may be increased or decreased upon the direction of the recipient country. The degree of preservation and packing provided must ensure safe delivery of materiel in serviceable condition.

3.4.2. Lower levels of protection shall not be approved unless authorized in writing by the requesting country, except as specified in this paragraph. It is acceptable to specify commercial preservation and packing which shall furnish the required protection at the point of use or installation when it is specified on the PR/MIPR that the item shall be installed in the CONUS. **(T-2)**

3.5. Contract Packaging Data Requirements. Packaging Data Requirements may either be specified in the procurement contract or action may be initiated to procure the data from the contractor on new items. **(T-2)**

3.5.1. The sustainment packaging offices are responsible for providing contract packaging data for each reprocured item. This data is extracted from existing data files when available. However, when current approved packaging data is not available in local data files, requirements can be determined from MIL-STD-2073-1, from reviewing item drawings or technical data, or from physically examining items currently in stock. The AFMC Form 158 is used to specify contractual packaging requirements.

3.5.2. When new items are being bought and approved packaging data is not available and cannot be developed in-house, the required data may be procured from the contractor. LCPS and AFSCPS packaging specialists determine whether it is practical and economical to obtain contractor-developed data. The DD Form 1423, *Contract Data Requirements List*, is used to document requirements for data items invoked to buy contractor-prepared data. To minimize costs, it is important to verify packaging specifications, requirements, data items, etc., are accurate, up-to-date, and necessary.

3.5.3. Evaluate contractor recommendations regarding data requirements. Coordinate/develop and submit necessary requirements to the program manager for inclusion in contractual work statements. Review and approve contractor submitted packaging data prior to acceptance or entry into logistics systems (such as the Stock Control).

3.5.4. Military packaging and quantity per unit pack (QUP) can be stipulated for contractual compliance without requiring the contractor to develop and submit packaging data. This procedure is most effective when the item will be stored at the ALC and the data can be developed later. This procedure may be most suitable when a small number of items are being procured and no provisioning action is involved. However, in order to best assist the contractor in providing items with adequate protection, as much data as possible will be furnished to the contractor.

3.5.5. Procured wooden containers shall meet DoD 4140.65-M, *Issue, Use, and Disposal of Wood Packaging Material*.

3.6. Procuring Packaging Data From Contractors. Data calls are used to ascertain the need to procure various data from the contractor as part of the contract. When it is in the best interest of the AF for the contractor to develop packaging or transportability data, LCPS and AFSCPS must determine minimum essential data item requirements and provide them as specified in the data call. LCPS may assist program management offices determine essential data requirements for Contractor Inventory Control Point (C-ICP) programs to ensure the users and/or field activities receive required packaging data for repairable items. **(T-2)**

3.6.1. DIDs. DIDs are specified in the contract to instruct the contractor as to the information and format required for the appropriate data being procured. The only packaging DIDs that

can be provided in response to a data call are those listed in the current edition of DoD 5010.12-M, *Procedures for the Acquisition and Management of Technical Data*, or otherwise approved according to DoDI 5000.02, *Operation of the Defense Acquisition System.* DD Form 1423 is used to annotate specifics about data delivery, routing, number of copies required, and tailoring requirements. The DD Form 1423 can only be used to tailor requirements out of the DID or to clarify what is already in the DID. It cannot be used to add requirements to the DID.

3.6.2. Major Packaging DIDs. The major packaging DIDs include:

3.6.2.1. DI-PACK-80120, *Preservation and Packing Data*.

3.6.2.2. DI-PACK-80121, *Special Packaging Instructions (SPI).*

3.6.2.3. DI-PACK-81059, *Performance Oriented Packaging (POP) Test Report*.

3.6.2.4. DI-PACK-80683, *Container Design Retrieval System (CDRS) Search Request*.

3.6.2.5. DI-PACK-80684, *Container Design Retrieval System (CDRS) Data Input*.

3.6.2.6. DI-MISC-81499, *Packaging Kit Contents List.*

3.6.2.7. To obtain transportability information from the contractor, specify DI-PACK-80880, *Transportability Report*.

3.6.3. Performance Oriented Packaging (POP) Test Reports. Test reports for POP can be obtained by stipulating DI-PACK-81059. It is not mandatory to ask for a contractor's POP test report when procuring hazardous material packaging data. However, it may be in the best interest of the DoD to request a contract POP test report when procuring contractor-developed packaging data to ensure the contractor's proposed container design can pass POP tests.

3.6.4. Category E DIDs. Consideration shall be given to requesting a copy of data according to DIDs in Category E (Engineering and Configurations Documentation). These DIDs involve specifications and the data generated by them may provide information relevant to the contractor's proposed protection of primary items being developed. If the DD Form 1423 is not annotated to require submission of such data to the responsible ALC packaging office, positive action must be taken to ensure access.

3.6.5. DIDs for Provisioning. DI-PACK-80120 and DI-PACK-80121 are stipulated on the DD Form 1423 when items are being acquired through the provisioning process. However, their use is not limited to provisioning actions. During the data call, the initiator should stipulate a requirement that packaging data be individually priced by type (SPI and coded data) or that prices be negotiated for packaging data concurrent with negotiation of prices of the provisioned items. This shall assist the responsible ALC packaging office in determining the most economical means of data development (in-house or contractor). Revisions to specifications, standards and DIDs can be found in the ASSIST database, at **http://assistdocs.com/search/search_basic.cfm.**

3.6.6. SPI Requirements for Reparables. DI-PACK-80121 shall be stipulated in conjunction with DI-PACK-80120. In order to maintain the integrity of the AF reusable container program, a statement such as the following shall be inserted in Block 16 of the DD Form 1423 that references DI-PACK-80121B: SPIs, which include drawings, and Fast or Standard packs IAW TO 00-85B-3, *How to Package Air Force Spares***,** **http://www.tinker.af.mil/shared/media/document/AFD-061220-059.pdf** shall be

developed for all items that are subject to individual shipment between users and a repair facility (reparable items). This includes items coded as expendability, recoverability, reparability category (ERRC) C, S, or T. If it is determined by the prime AFSCPS to be more advantageous, MIL-STD-2073-1, coded packaging data may be used for certain items instead of a SPI drawing. For every item having a SPI drawing, the packaging coded data (DI-PACK-80120) is required to input data into the D035T. When DI-PACK-80121 is stipulated, the DD Form 1423 is annotated to require contractors to furnish the original and one copy of the DD Form 2169, *Special Packaging Instruction*, to the responsible ALC packaging office.

3.6.7. DIDs for Anticipated Long-Life Container Requirements. When development and or use of long-life containers is anticipated, DI-PACK-80683 and DI-PACK-80684 must be stipulated on the DD Form 1423. DI-PACK-80683 is used to avoid costly design of long-life containers if an existing design can be used or modified for use. DI-PACK-80684 serves as a means to enter new container designs into the CDRS for future use. The DD Form 1423 shall be annotated to request design retrieval data and submitted to the CDRS Office (**AFPTEF, AFLCMC/EZPAA, 5215 Thurlow Street, Suite 5, Wright Patterson AFB, OH 45433-5547**). The responsible LCPS or AFSCPS packaging specialists should annotate the DD Form 1423 so that they obtain an information copy of all design requests. ALC packaging offices may exempt contractors from submitting approved new designs to AFLCMC/**EZPAA**. However, if the AFSCPS exempts contractors from submitting new designs to the CDRS, the AFSCPS must be responsible for submitting the designs to CDRS. Contact AFPTEF if a new long-life container must be developed.

3.6.8. Item Type Storage Code. The Item Type Storage Code (ITSC) will be requested as a packaging data element in contracts and briefed in Provisioning Guidance Conferences (PGC). Updates to the ITSC will only be approved IAW **Chapter 5**, **paragraph 5.1**. **(T-2)**

3.6.9. Commercial Item Description (CID). Each CID should have a "Packaging, Packing, Marking, and Palletization" paragraph(s). The following paragraph should be a part of all CIDs: "Packaging, Packing, and Palletization: Unless otherwise specified in the contract, packaging, packing, and palletization shall be in accordance with American Society for Testing and Materials International (ASTM) D3951, *Standard Practice for Commercial Packaging*, as specified for shipments to the DoD. Marking shall be in accordance with MIL-STD-129, *DoD Standard Practice, Military Marking for Shipment and Storage*."

3.7. AFMC Form 158, Packaging Requirements. When notified by programs, packaging requirements for inclusion in AFMC contracts documents are accomplished on an AFMC Form 158 or the Purchase Request Process System (PRPS) AFMC 158 report by the prime ALC packaging office. The following apply to the requirements incorporated on the AFMC Form 158: **(T-2)**

3.7.1. Current Packaging Documents and Data. Approved and current specifications and standards, MIL-STD-2073-1, coded/supplemental data, or SPIs must be entered in the appropriate blocks/columns of the AFMC Form 158.

3.7.2. End Item/System Specifications. Before citing packaging requirements on the AFMC Form 158 (or computer generated equivalent), review the applicable end item/system specification, system requirements documents, technical requirements documents, and other contractual documents to ensure that requirements are current, adequate, accurate, and compatible with current AF and AFMC policies.

3.7.3. Quantity Per Unit Pack (QUP). Only QUPs that have been approved or furnished by the Item Manager (IM) will be stipulated on the AFMC Form 158. The AFSCPS cannot change IM established QUPs unless approved by the IM. Current packaging data records will be reviewed to ensure that the data reflects approved unit package quantities. On PRs/MIPRs, unit package quantities for all items being acquired are annotated by the PR/MIPR initiator immediately following the item identification. When the unit pack quantities seem incompatible with packaging requirements, AFSCPS will submit written recommended changes, with rationale, to the appropriate IM, with the understanding that the IM has final control over the establishment of QUP.

3.8. Waivers of and Deviations from AFMC Form 158 Requirements. LCPS and AFSCPS packaging specialists shall review and, if warranted, approve all waivers and deviations concerning AFMC Form 158 packaging requirements. This includes waivers of or deviations from military specifications or standards cited. An amended AFMC Form 158 shall be prepared by LCPS or AFSCPS packaging specialists only, to reflect new requirements if required by the procuring activity. **(T-2)**

3.8.1. These exhibits should be used simply to duplicate the requirements of MIL-STD-2073-1. The MIL-STD-2073-1, is used when the documents authorized by AFMC for contractual stipulation do not provide for the peculiarities in the packaging requirements for a specific system or materiel, or when clarification of existing contractual documents is required. Such agreements are invoked when they result in savings or other benefits to the AF, at no detriment to the protection of the items involved. When it is apparent that the provisions of the agreement may have recurring AFMC-wide application, contact AFMC/A4RT so consideration can be given to adopting the terms of the agreement as a standard AFMC packaging requirement.

3.8.2. When agreements involve items for which an AFMC activity other than the one initiating the agreement has management responsibility, the proposed packaging agreement shall be coordinated in writing with the managing activity before incorporating it into a contract. This will be accomplished as soon as possible after initiation of the requirement.

3.8.3. Caution shall be exercised to make sure packaging requirements do not infringe on areas of responsibility assigned to other DoD agencies. When terms of the agreement affect other AFMC activities or other AF or DoD activities the agreement shall be coordinated with them.

3.9. Obtaining Safety Data Sheets (SDSs). SDSs are mandatory for all known hazardous items and for all items shown in FED-STD-313, *Material Safety Data, Transportation Data, and Disposal Data for Hazardous Materials Furnished to Government Activities*, Table I and II. Contract information is identified in the Federal Acquisition Regulation (FAR) in subpart 23.3. FAR clause 52.223-3, *Hazardous Material Identification and Material Safety Data* must be included in the award for packaging offices to obtain the SDS from the vendor. This requirement includes centrally and locally purchased items. (Note that SDSs are not used in developing transportation data for ammunition and explosive items. Instead, data from DI-L-331 is sent to AFLCMC /EBHE for determination of hazard classification.) Anytime a SDS is required, the face of the AFMC Form 158 must be stamped or typed “SAFETY DATA SHEET REQUIRED” wherever adequate space is available. The AFMC Form 158 can also be used to highlight the need for POP testing, packaging, and marking requirements in accordance with applicable model requirements. **(T-2)**

3.10. Transfer of Packaging Data for Logistics Support. Packaging data obtained from the contractor during acquisition must be provided to the responsible ALC packaging office to ensure adequate spares support. ALC packaging offices identify and shall incorporate into Section 6 of the transition agreement requirements to transfer the information to the supporting ALC. **(T-2)**

3.10.1. Packaging data to be transferred may include drawings furnished by the contractor as part of Section 5, Part II; pertinent CI specifications; and drawings developed for special design protection equipment in support of other CIs.

3.10.2. The transition agreement shall be written to ensure the transfer of required packaging and handling information from the program office and any other AFMC acquisition office that may have data.

3.11. FAR 52-211.2 *Availability of Specifications, Standards, and Data Item Descriptions listed in the Acquisition Streamlining and Standardization Information System* **(ASSIST) clause must be included in the award when hard copies are not attached in the contract solicitation. (T-2)**

3.12. DFAR 252.223-7001, *Hazard Warning Labels*. Ensure clause is applied in packaging HAZMAT procurement provisions. **(T-2)**

Chapter 4

HAZARDOUS MATERIALS:

4.1. Hazardous Materials. For the purposes of this instruction, the term "hazardous materials" means explosives (Class 1), compressed gases (Class 2), flammable liquids (Class 3), flammable solids (Class 4), oxidizers and organic peroxides (Class 5), poisons and infectious substances (Class 6), radioactive materials (Class 7), corrosive materials (Class 8), and miscellaneous dangerous goods (Class 9), or any substance or material which has been determined to be capable of posing an unreasonable risk to health, safety, or property. The term is equivalent to "dangerous goods" and includes hazardous substances, hazardous wastes, marine pollutants and elevated temperature materials. This definition is also contained in 49 Code of Federal Regulations (CFR) 100-199 and AFMAN 24-604. Definitions for worker safety and health purposes are contained in 29 CFR 1910.1200, *Occupational Safety and Health Administration.*

4.2. Hazardous Materials Regulatory Guidance. Packaging offices must have copies or access to all of the latest hazardous materials regulations publications for use. The following documents govern packaging requirements for multimodal transport of dangerous goods.

4.2.1. United Nations (UN) Recommendations on the Transport of Dangerous Goods Model Regulations (Orange Book). Prescribes guidance developed by the UN to harmonize dangerous goods transport regulations.

4.2.2. International Civil Aviation Organization (ICAO), *Technical Instructions for the Safe Transport of Dangerous Goods by Air*. Prescribes detailed requirements applicable to the transport of dangerous goods by commercial air.

4.2.3. International Air Transport Association (IATA), *Dangerous Goods Regulations*. Prescribes the detailed requirements applicable to the international transport of dangerous goods by air under normal circumstances.

4.2.4. Department of Transportation (DOT) Title 49**,** *Code of Federal Regulations* (49 CFR), *Transportation.* Prescribes procedures for all Continental United States hazardous material (HAZMAT) transport modes. 49 CFR 171-180 applies to packaging and transportation requirements.

4.2.5. DOT Title 29 CFR 1910.1200, *Hazard Communication*. The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard ensures that all chemicals produced or imported by chemical manufacturers or importers are evaluated to ensure that workers who come into contact with them are apprised of the hazards. Personnel who deal with hazardous materials require training in accordance with the hazardous communication standard. Information regarding hazardous materials is transmitted by container labeling and other forms of warning, SDS, and employee training.

4.2.6. *International Maritime Organization (IMO), International Maritime Dangerous Goods* (**IMDG**) *Code*. Applies international modal regulations to vessels transporting dangerous goods.

4.2.7. AFMAN 24-604. Provides guidance and procedures for preparing hazardous materials for shipment by military aircraft to ensure that materials are packed, marked, labeled and prepared properly for transportation.

4.2.8. Mail and Parcel Post Shipments. AFI 24-602V2, *Cargo Movement* and DoD 4525.8-M/AF Supplement 1, *DoD Official Mail Manual.*

4.3. Life Cycle and Sustainment Packaging Specialist Responsibilities. (T2)

4.3.1. Hazardous Materials Packaging Requirements for Prime Items. Each AFSC packaging office establishes packaging and handling requirements for its assigned prime items.

4.3.2. SDS. The requirement to provide an SDS for hazardous materials must be stipulated contractually by the prime packaging office on the AFMC Form 158 or the PRPS 158 report.

4.3.2.1. FED-STD-313, contains criteria for receiving SDSs from the contractor.

4.3.2.2. Explosives that meet the definition of hazardous chemical in **http://www.osha.gov/pls/oshaweb/owalink.query_links?src_doc_type=STANDARDS&src_unique_file=1910_1200&src_anchor_name=1910.1200(c)** are required to have a SDS.

4.3.3. Packaging personnel shall maintain SPIs to comply with all current applicable hazardous materials regulations to ensure uniformity of packaging with specifications and standards. If changes are required to specifications and standards due to HAZMAT regulatory requirements, they shall be addressed to the preparing activity for the document. Coordinate changes IAW **paragraph 5.7**.

4.3.4. Using Non-DOT Specified Packaging. When packaging other than that specified by the DOT is used for hazardous materials, the packaging must be of equal to or greater strength and efficiency as the packaging prescribed by the DOT as authorized by 49 CFR 173.7 or as authorized by a DOT Competent Authority Approval (CAA) or Special Permit (DOT-SP). The use of non-DOT packaging must be substantiated and documented as being equal to or greater than DOT requirements according to joint service document AFMAN24-210, *Package of Hazardous Materials*. The ALC packaging office must coordinate with medical, safety, and item management personnel, as appropriate. Packaging personnel shall ensure the packaging specification, standards, and approval document complies with current applicable hazardous materials regulations. All documentation supporting the alternate packaging must be kept on file until the item is removed from the DoD inventory.

4.3.5. Packaging Specialists' Responsibilities for Preparing Hazardous Materials for Shipment. The packaging specialists shall provide guidance to contractors in determining material requirements. This guidance will address preservation, packing, and marking according to applicable directives governing the mode of transportation used and the hazardous potential of the item.

4.3.5.1. Packaging specialists must ensure hazardous materials requirements (e.g. transportation modes) and cautionary markings are specified in procurement documents. UN specification requirements must be specified in contracts for all hazardous materials that have been identified for worldwide delivery, regardless of destination and mode of transportation.

4.3.5.2. Prepare and submit DOT-SP, CAA and Certificate of Equivalency (COE) packages IAW AFMAN24-210 procedures.

4.4. Hazardous Materials Training. All DoD personnel who handle, inspect, package and ship hazardous materials via military air must receive proper training. The training shall be conducted

as required by AFMAN24-604, Title 49 CFR, PART 172, Subpart H and Service policy directives. This training must be completed by LCPS and AFSCPS involved in the design and review of special packaging instructions containing HAZMAT and testing of performance oriented packaging containers. New employees must be trained within 90 days of starting the job. **(T-2)**

Chapter 5

PACKAGING DATA AND SPI DEVELOPMENT:

5.1. Packaging Data Development. Sustainment packaging data developed in-house must be prepared in accordance with MIL-STD-2073-1. It is not necessary to complete or maintain a hard copy of the DD Form 2326 if data is electronically prepared and entered into the AFMC packaging, transportation, and regulated material system (PT&RM), D035T portion of the SCS. **(T-2)**

5.1.1. During an initial creation of a new item in D035T, a generic set of values is placed in several database fields to populate Packaging and Transportation data fields IAW the Federal Logistics Information System (FLIS) Technical Procedures. Systems operators must have access to the required D035T menus in order to properly update mandatory data elements IAW FLIS to successfully exchange logistics information with DoD and AF systems of record.

5.1.2. Item of Record Update. Ensure packaging codification changes are properly vetted with items managers and equipment specialist to ensure all associated cataloging and logistics fields updates maintain the integrity of the item of record in the Web Federal Logistics Information System (WebFLIS).

5.1.2.1. Sustainment ITSC updates or changes will be vetted with the platform Life Cycle and the Sustainment Program Office. Wholesale and retail storage activities will need to comply with the ITSC updates. AFSCPS are only responsible for procuring and updating changes at the request of the prime Program Office lead.

5.2. Packaging Data Approval. Packaging data procured from contractors must be approved by the responsible AFSCPS prior to use or entry into the D035T (PT&RM) data system. This applies to coded and SPI data. Stamps are used by authorized AFSC packaging specialists to indicate approval of the packaging data. The center of this diamond-shaped stamp includes a number that identifies both the responsible sustainment packaging office and the authorized packaging specialist. These identification numbers are listed below. **(T-3)**

Figure 5.1. Packing Identification Numbers.

ALCStamp Numbers
OC-ALC1-20
OO-ALC21-40
WR-ALC81-100

:

5.3. Preparing SPIs. Each ALC packaging office maintains SPIs for items requiring special packaging techniques, materials, or containers. The detail must be sufficient for reproduction by base packaging personnel for return to a repair facility, or prepare them for redistribution. Whenever possible, SPIs should be designed so that they can be applied to groups of similar items. If feasible, a short-life container shall be designed as an alternate pack to long-life containers. SPIs are maintained for all items with ERRC Codes/Designators C/XD1, S/ND2, and T/XD2 that are subject to shipment as a single item between field activities and repair facilities. (See DoD 4100.39-M, Federal Logistics Information System, Volume 10, Table 69). These might not always

be "true" SPIs, in the sense that discrete SPIs are not required for items suitable for fast packs or standard packs. However, correlating the reparable item NSN with a SPI number of some type maintains the integrity of the AF reusable container program and conserves AF and DoD funds. TO 00-85B-3, *How to Package Air Force Spares*, provides details on the mandatory coding system imbedded in the "pseudo" SPI number assigned to discrete, fast packs and standard packs. **(T-2)**

5.3.1. Format and Requirements. The suggested order of preference for types of packaging techniques to be used, subject to cost effectiveness, is as follows: **(T-3)**

5.3.1.1. Standard pack.

5.3.1.2. Fast pack.

5.3.1.3. Discrete SPI drawing.

5.3.1.4. This suggested order of preference should not be the sole determining factor in the type of technique above. All items shall be packaged in the most cost effective container that will adequately protect the item (industry-standard sizes are preferred). Prior to selection, each type shall be evaluated for practicality and cost-effectiveness (labor, materials, weight, cube, cost of using non-industry-standard vs. industry-standard container sizes, etc.) evaluating for practicality and effectiveness as well as well as fit and protection provided for the item in question. A computer-generated form may be used for SPIs developed using the CADS. The general format and requirements for SPIs MIL-STD-2073-1.

5.3.2. SPI Development on CADS. CADS is used to produce SPI and technical illustrations for assigned items and to revise SPIs. Any other systems require approval from AFPTEF. General criteria for SPI development are:

5.3.2.1. Packaging designs requiring revision due to known problems.:

5.3.2.2. Active depot reparable without a SPI.

5.3.2.3. New SPIs received from contractors.

5.3.2.4. Revisions to SPIs for administrative changes.

5.4. SPI Numbering. The SPI numbering system provides for three categories of SPIs. Each is limited to ten character positions. Each category shall be identifiable through use of distinctly different alphanumeric arrangements within the ten positions. The first character position for each of the three categories shall always be the alpha service designator (A = Army, D = DLA, F = Air Force, M = Marine Corp, N = Navy). SPI numbers shall not be changed due to national item identification number (NIIN) changes (see TO 00-85B-3 and MIL-STD 2073-1). **(T-2)**

5.4.1. Discrete SPI Numbers. A Discrete SPI has a ten position number using the Service designator (alpha) in the first position and the NIIN for the remaining nine positions (ex. A001234567). This NIIN may represent a single item or a family of items.

5.4.2. Fast Pack Numbers. Fast packs (and standard packs) are given "pseudo" SPI numbers to facilitate effectiveness of the AF reusable container program. There are no drawings required to pack a fast pack (see TO 00-85B-3). The fast pack ten position number (ex. A000004XA5) consists of the following:

Figure 5.2. Fast Pack Numbers Explained.

Position 1	Military service/agency designator (alpha IAW Section II, TO 00-85B-3)
Positions 2 - 6	Five zeroes (numeric)
Position 7	Method of Preservation (numeric IAW Section III, TO 00-85B-3)
Position 8	"X" (fast pack unique designator IAW Section II, TO 00-85B-3)
Positions 9 - 10	Fast pack size code (alphanumeric IAW Section IV, TO 00-85B-3)

Note: The last three characters, though, are the most identifiable indicator of a fast pack and are printed on each container. To assist depot packing and crating personnel, the fast pack NSN shall be annotated in the "D" record of the DD Form 2326 when developing and entering packaging data to AFMC data systems (see TO 00-85B-3).

5.4.3. Standard Pack Numbers. Standard packs (and fast packs) are given "pseudo" SPI numbers to facilitate effectiveness of the AF reusable container program. There are no drawings required to pack a standard pack (see TO 00-85B-3). The standard pack ten position number (ex. A000004F01) consists of the following:

Figure 5.3. Standard Pack Numbers.

Position 1	Military service/agency designator (alpha IAW Section II, TO 00-85B-3)
Positions 2 - 6	Five zeroes (numeric)
Position 7	Method of Preservation (numeric IAW Section III, TO 00-85B-3)
Position 8	Simple Instruction Code (alpha IAW Section V, TO 00-85B-3)
Positions 9 - 10	Standard pack size code (numeric IAW Section V, TO 00-85B-3)

5.5. SPI Dates . Only current, five-digit "ordinal dates" are used. The ordinal date consists of two characters for the year followed by three characters for the calendar day of the year (ex. 03147). To date the fast pack and standard pack SPI number, use the ordinal date on which the item was assigned to the fast pack or standard pack. The addition or deletion of an item to an existing SPI does not constitute a change in the SPI ordinal date.

5.6. SPI Distribution Statement. Apply the applicable distribution statement IAW DoDI 5230.24, *Distribution Statements on Technical Documents*, and MIL-STD-31000A, *Technical Data Packages*. **(T-2)**

5.7. New SPI and Revisions. Coordinate SPI revisions in advance and IAW TO 00-5-3, AF Technical Order Life Cycle Management and AFI 24-602V2. **(T-3)**

5.7.1. Confirm with Item Manager that cataloging and logistics data fidelity is achieved with all corresponding systems prior to final SPI approval. **(T-2)**

5.7.2. Coordinate SCS D035T SIS SPI and packaging data updates with AFLCMC/HIS SCS Capability Delivery Team IAW DoDI 4140.69. See **Chapter 2, paragraph 1.9.18** (T-2)

5.8. Distributing Copies of SPIs. Each new or revised SPI is uploaded to SPIRES website for direct downloading purposes within 5 workdays of completion and distributed to offices below as applicable: **(T-3)**

5.8.1. A copy of each SPI showing a long-life reusable container must be sent to CDRS management office, for inclusion into the CDRS.

5.8.2. A copy must be sent to the item manager, equipment specialist and the prime ALC DLA Defense Depot Distribution Center.

5.8.3. The original is maintained at the responsible ALC packaging office.

5.9. Request for Copies of SPIs.

5.9.1. SPIRES can be accessed at; **https://lts.cce.af.mil/**. SPIs can be downloaded directly for viewing and printing. Submit DD Form 2875, Systems Authorization Access to gain access to the SPIRES website.

5.9.2. SPI Audit. Inconsistencies between the SCS D035T (PT&RM) and SPIRES systems are minimized by a weekly or daily update process. A report generated by SPIRES from the Developer's Menu listed as "Data Inconsistencies" shows the differences between the D035T and SPIRES by source of supply (SOS) codes. An audit of packaging requirements must be accomplished when new updates to hazardous materials regulations are released. These discrepancies will be corrected as soon as possible by the responsible AFSC packaging specialists.

5.10. Marking SPI Containers. Mark applicable SPI number on the exterior container identifying it as the prime container for shipment and storage of a particular item(s). Fast packs and standard packs are excluded. Additional marking requirements are determined by the ALC packaging office. Component parts of SPI containers which may be separated from the pack are identified with the SPI number. Those component parts, such as cushioning and dunnage, are specific to a particular stock numbered item and sometimes facilitate handling within the repair process. **(T-2)**

5.11. Internal Industrial Operations Materials Handling. The ALC packaging office section responsibilities include design and development of material handling devices and/or containers used within industrial operations. AFSCPS shall work in cooperation with equipment specialists, engineers, and technicians to determine special item characteristics of prime items as early as practical in the life cycle of items.

5.11.1. Material Handling and Technical Assistance Requirements of Prime Items. The AFSCPS provides technical assistance and support to the responsible engineering staff to ensure availability of adequate handling devices and/or containers. This is accomplished by assigning a packaging specialist to work with the product directorates' engineering functions on actions related to improving handling methods and devices. Packaging specialists shall provide the following assistance to the product directorates' engineering functions:

5.11.1.1. Information regarding special handling instructions for hazardous materials, electrostatic sensitive devices, blocking and bracing and other packaging features in accordance with regulations and limitations of the user.

5.11.1.2. The development of SPIs to facilitate materials handling within an industrial operations environment and as a final pack in the transportation environment.

5.11.1.3. Guidance pertaining to future transportation, packaging and handling plans to ensure the compatibility of each directorate's handling methods and systems with each other and with the AF transportation, packaging and handling program.

5.11.1.4. Information relative to limitations of the existing industrial operations resulting in damage to assigned prime items.

5.11.1.5. Surveillance of the industrial operations handling practices and equipment, conducted in conjunction with each directorate's engineering function or their material systems quality control program.

Chapter 6

PACKAGING DATA SYSTEMS.

6.1. General. The AFSC and other AFMC activities as applicable, shall use and support approved packaging data systems. Contact the packaging specialist prior to upgrading or developing packaging data systems, or prior to developing system applications that impact or interface with existing packaging data systems.

6.2. Special Packaging Instruction Retrieval and Exchange System (SPIRES). SPIRES database is managed and maintained by the AFMC/A4RT. It is an automated multi-response system that serves as the official central repository for AF managed SPIs. SPIs are accessible 24 hours a day via the website. SPIRES is a critical link in the distribution of packaging information to the DoD components worldwide.

6.2.1. HQ AFMC is responsible for system upgrades, performance monitoring, and enhancing customer support through recommendations and evaluations to define future enhancements. In addition, AFPTEF will conduct periodic working group meetings and assist the LCPS and AFSCPS to ensure efficient operations. **(T-2)**

6.3. Computer Aided Design System (CADS). The ALC packaging office and other AFMC activities as appropriate, shall maintain graphics support capability, including drafting, technical illustration, and CADS. The AFSC packaging offices maintain responsibility for the local operation of the CADS. **(T-2)**

6.3.1. The CADS shall be used to produce SPIs and technical illustrations for assigned items, and to change SPIs which require revision.

6.3.2. ALC Packaging offices are responsible for the day-to-day operations of their respective CADS, system upgrade, and development of system requirements for new equipment. CADS equipment shall be kept operational and upgraded as necessary to ensure acceptable working conditions for the ALC packaging offices. AFPTEF serves as a resource for questions regarding CADS system management.

6.4. Stock Control System (SCS) D035T Shipping Information System (SIS). The AFSCPS shall use the SCS D035T SIS database to enter prepared packaging data (IAW MIL-STD-2073-1) and HAZMAT regulated materials data. AFSCPS are responsible for accepting and approving contractor-prepared packaging data and regulated materials data. This data shall be entered in the SCS D035T SIS database. The SCS D035T (SIS) is primarily available at the ALC packaging offices and provides on-line capability for interrogations, mass interrogations, data entry and clear text interpretations of packaging, transportation, and hazardous materials data. It also produces other reports and data products. The point of contact for the SCS D035T SIS is AFMC/A4RT. **(T-2)**

6.4.1. User Identifications/Passwords for SCS D035T SIS Data Entry. The ALC packaging offices and AFMC/A4RT are the only organizations authorized access for packaging data entry purposes. AFMC/A4RT will enter clear text data and common item table updates as revisions to MIL-STD-2073-1, occur. The AFSCPS shall enter packaging data. All other users have "read only" access. Therefore, it is essential that AFSC packaging specialists and AFMC/A4RT maintain current packaging information.

6.4.2. Entry of Nonprime AF Packaging Data. Storage at any ALC must include prime and nonprime items. The AFSCPS may enter data in the blank SCS D035T SIS fields for prime and nonprime items in order to package them for shipment and storage. The prime AFSC packaging specialist must be notified by a SCS D035T (SIS) change notice that a nonprime AFSC packaging specialist has entered data for an item. The prime AFSCPS may accept or overlay it with their own data. Existing data on a nonprime item shall not be changed. Contact the prime AFSCPS packaging specialist if changes to existing data are needed.

6.4.3. Entry of Non-AF Packaging Data in SCS D035T (SIS). Non-Air Force assets may be stored at an ALC. The depot packing activities require access to the packaging data for those items when the AF is designated as a secondary inventory control activity (SICA). This packaging data is developed by packaging personnel at the managing military service/agency, not by AFMC personnel. In order for depot personnel to access the data, it must be resident in SCS D035T SIS or another central system, such as the Federal Logistics Information System (FLIS) at Battle Creek, MI. If the non-AF data is not resident in the FLIS, the AFSCPS cannot establish the item in SCS D035T SIS until a cataloging action is accomplished in the FLIS. The AFSC packaging specialists must enter this data, exercising care to enter it exactly as the managing military service/agency has prepared it. To minimize pipeline times, the AFSC packaging specialists must provide this data entry support expeditiously, usually within 24 hours from the time the depot requests it.

6.4.4. SIS Packaging Data Products. SCS D035T SIS produces the following data products:

6.4.4.1. Unmatched Clear Text Summary Report, PCN A-D035T-601-QT-L59, indicates that a data code from MIL-STD-2073-1, was interrogated for a clear-text interpretation, but SCS D035T (SIS) was unable to locate clear text for the code. OO-AFSC forwards this product to HQ AFMC/A4RT for review to determine if clear-text codes should be added to SCS D035T (SIS). HQ AFMC/A4RT shall determine causes for unmatched data (input error, invalid or old data code entered, clear-text data not available) and takes appropriate action based on the data analysis (add clear-text, alert the responsible AFSCPS of any outdated data codes, or other appropriate action). This reporting requirement is exempt from licensing in accordance with AFI 37-124, The Information Collections and Reports Management Program; Controlling Internal, Public and Interagency AF Information Collections.

6.4.4.2. Stock-List Change Notice, A-D035T-801-DA-L11, notifies the affected AFSC of stock-list change actions that impact their prime items.

6.4.4.3. Packaging Block Maintenance Exception List, A-D035T-601-DA-L10, identifies invalid data code entries.

6.4.4.4. SIS Deletion Notice, A D035T-601-WK-L50, notifies the prime AFSCPS that the D043A (Master Item Identification Database) system has deleted an NSN. Upon notification, the prime ALC packaging office should remove any associated SPIs from their files and notify DLA packaging specialists for updating their prime SPI file which supports DLA packaging operations.

6.4.4.5. The following products result from interface with the G019 (Maintenance Items Scheduled to Repair System):

6.4.4.5.1. The Quarterly Packaging Container Requirements (SPI), A-D035T-801-QT-L04, is provided to each prime ALC packaging office and depot packaging function. The product lists, in SPI number sequence, the quantity of each SPI container required for the fiscal year.

6.4.4.5.2. The Quarterly Packaging Container Requirements (Non-SPI), A-D035T-802-QT-L04, is provided to each prime ALC packaging office and depot packaging function. The product lists, in container dimension sequence and type of container, the quantity of each type and size of container required for the fiscal year.

6.4.5. Hazardous Material Data Products. Data products include: **(T-2)**

6.4.5.1. SIS Regulated Material Block Maintenance Exception List, A-D035T-601-DA-L12, notifies user that codes entered in Regulated Block Maintenance are incorrect.

6.4.5.2. Nonprime SIS Change Notice (Regulated), A-D035T-603-DA-L51, are notices produced to the prime ALC packaging office identifying data changes that have been made by a nonprime ALC packaging management section user. The ALC packaging office has the option of overlaying the data with their own data, or accepting the nonprime input.

6.4.5.3. Nonprime Change Notice (Regulated Supplemental Data), A-D035T-604-DA-L51, are notices produced to the prime ALC packaging office identifying supplemental data changes that have been made by a nonprime packaging management section user. The prime ALC packaging office has the option of overlaying the data with their own data, or accepting the nonprime input.

6.4.5.4. Regulated Material Block Interrogation Report (Dangerous Goods Regulations (IATA Data), A-D035T-602-DA-L28, reports are produced in response to multiple field block interrogation requests of IATA data.

6.4.5.5. Regulated Material Block Interrogation Report (IMO Data), A-D035T-603-DA-L28, is produced in response to multiple field block interrogation requests of IMO data.

6.4.5.6. Regulated Material Block Interrogation Report (49 CFR Data), A-D035T-604-DA-L28, is produced in response to multiple field block interrogation requests of DOT data.

6.4.6. Reporting SCS D035T (SIS) System Deficiencies/Suggesting System Enhancements. AFSCPS will follow the procedures below when recommending changes to the SCS D035T (SIS) System:

6.4.6.1. AFSCPS Users. Document deficiencies or enhancements through the functional OPR (FOPR). The user must provide the FOPR with a "screen dump print-out" of all suspected system deficiencies and provide them to the FOPR for resolution. The FOPR must attempt to resolve the deficiency or contact the SCS D035T SIS system OPR at HQ AFMC/A4RT. Deficiencies may be also submitted by accessing the Automated Problem Reporting System (APRS) (Dimensions). Submit suggestions for system enhancements to the SCS D035T (SIS) system OPR, documenting savings, benefits, costs, and any other pertinent information that shall assist the evaluator in determining feasibility for implementation. Submissions may be made with an AFMC Form 321, *C&I Requirements Document*, or through the normal correspondence process with the SCS D035T (SIS)

system OPR or by email: **SCSHelpD@seguetech.com**, and toll free number 1-800-331-4817.

6.4.6.2. Sustainment Users. The SCS D035T (SIS) system OPR must document/handle system deficiencies in a similar manner as above, by resolving the deficiency at the lowest level or submitting it to the APRS (Dimensions). System enhancements received from other activities must be evaluated to determine applicability, cost effectiveness and AFMC-wide application. An AFMC Form 321 must be prepared by the system OPR and submitted to the SCS D035T (SIS) SPO for resolution. The SCS D035T SIS system OPR shall also ensure that enhancements are:

6.4.6.2.1. Not duplicative of other SIS change requests.

6.4.6.2.2. Not duplicative of ongoing system efforts occurring at higher levels (AF/DoD).

6.4.6.2.3. Are appropriately coordinated if impacting other activities such as DLA or FLIS.

6.4.6.3. Data Products Changes. ALC packaging offices should notify the SCS D035T SIS system OPR (and FOPR) regarding SIS data products that are no longer required. The SCS D035T SIS system OPR will analyze this data, coordinate it with the other users, and contact the SCS D035T SIS SPO if it is appropriate to delete the products. Any new product requirements should be handled in a similar manner.

6.5. Other Hazardous Materials Data System Responsibilities. The responsible AFSCPS is responsibility for submitting updates to the DoD Performance Oriented Packaging (POP) Program. The responsible AFSCPS must provide all additions, changes, and deletions to the packaging, transportation, and handling requirements for their prime items. **(T-2)**

6.5.1. DoD POP Program. The POP program provides a DoD listing of packaging configurations meeting the UN performance standards. IAW AFMAN24-210 POP testing activities shall forward all test reports to include DOT approved third party test from approved test facilities to DDC J3-MA Packaging Team, Building 81, "J" Avenue, 2ND Floor East Wing, New Cumberland, PA 17070-5000. Contact them for input format requirements. To change data, submit only the page that contains the changed data. Recertification test reports must be conducted prior to the expiration date of the test report currently loaded in the database. For deletion of data, contact the above address for instructions. **(T-2)**

Chapter 7

PACKAGING DESIGN AND TESTING

7.1. General . The AFSC packaging management sections' test activities are normally concerned with completed pack tests involving free-fall and rotational type drop tests, and repetitive shock tests. The purpose of these tests is to verify, by means of standard test procedures, new pack designs.

7.2. Performance Oriented Packaging (POP) Tests . AFPTEF and AFSC/406th Supply Chain Management Squadron (SCMS) packaging office test activities perform in-house POP testing or contract outside laboratories to perform testing. Test results must be sent for inclusion in the DoD POP data bank in accordance with the instructions provided in **Chapter 6**.

7.3. AFPTEF Capabilities. AFPTEF provides in-house engineering capability for packaging design, prototype and testing. AFMC activities must contact AFPTEF for support capabilities prior to contracting out for specialized containers or engineering evaluation. All activities engaged in development or procurement of specialized containers shall send a search request in accordance with DI-PACK-80683 prior to new container design and DI-PACK-80684 (MIL-STD-2073-1) following new container development, to **AFPTEF** before initiating a new design or a production program. Contact the **AFPTEF** to ensure standardization and promote reusability. **(T-2)**

7.4. Using AFPTEF Services. Consider one of the following when requesting support:

7.4.1. Long-Life Container Support. AFPTEF must be notified when long-life, complex, or highly engineered containers are required. Review is mandatory on specifications and Statements of Objectives (SOO) before procuring new design long-life containers. Projects involving long-life containers must be coordinated with the ALC item management organization responsible for the item/system involved. AFPTEF will determine the extent of their participation in establishing the design criteria, writing specifications, preliminary design reviews (PDRs) and critical design reviews (CDRs), writing of test plans, evaluation of design, first article acceptance, and physical configuration audits which require a major engineering effort.

7.4.2. Computer Aided Design System (CADS) Engineering Solutions. AFPTEF is responsible for providing computer-aided engineering investigations and solutions on the CADS through finite element modeling and simulated testing programs.

7.4.3. Standardized Test Methods. AFPTEF develops and standardizes test methods and procedures to be used by the ALC packaging offices during evaluation of completed pack designs. Standardization is necessary from a single source to provide validity and comparability of test results between different AFSC organizations. To achieve standardization of test results, it is necessary for AFPTEF to approve equipment and instrumentation used by the ALC packaging offices for packaging tests.

7.4.4. AFPTEF testing services should be considered when:

7.4.4.1. Testing requirements or problem areas include environmental testing over a long period or through use of environmental chambers.

7.4.4.2. Items require special environmental or transportation protection requirements above those normally encountered in a distribution cycle.

7.4.4.3. Technical or engineering differences exist between the ALC packaging offices and container designers for major systems or equipment.

7.4.4.4. In-house or field tests of completed packaging systems require instrumentation to monitor quantitatively the levels of shock and vibration developed on the packaged equipment/material.

7.4.4.5. Performance design curves are required on package cushioning materials.

7.4.4.6. Requirements exist to test materials for which AFPTEF is the DoD lead agency (AFMAN24-206_IP).

7.4.4.7. Testing required exceeds local capabilities.

7.5. Requests for Assistance. AFPTEF assistance may be requested by phone, email, through PACKWEB, or by submission of the AFPTEF Engineering Support Request form (Attachment 3). Regardless of contact method, the Support Request form can act as a guide to the information that will be required. Response to requests for assistance is dependent on manpower, equipment availability, and project priority. A determination of the action to be taken is provided to the requesting organization within ten (10) days after receipt of request.

Chapter 8

PACKAGING COST REDUCTION AND CONTROL

8.1. General. ALC packaging offices are responsible for activating, aggressively pursuing, and closely monitoring a continuous program to control and reduce AFMC, AFLCMC, ALC AF, and DoD packaging costs while improving packaging sustainability.

8.2. Packaging Cost Minimization Program. . The successful implementation of a packaging cost minimization program requires the participation and coordination of the ALC packaging office with: **(T-3)**

8.2.1. Components located on the base involved with packaging.

8.2.2. End users who are involved in physically packaging materiel.

8.2.3. Personnel involved in acquiring materiel which requires packaging. Efforts must be directed toward:

8.2.3.1. Obtaining optimum packaging design, while using DoD and or industry standard container sizes and materials wherever possible.

8.2.3.2. Use of new and improved materials and methods.

8.2.3.3. Use of commercial packaging, IAW ASTM D3951, when it meets anticipated distribution conditions,

8.2.3.4. Specifying reusable containers and packaging materials whenever practical.

8.2.3.5. Careful analysis of packaging costs.

8.2.4. Actions that ALC packaging office can take to achieve efficiencies include, but are not limited to:

8.2.4.1. Developing effective and economical materials, processes, and procedures for materiel or systems and are used within contractor facilities. For example, emphasizes elimination of unnecessary heavy and costly containers.

8.2.4.2. The ALC packaging office should inform contracting officers that it can assist in packaging cost analysis. This expertise should be utilized in analyzing and evaluating contractor’s proposed packaging charges.

8.2.4.3. Identify and recommend potential new uses for cataloged surplus long-life reusable containers to the prime item manager in accordance with AFI 23-101, *Materiel Management policy*.

8.2.5. The CDRS shall:

8.2.5.1. Provide an in-depth review of technical data on existing container designs and surplus assets to determine reusability in new defense system acquisitions or existing programs.

8.2.5.2. Request cost saving documentation achieved through the use of CDRS for the reuse of existing container or container designs from the development or procurement activity.

8.3. Packaging Services Contracts (PSC). A PSC should be used when savings can be effected by removing the packaging requirements from the prime contractor and placing it with another contractor. When requested by contracting personnel, other commands, services or agencies, the depot shall provide estimated costs based on PSCs or obtain estimated costs from Defense Distribution Depot packaging operations.

Chapter 9

PREVENTION AND CONTROL OF PACKAGING DISCREPANCIES:

9.1. General. Each ALC packaging office shall establish and maintain a program that minimizes deficiencies resulting from items improperly packaged.

9.2. ALC Packaging Office Section Re**sponsibilities.** AFSCPS shall: **(T-2)**

9.2.1. DLM 4000.25, Volume 2, Chapter 17. Review automated *Supply Discrepancy Report (SDR)* information copies and summary reports from WebSDR to identify trends in packaging deficiencies. The DoD WebSDR systems automates the Standard Form (SF) 364, *Report of Discrepancy*, paper copy.

9.2.1.1. Investigate, notify, and assist product support managers and/or item managers with organic spare and repair contracts packaging supply discrepancy reports (P-Coded) for timely corrective action. Utilize WebSDR to monitor SDRs submitted against contracts for analysis, trends, correction, and individual national stock numbers. Pursue corrective action on SDRs submitted against DLA by end-customers due to improper packaging.

9.2.1.2. Develop, revise, modify, and test packaging requirements as needed when an SDR indicates repetitive damage to an item despite compliance with applicable packaging directives.:

9.2.1.3. Notify the DLA depot packaging organization of any changes to ensure that repackaging is accomplished and preclude further packaging damage.

9.2.1.4. Ensure detailed packaging instructions are provided to using activities when deficiencies result from improper packaging and prevent recurrence.

9.2.1.5. Assist depot packaging organization in determining the cost of correcting discrepancies.

9.2.2. Take necessary action to correct deficiencies resulting from improper preservation and packing. Corrective action can be, but is not limited to:

9.2.2.1. Training on an individual basis for packers/workers on protection of particular items. This type of training is informal in nature and does not require establishing a formal training program. Any such training or guidance should be accomplished only with the permission or participation of the supervisor of the individuals/organization concerned.

9.2.2.2. Compliance with applicable directives.

9.2.2.3. Notifying the responsible sustainment packaging specialist of packaging damage to items despite compliance with applicable directives.

9.3. Exceptions to Discrepancy Reporting Requirements. SF 364s are prepared and acted upon according to DLM 4000.25-M. An SDR is prepared for an item not packaged according to applicable packaging instructions even when there is no item damage. Exceptions to the requirement for an SDR when there is no item damage are:

9.3.1. Packages dated before the current SPI date.

9.3.2. The responsible sustainment packaging specialist has approved the use of a contractor pack by indicating the prime ALC and a deviation number in the lower right corner of the exterior container (example, WR-001). **(T-3)**

9.3.3. When using a contractor pack, annotate "Contractor Pack" on the DD Form 1348-1A, ***Issue Release/Receipt Document***, or the condition tag. Contractor packs can be recognized by the contractor data markings required by MIL-STD-129, such as the purchase or delivery order number and the name and address of the contractor.

9.3.4. IAW T.O. 00-85B-3, the next larger size type I or type II fast pack (**PPP-B-1672**, *Boxes, Shipping, Reusable with Cushioning*) can be used for shipments with uniform materiel movement and issue priority system (UMMIPS) priority 01-08 if the required type I (vertical) or type II (slide) container isn't available.

9.3.5. The responsible AFSCPS has approved an alternate pack and provided a deviation number which is indicated in the lower right hand corner of the exterior container (WR-001).

9.3.6. Using larger standard pack containers for shipment of unserviceable items when correct size not available.

Chapter 10

RESPONSIBILITIES WITH OTHER ACTIVITIES:

10.1. General. This chapter outlines additional packaging program responsibilities between the ALC packaging office and other AF Bases and DoD agencies.

10.2. Base Requests for SPI Packs. When a container or pack prescribed by an SPI has been lost or damaged and a special packaging design creates an essential requirement that cannot be fabricated by the base or obtained through local supply channels, bases may formally submit their requirements to the prime ALC packaging office.

10.2.1. All requests for containers must include an information copy to the major command of the requesting base and a fund cite to cover materials, labor, and transportation costs. AFI 24-602V2 contains specific guidance on base requests for SPI packs.

10.2.2. The responsible ALC packaging office may either grant a waiver from the SPI requirements or forward the request to the depot packing function to supply the SPI pack by the most economical means. These services should be provided on an exception basis since AF funds are an issue (the requester must fund the costs associated with the container manufacture, labor, and transportation costs).

10.2.2.1. Waivers are required each time a container is used in place of the original SPI. A waived container shall not be reused unless another waiver is granted. The waiver number must be placed only on a Non-SPI container. After its use, the waiver number must be obliterated before further use of the container.

10.2.2.2. Depot packing functions are not staffed nor funded to be a volume manufacturer of containers for using activities. Also, some SPIs have design characteristics that are beyond the capability of depot packing operations to manufacture and must be procured from commercial sources.

10.2.3. Based on availability of containers or proximity of the requesting activity to the prospective supplier, the prime ALC packaging office will determine one of the following:

10.2.3.1. Direct the requestor to the depot packing organization at the managing ALC to supply the SPI pack to the requesting activity.

10.2.3.2. Forward a copy of the SPI and redirect the request to the ALC that has geographical responsibility for providing technical assistance to the requesting activity. The responsible ALC packaging office requests their depot packing activity to supply the container to the requesting activity.

10.2.3.3. The contractor is responsible for DLA repackaging costs when shipping repairable components to DLA facilities not properly packed IAW the contract solicitation.

10.3. Support to Other DoD Agencies. Packaging services are developed and performed as specified in Depot Maintenance Interservice Support Agreements (DMISAs). Provide technical assistance and packaging training as required to Program Support Managers, Equipment Specialists and Item Managers.

10.4. Depot Packaging Organizations. At the ALCs, continuing coordination between the ALC packaging office and depot packing organizations is required. The depot packing functions are

aligned with DLA, but adhere to packaging requirements developed by ALC packaging offices when packing AF assets.

10.4.1. ALC Consultation Services Provided to DLA Depot Packaging Operations. ALC packaging office personnel will:

10.4.1.1. Provide technical guidance and assistance to depot packing operations in achieving economical packaging, plan for surge requirements, and other related packaging matters. Continuous liaison is required to ensure effective results.

10.4.1.2. Provide technical assistance when packaging instructions are not available as quickly as possible to avoid shipping delays. This technical input will assist DLA in constructing containers and applying economical packaging materials, dunnage, processes, and procedures.

10.4.1.3. Recommend changes in container design and construction, packaging instruction, methods, and techniques to ensure proper preservation and packing of AF property. Suggestions that enhance the packaging by improving current packaging methods or reduce cost may be adopted. The responsible ALC packaging office will evaluate the packing and crating organization's suggestions to ensure that the integrity of the packaging will be maintained if the suggestion is adopted. However, DLA or contracted packing and crating organizations are not to deviate from AF prescribed packaging without first obtaining the consent of the responsible ALC packaging office. If required, revise the SPI when changes are made to the container configuration.

10.4.1.4. Assist depot packing supervisors with information that may reduce packaging costs. For example, the latest GSA stock list could be used to compare costs of different packaging materials which serve similar or identical purposes.

10.4.1.5. Require reclamation and reuse of containers and packaging material, placing emphasis on retaining specially designed packs for use in reshipment or return of like items. This is a function of the CDRS at AFLCMC/EBDJ.

10.4.1.6. Provide guidance and assistance to ensure that only material which is adequately protected to withstand local climatic conditions is placed in outside storage.

10.4.1.7. Assist with packaging data requirements as requested.

10.4.1.8. Provide supplemental instructions regarding packaging of disassembled or incomplete items in the specified containers. MDR exhibits are an example of items subject to disassembly. Supplemental instructions may be included in the SPI when disassembled turn-ins are expected routinely. When supplemental instructions cannot be provided, the responsible ALC packaging office will review/approve the packaging recommended by the depot packing component.

10.4.2. Packaging Materials Reclamation Groups (PMRG). The packaging materials reclamation group assures coordination between the installation activities that generate the requirement for reusable packaging materials and the activities responsible for reclaiming and reusing them. Semi-annual meetings with participation from appropriate organizations will ensure the continued effectiveness of the reclamation program, thereby conserving AF and DoD funds.

10.4.2.1. Membership. Membership on packaging materials reclamation groups shall include the BCM or designated representative from the ALC packaging office, DLA depot packaging and storage, product directorates, organization PMRG representative, Unit Container Manager (UCM), and any AFSC/ALC and/or tenant organizations as appropriate to each base. A representative from the local Defense Logistics Agency Disposal Services (DLADS) may also be included in the working group. Chairmanship of the group should be determined locally. Since AFSC and DLA maintain a vested interest in the reclamation program, it may be feasible to rotate or share chairmanship between DLA and AFSC members.

10.4.2.2. The BCM is appointed IAW AFI 24-602V2, Chapter 1, paragraph 1.4 and shall: **(T-2)**

10.4.2.2.1. Schedule reclamation meetings every six months as a minimum or as needed.

10.4.2.2.2. Institute an on-the-job training to ensure containers are opened and unpacked carefully to avoid damage to containers/components.

10.4.2.2.3. Determine which containers and materials are reclaimed or disposed of by using activities.

10.4.2.2.4. Ensure reclaimed containers/materials are protected from inclement weather during recovery, collection and storage.

10.4.2.2.5. Develop procedures to store and separate reclaimed containers from refuse, DLADS, and supply pickup sites.

10.4.2.2.6. Recover, collect, screen, and inspect for materiel inadvertently left in containers, and storing containers and materials.

10.4.2.2.7. Ensure materiel found in reclaimed containers are returned to proper accountability and corrective action is taken to prevent usable materiel disposal.

10.4.2.2.8. Obtain containers and materials from storage; screen and/or dispose of excess materials.

10.4.2.2.9. Utilize the Reusable Container Worldwide Warehouse (RECON) website (**https://recon.wpafb.af.mil/**) to identify AF excess containers and/or packaging material.

10.4.2.2.10. Ensure provisions of AFI 23-101, are followed for long-life containers and TO 00-85B-3, *How to Package Air Force Spares*, is followed for short-life containers.

10.4.2.2.11. Publicize to the installation the benefits of reclaiming containers and packaging materials.

10.4.2.2.12. Assist with accurate calculated reclamation cost avoidance realized.

10.4.3. Cost Avoidance Calculations. Appropriate reclamation cost avoidance calculations include avoidance realized through reused SPI packs, long-life containers, specification containers, cushioning material, and repaired wooden pallets. Materials that are saved and eventually discarded do not contribute to cost avoidance. The cost avoidance is computed by

subtracting the cost of labor and materials used for refurbishment from the replacement cost. Labor, materials, and replacement cost may be established yearly. Other types of cost avoidance may be calculated, but not included in packaging reclamation cost avoidance. Other types include: containers, distribution of serviceable pallets, recovery of items of supply found in containers, and reused lumber.

10.4.3.1. Reclamation Group Meeting Minutes. Meeting minutes must be distributed to appropriate offices, group members and HQ AFMC/A4RT.

Chapter 11

TRANSPORTATION DATA FOR SOLICITATIONS

11.1. General. Transportation specialists support acquisition logistics by providing their expertise in developing and submitting transportation procedures, concepts, and objectives for AF systems and equipment during acquisition for program managers IAW AFI63-101, *Integrated Life Cycle Management*. The contracting officer shall ensure the Purchase Request (PR) package for solicitations, includes a DD Form 1653, *Transportation Data for Solicitations,* showing the PR package was reviewed by AFMC transportation functions (as seen in paragraph **11.1.2** and **11.1.3**). When provided with the PR, (or Funding Document containing all information required on the PR), include the DD Form 1653, which will be an attachment in Section J (List of Attachments) of the solicitation/contract.

11.1.1. AFMC/A4RT Transportation Policy Branch is responsible for developing transportation policy to support AFLCMC and AFSC procurements.

11.1.2. AFLCMC Program Support Branch (AFLCMC/LZSA) prepares, reviews and submits DD Form 1653 for AFLCMC program acquisition requirements.

11.1.3. AFSC transportation specialists prepares, reviews, and submits DD Form 1653 for sustainment of AF programs.

11.2. DD Form 1653 Preparation and Submission. The transportation specialist prepares the DD Form 1653 to accompany requirements for the acquisition of supplies. If required, the completed form will be submitted along with the *DD Form 1423, Contract Data Requirements List (CDRL)* prepared by the contractor, during the initial Data Call and should contain recommendations for suitable Free on Board (F.O.B.) terms and other suggested transportation provisions for inclusion in the solicitation. See *Title 48 Federal Acquisition Regulations System, Code of Federal Regulations (CFR), Part 247.371, DD Form 1653, Transportation Data for Solicitations.*

11.2.1. Complete DD Form 1653 and DD Form 1423 when items are acquired through provisioning action indicating the contractor will develop and submit transportation data if DIDs DI-PACK-80877 (*Transportation Data Report*) has been indicated by selection of block "O" on the DD Form 1653 or included as part of the contractual agreement.

11.2.2. The transportation specialists establish and submit transportation requirements for spares and repair parts acquired as part of the systems or equipment acquisition for inclusion into SOWs and SOOs (**Attachment 5**). If contractor is the C-ICP, the transportation requirements are established by the AFLCMC transportation specialists. In any instance, the AFSC/AFLCMC transportation specialists coordinate with each other, as required.

11.3. D375 Contractor Supported Weapon Systems - Data Exchange (CSWS-DE). The preferred method for Contractors' to provide transportation data for new and/or modified items entering the DOD inventory is by using the D375 CSWS-DE system. CSWS-DE (D375) is an automated system that allows contractors to enter and update transportation data, weights, dimensions, and commodity special handling codes required by the DID (DI-PACK 80877). Once transportation data is updated by contractor in CSWS-DE, the data will electronically update the AF Shipping Information System (D035T), which will in-turn, pass those relevant data details to

the AF Catalog (D043) and Federal Logistics Information System (FLIS). The point of contact for D375 (CSWS-DE) is AFSC/LOMM.

11.4. D035T Stock Control System (SCS) Shipping Information System (SIS). Transportation specialists will use SIS (D035T) database to enter transportation and regulated materials data for AF organically managed inventory items. D035T provides on-line capability for data entry, data interrogations, mass interrogations, and clear text interpretations of transportation data. It also produces data management products and other reports to include daily transactions of relevant transportation data to D043 and FLIS. The point of contact and Functional Manager for D035T (SIS) is AFMC/A4RT.

11.5. Transportation Data and Clauses. The Contractor shall ensure that items can be shipped by the desired mode of transportation via both commercial means and the Defense Transportation System (DTS). All items shall be shipped according to transportation instructions (**Attachment 5**) IAW Section F of the contract and DD Form 1653 (**Attachment 4**) in Section J of the contract.

11.5.1. The Contractor shall provide transportation data for new and/or modified items entering the DOD inventory IAW Federal Acquisition Regulation (FAR) 52.247.53.

11.5.2. The Contractor shall identify and manage any items requiring special handling and/or movement procedures IAW Defense Transportation Regulation (DTR), 4500.9-R, Part II. These items may include hazardous, classified/sensitive, oversize/outsize, or electrostatic sensitive device items, items requiring demilitarization or precious metals.

11.5.3. The contractor shall ensure that classified material is shipped IAW DoD 5220.22.M, National Industrial Security Program Operating Manual. All items shall be protected from the hazards of handling equipment and shall be transportable IAW MIL-STD-1366E, Interface Standard for Transportability Criteria and prescribed DI-PACK. All contractor requirements must be contained within the contract/grant/agreement to be enforceable.

C. MCCAULEY VON HOFFMAN
Major General, USAF
Director of Logistics, Civil Engineering, Force Protection and Nuclear Integration

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 23-101, *Materiel Management Policy,* 22 Oct 2020

AFI 24-602V2, *Cargo Movement,* 13 Jul 2017

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

AFI 63-101/20-101, *Integrated Life Cycle Management,* 30 Jun 2020

AFMAN 24-206, *Packaging of Materiel,* 28 Jul 2020

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AFMAN 24-604, *Preparing Hazardous Materials for Military Air Shipment,* 9 Oct 2020

AFMCMAN20-106, *Provisioning*, 6 Dec 2018

AFPD 24-6, *Distribution and Traffic Management,* 23 Mar 2018.

ASTM 3951-18, *Standard Practice for Commercial Packaging,* 12 Nov 2018

DAFMAN 90-161, *Publishing Processes and Procedures,* 14 April 2022

DLM 4000.25-M, Volume 2, *Defense Logistics Management System,* 13 Jun 2012

DoD 4 525.8-M/AF Supplement 1, *DoD Official Mail Manual*, 15 August 2002

DoD 4100.39-M, *Federal Logistics Information System Procedures,* 8 Mar 2017

DoD 4100.39M, *Federal Logistics Information Systems,* Volume 10, 20 Aug 2020

DoD 4140.65-M, *Issue, Use, and Disposal of Wood Packaging Material*, 21 Aug 2012

DoD 5010.12-M, *Procedures for the Acquisition and Management of Technical Data*, 14 May 1993

DoD 8910.1-M, *DoD Procedures for Management of Information Requirements,* 30 Jun 2014

DODI 4140.69, *Engineering Support Instructions for Items supplied by Defense Logistics Agency (DLA)*, 30 Sep 2016

DoDI 5000.2, *Operation of the Defense Acquisition System*, 23 Jan 2020

DoDI 5230.24, DODI 5230.24, *Distribution Statements on Technical Documents,* 23 Aug 2013

DoDM 4140.01, Volume 9, *DoD Supply Chain Materiel Management Procedures: Materiel Programs*, 16 May 2019

DOT Title 29, *1900-1910, Code of Federal Regulations (29 CFR), Occupational Safety and Health Administration, Department of Labor*

DOT Title 49, *Code of Federal Regulations* (49 CFR), *Transportation*

FED-STD-313, *Material Safety Data, Transportation Data, and Disposal Data for Hazardous Materials Furnished to Government Activities,* 12 Oct 2018

MIL-STD-129, *DoD Standard Practice, Military Marking for Shipment and Storage,* 27 Sep 2019

MIL-STD-1366, *Definition of Materiel Transportation System Dimensional and Weight Constraints*, 31 Oct 2006

MIL-STD-1791A, *Designing for Internal Aerial Delivery in Fixed Wing Aircraft,* 31 Mar 2021

MIL-STD-2073-1, *Standard Practice for Military Packaging,* 22 Apr 2019

MIL-STD-31000A, *Technical data Packages,* 31 Oct 2018

MIL-STD-648, *Specialized Shipping Containers*, 01 Nov 2016

SAE GEIA-STD-0007, Rev. B, *TechAmerica Standard, Logistics Product Data*, May 2013

TO 00-25-195, *Source, Maintainability, and Recoverability Coding of Air Force Weapons, Systems, and Equipment,* 6 May 2011

TO 00-85B-3, *How to Package Air Force Spares,* 1 Mar 2015

Prescribed Forms

AFMC Form 158, *Packaging Requirements*

AFMC Form 321, *C&I Requirements Document*

Adopted Forms:

AF Form 847, *Recommendation for Change of Publication*

DD Form 1348-1A, *Issue Release/Receipt Document*

DD Form 1423, *Contract Data Requirements List*

DD Form 2169, *Special Packaging Instruction*

DD Form 2326, *Preservation and Packing Data*

Abbreviations and Acronyms

AF—Air Force

AFLCMC—Air Force Life Cycle Management Center

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFPD—Air Force Policy Directive

AFPTEF—Air Force Packaging Technology and Engineering Facility

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Sustainment Center

AFSCPS—Air Force Sustainment Center Packaging Specialist

ALC—Air Logistics Complex

APRS—Automated Problem Reporting System

ASTM International—American Society for Testing and Materials International

ATTLA—Air Transportability Test Loading Agency

BCM—Base Container Monitor

BPC—Building Partner Capacity

CAA—Competent Authority Approval

CA—Configuration Audits

CADS—Computer Aided Design System

CAGE—Commercial and Government Entity

CDR—Critical Design Reviews

CDRL—Contract Data Requirements List

CDRS—Container Design Retrieval System

CI—Configuration Item

CID—Commercial Item Description

CIR—Critical Item Review

CLIN—Contract Line Item Number

CLS—Contractor Logistic Support

COE—Certificate of Equivalency

CRT—Contract Repair Teams

CSWS—Contractor Supported Weapon System

DID—Data Item Descriptions

DLA—Defense Logistics Agency

DLADS—Defense Logistics Agency Disposal Services

DLAI—Defense Logistics Agency Instruction

DLMS—Defense Logistics Management System

DMISA—Depot Maintenance Interservice Support Agreement

DoDD—Department of Defense Directive

DoD—Department of Defense

DoDI—Department of Defense Instruction

DoDM—Department of Defense Manual

DOT—Department of Transportation

DOT-SP—Department of Transportation Special Permit

DRRB—Data Requirements Review Boards

DSCR—Defense Supply Center

ECP—Engineering Change Proposals

ERRC—Expendability, Recoverability, Reparability Category

ESD—Electrostatic Discharge

ESDS—Electrostatic Discharge Sensitive

FACI—First Article Configuration Inspections

FAR—Federal Acquisition Regulation

FLIS—Federal Logistics Information System

FMS—Foreign Military Sales

FOPR—Functional Office Primary Responsibility

FSC—Federal Supply Class

HQ—Headquarters

IATA—International Air Transport Association

IAW—In Accordance With

ICAO—International Civil Aviation Organization

ICP—Inventory Control Point

ILCM—Integrated Life Cycle Management

ILS—Integrated Logistics Support

IMDG—International Maritime Dangerous Goods

IM—Item Manager

IP—Interservice Publication

ISPM—International Standard for Phytosanitary Measures

ITO—Instructions to Offeror

ITSC—Item Type Storage Code

LCPS—Life Cycle Packaging Specialist

MDR—Material Deficiency Reports

MIL-PRF—Military Performance Specification

MIL-SPEC—Military Specifications

MIL-STD—Military Standards

MIPR—Military Interdepartmental Purchase Requests

MMAC—Material Management Aggregation Code

MMHE—Munitions Materiel Handling Equipment

NIIN—National Item Identification Number

NSN—National Stock Number

OPR—Office of Primary Responsibility

OT&E—Operational Test and Evaluation

PDR—Preliminary Design Reviews

PHS&T—Packaging, Handling, Storage and Transportation

PMRG—Packaging Materials Reclamation Group

POA—Program Oversight Authority

POP—Performance Oriented Packaging

PRPS—Purchase Request Process System

PR—Purchase Requests

PSC—Packaging Services Contracts

PT&RM—Packaging, Transportation, and Regulated Material

QUP—Quantity Per Unit Pack

RECON—Reusable Container Worldwide Warehouse

RFP—Requests for Proposal

RPT—Resident Provisioning Team

SA/SC—Support of Security Assistance and Security Cooperation

SCMS—Supply Chain Management Squadron

SCS—Stock Control System

SDR—Supply Discrepancy Report

SDS—Safety Data Sheet

SF—Standard Form

SICA—Secondary Inventory Control Activity

SIS—Shipping Information System

SOO—Statements of Objectives

SOS—Source of Supply

SOW—Statements of Work

SPIRES—Special Packaging Instruction Retrieval and Exchange System

SPI—Special Packaging Instructions

UCM—Unit Container Manager

UMMIPS—Uniform Materiel Movement and Issue Priority System

UN—United Nations

USSF—United States Space Force

WebFLIS—Web Federal Logistics Information System

Terms

Air Force Sustainment Center—The Air Force Sustainment Center is one of five specialized centers assigned to the Air Force Materiel Command. The mission of the Air Force Sustainment Center is to Sustain Weapon System Readiness. The center provides war-winning expeditionary capabilities to the warfighter through world-class depot maintenance, supply chain management and installation support.

American Society for Testing and Materials (ASTM) International—The packaging methods and materials used by commercial suppliers that meet minimum requirements for the transport and short-term storage (12 months or less) of supplies and equipment, without damage or deterioration, in enclosed facilities. (See ASTM D3951-10, Section 4, Significance and Use.)

Acquisition Category (ACAT)—The acquisition category informs the level and amount of review, decision authority, and applicable procedures required for a program. Acquisition category is primarily determined by the expected program cost and/or level of interest.

Commercial Packaging—The packaging methods and materials used by the commercial supplier.

Container Design Retrieval System (CDRS)—A program that provides a DoD centralized database for storing, retrieving, and analyzing container designs for the purpose of avoiding duplication in specialized container design and to promote reuse. MIL-STD-2073-1, *Standard Practice for Military Packaging*, DI-PACK-80683, *Container Design Retrieval System (CDRS) Search Request*, and DI-PACK-80684, *CDRS Data Input*, govern the CDRS. This program is located at **AFLCMC/EZPAA, 5215 Thurlow Street Suite 5, Wright-Patterson AFB, OH 45433-5547.**

Corrosion—Metal oxidation due to an electrochemical or chemical attack resulting from exposure to both moisture and other adverse environmental conditions (chemical or biological contaminants such as chlorine, a cathodic metal, fungi, plants, or animals, or a combination of these factors).

Breakage, denting, marring, distortion, displacement, or abrasion of an item—The term also applies to the malfunction or inaccuracy of an item having mechanical, electric, or electronic parts, or an item that requires calibration

Deterioration—Reduction of an item's ability to function as intended, quality, or value, due to damage or corrosion.

Electrostatic Discharge (ESD)—A transfer of electrostatic charge between bodies at different electrostatic potentials, caused by direct contact or induced by an electrostatic field.

Electrostatic Discharge Sensitive (ESDS)—Items-Parts or assemblies that are sensitive to ESD damage.

Fast Pack—A family of standard size, short-life, reusable, cushioned containers. Fast pack design permits shipment of a large number of different items within certain limits of size, weight, configuration, fragility, and environmental reacting characteristics. Reference T.O. 00-85B-3, How to Package Air Force Spares, and PPP-B-1672, Boxes, Shipping, Reusable with Cushioning.

Hazardous Material—A substance or material which the Secretary of Transportation determined to be capable of posing unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated. This includes all items listed as hazardous in Title 49 CFR, and AFMAN 24-604.

Life Cycle Centers—AFMC Life Cycle centers administers all aspects of infrastructure, resource management, and business systems necessary for the successful acquisition of systems, subsystems, end items, and services to satisfy validated warfighter or user requirements. The five life cycle centers consist of Air Force Life Cycle Management Center, Air Force Research Laboratory, Air Force Test Center, Air Force Nuclear Weapon Center.

Long Life Reusable Container—A reusable shipping container, usually made of plastic or metal, that is specially designed to a minimum of 100 round trips or equal to the service life of the item it was designed to protect. These containers may be refurbished by appropriate maintenance practices to their original condition and subsequently reused. Long-life containers are usually accountable items of supply and are beyond the depot/base capability to construct.

Military Specifications (MIL-SPEC)—A document prepared to support acquisition that describes the essential technical requirements for purchased materiel and the criteria for determining whether those requirements are met.

Military Standards (MIL-STD)—A document that establishes uniform engineering or technical criteria, methods, processes and practices for military-unique or substantially modified commercial processes, procedures, practices, and methods.

Military Performance Specification (MIL-PRF)—A performance specification states requirements in terms of the required results with criteria for verifying compliance, but without stating the methods for achieving the required results. A performance specification defines the functional requirements for the item, the environment in which it must operate, and interface and interchangeability characteristics.

Packaging—Consists of the materiel and methods prescribed in Federal, international, or military specifications, standards, drawings or other authorized documents designed to provide a specific level of protection for materiel in transportation or storage. Packaging incorporates the processes and procedures used to protect materiel from deterioration and damage, and includes cleaning, drying, preserving, packing, marking, labeling, placarding, unitizing, and containerization.

Packing—Selecting and constructing the shipping container and assembling items or packages therein.

Preservation—Applying protective measures to prevent deterioration, including cleaning, drying, and the use of preservatives, barrier materials, cushioning, and containers, when necessary.

Reparable Item—An item that can be reconditioned or economically repaired for reuse when it becomes unserviceable. (Depot reparable Air Force items may be identified by ERRC codes C, S, or T; or by ERRC designator XD1, XD2, or ND2 on the shipping document; and by the presence

of a material condition tag/label. (DoD 4100.39-M, *Federal Logistics Information System, Volume 10, Table 69*).

Reusable Container—A shipping and storage container designed for reuse without impairment of its protective function and which can be repaired and/or refitted. Reusable containers are designed to be used, reclaimed and reused as a complete system, with the possible exception of the wrap or barrier material. (Reusable containers can be either short-life (minimum of 10 round trips) or long-life (minimum of 100 round trips).

Short—Life Containers—A reusable shipping container, normally constructed of wood or fiberboard, that is designed to last a minimum of 10 round trips. Fast packs are examples of short-life reusable shipping containers.

Standard Pack—A standardized method including preservation, packaging materials, and shipping container. Generally, items chosen for standard packs require less cushioning than those for fast packs (Reference T.O. 00-85B-3).

Unitization—Consolidating, or otherwise binding unit, intermediate or exterior packs onto a pallet or load base, so that the load can be handled as a unit through the distribution system.

Attachment 2

FIGURE A2.1. RECOMMENDED PRESERVATION AND PACKING COMMERCIAL (C) AND/OR MILITARY (M) PACKAGING REQUIREMENTS.

	Pres/Pack
Worldwide Expedite Shipments (NMCS, 777, 999, 879, or as identified by acquiring activity)	
Recoverable/Reparable (ERRC C, S, or T)	C/M (Notes 1&2)
Consumable	C/C (Note 2)
Worldwide Air Movement	
Recoverable/Reparable (ERRC C, S, or T)	C/M (Notes 1&2)
Consumable	C/C (Note 1)
Indoor Storage, (12 months or less)	
Recoverable/Reparable (ERRC C, S, or T)	C/M (Notes 1&2)
Consumable	C/C (Note 2)
Indoor Storage, (Over 12 months)	
Recoverable/Reparable (ERRC C, S, or T)	M/M (Note 1)
Consumable	M/C (Note 1&2)
SA/SC Grant Aid (Unless otherwise directed by country)	M/M (Note 1)
Outdoor Storage	M/M (Note 1)
War Readiness Material	M/M (Note 1)
Overseas Surface Movement	M/M (Note 1)

Note 1: Factors to be considered by the Packaging Specialist when determining asset protection requirements:

a. Hazardous material transportation classification or regulated material packaging requirements and putting requirements on AFMC Form 158/Contract Section D (i.e., UN number, proper shipping name, etc.).

b. Projected asset use (install or storage).

c. Available technical information and personal experience.

d. Reusable container requirements for recoverables and putting requirements on AFMC Form 158/Contract Section D.

e. Assets meeting two or more conditions, the highest applicable protection will be assigned.

Note 2: For Military (M) packaging, comply with MIL-STD-2073-1.

a. Indoor storage, SA/SC, and Grant Aid assets (unless otherwise required), package in Level B shipping/storage containers.

b. Assets protected for outdoor storage or bulk overseas shipping mode (e.g., engines, missiles, etc.) will require Level A containers.

c. Level B, fiberboard containers are authorized for assets smaller than 1 cubic foot and weighing less than 25 lbs (11.34kg).

Note 3: For Commercial (C) packaging, package in accordance with ASTM D3951, as a minimum, if no specific/detailed commercial packaging requirements are identified in the contract or purchase order. Specific/detailed commercial packaging requirements need to be obtained from the contractor. Commercial packing for consumable items may be used if:

a. It is a Worldwide Expedite shipment, indoor storage for less than 12 months, or

b. It is requested by a SA/FMS country that will assume responsibility for damage. If a consumable item has a history of damage with a present commercial packaging, then military packaging needs to be specified.

Attachment 3

FIGURE A3.1. AIR FORCE PACKAGING TECHNOLOGY AND ENGINEERING FACILITY (AFPTEF) ENGINEERING SUPPORT REQUEST.

PROJECT NAME: DATE:

ORIGINATOR: RECOMMENDED PRIORITY:

ADDRESS: Symbol:

POINT OF CONTACT: Telephone:

BACKGROUND:

OBJECTIVE:

ACTION REQUIRED: (Include any pertinent comments that may affect the project, for example, constraints, in-house testing limitations, supporting contractual developments, field testing, essential features, desired features, etc.)

COST CONSTRAINTS: (An example, cost of item, dollar being sustained, number in Air Force inventory, project cost, estimate of potential savings, Air Force mission impact, etc.)

NEED DATE/TIMEFRAME

AFPTEF PROJECT NUMBER: (If approved.)

PRIORITY ASSIGNED:

ESTIMATED MANHOURS:

ESTIMATED COMPLETION DATE:

APPROVED/DISAPPROVED:

COMMENTS:

TO BE COMPLETED BY AFLCMC/EZPAA

Attachment 4

FIGURE A4.1. SAMPLE DD FORM 1653, TRANSPORTATION DATA FOR SOLICITATIONS (PAGE 1).

(NOTE: This is a sample DD Form 1653 and is not all inclusive. Variations are authorized.)			
TRANSPORTATION DATA FOR SOLICITATIONS (USE REVERSE FOR ADDITIONAL REMARKS)		1. PR. PO or MIPR NUMBER	2. DATE (PR PREPARED)
3. **COMMODITY** **NMFC: [ ] DATA/FIRST ARTICLE:** FOB DESTINATION [ ] **First Article ship to address: FD2060** **(see page 2, block 7)**			4. STOCK NUMBER
5. **F.O.B. TERMS RECOMMENDED** AS BEST SUITED FOR THIS PROCUREMENT (X ONE OR MORE) [ ] a. ORIGIN [ ] c. OTHER – (DESTINATION APOE/WPOE) [ ] b. DESTINATION			
6. **TRANSPORTATION PROVISIONS / CLAUSES** (X APPROPRIATE BLOCKS)			7. FAR CITATION
	a. REPORT OF SHIPMENT (REPSHIP)(FEB 2006)		52.247-68
	b. COMMERCIAL BILL OF LADING NOTATIONS(FEB 2006)		52.247-1
	c. F.O.B. ORIGIN (FEB 2006)		52.247-29
	d. F.O.B. ORIGIN WITH DIFFERENTIALS (FEB 2006)		52.247-33
	e. F.O.B. DESTINATION (NOV 1991)		52.247-34
	f. F.O.B. ORIGIN AND/OR DESTINATION EVALUATION (APR 1984)		52.247-45
	g. SHIPPING POINT (S) USED IN EVALUATION OF F.O.B. ORIGIN OFFERS (APR 1984)		52.247-46
	h. EVALUATION – F.O.B. ORIGIN (JUN 2003)		52.247-47
	i. F.O.B. DESTINATION – EVIDENCE OF SHIPMENT (FEB 1999)		52.247-48
	j. DESTINATION – UNKNOWN (APR 1984)		52.247-49
	k. NO EVALUATION OF TRANSPORTATION COSTS (APR 1984)		52.247-50
	l. EVALUATION OF EXPORT OFFERS (JAN 2001)		52.247-51
	m. CLEARANCE AND DOCUMENTATION REQUIREMENTS-SHIPMENTS TO DOD AIR OR WATER TERMINAL TRANSSHIPMENT POINTS (FEB 2006)		52.247-52
	n. FREIGHT CLASSIFICATION DESCRIPTION (APR 1984) **IAW CONTRACT**		52.247-53

Figure A4.1. SAMPLE DD FORM 1653, TRANSPORTATION DATA FOR SOLICITATIONS (PAGE 2).

	o. F.OB. POINT FOR FMS SHIPMENTS ORIGINATING OUTSIDE THE U.S. **(FMS)** (JUL 1997)	See CONTINUATION
	p. F.O.B. POINT OF DELIVERY OF GOVERNMENT – FURNISHED PROPERTY (JUN 2003)	52.247-55
	q. TRANSIT ARRANGEMENTS (APR 1984)	52.247-56
	r. TRANSPORTATION TRANSIT PRIVILEGE CREDITS (APR 1984)	52.247-57
	s. LOADING, BLOCKING, AND BRACING OF FREIGHT CARS (APR 1984)	52.247-58
	t. F.O.B. ORIGIN – CARLOAD AND TRUCKLOAD SHIPMENTS (APR 1984)	52.247-59
	u. GUARANTEED SHIPPING CHARACTERISTICS (DEC 1989)	52.247-60
	v. F.O.B. ORIGIN – MINIMUM SIZE OF SHIPMENTS (APR 1984)	52.247-61
	w. PACKAGING, MARKING, AND CONSIGNMENT INSTRUCTIONS	47.305-10
	x. F.O.B. ORIGIN – PREPAID FREIGHT (FEB 2006), * SEE 6Z BELOW	52.247-32

8. EVALUATION OF PORT BIDS OR PROPOSAL (Ports and combined handling and transportation charges per measurement ton used by the Government for evaluation purposes).

a. DESTINATION COUNTRIES	b. ORIGIN PORTS (Air or Water)				
	BAYONNE NJ				
	NORFOLK VA				
	CONCORD CA				
	SEATTLE WA				

6Z. NOTE TO CONTRACTOR: CONTACT CTO IF PROBLEMS ARISE. SHIP DOOR-TO-DOOR COMMERCIAL EXPRESS CARRIER SERVICE FOR MOVEMENT OF MICAP AND PROJECT CODES (TP-1 AND TP-2/RDD 777): 122, 123,700, 780 (WITH RESTRICTIONS), 879, 880, 9FF, 9FV, 9FX, 9GF, 9GJ, 9GV, 9GS, 9GD, SURGE and 720.

(X) SEE REVERSE

a. TYPED OR PRINTED NAME (Last, First, Middle)	b. **SIGNATURE** /// **Signed**///	c. **DATE** (YYYYMMDD)

DDFORM 1653 APR 1999 (PREVIOUS EDITIONS ARE OBSOLETE) 406 SCMS/GULAA OVERPRINT

Figure A4.2. SAMPLE DD FORM 1653, TRANSPORTATION DATA FOR SOLICITATIONS (PAGE 3).

PR: **Page 3**

DD FORM 1653: ADDITIONAL TRANSPORTATION DATA FROM: 406 SCMS/GULAA

REMARKS

1-A. FOREIGN MILITARY SALES:

_____**1) NOTE TO CONTRACTOR: FOREIGN MILITARY SALES:** 10-15 DAYS PRIOR TO SHIPMENT, CONTACT THE DCMA/ ACO TRANSPORTATION OFFICE FOR SHIPPING ADDRESS / INSTRUCTIONS.

_____**(2) FOR REPAIR & RETURN FMS**: ALL INBOUND SHIPPING DOCUMENTS MUST BE MAINTAINED FOR USE IN OUTBOUND SHIPPINmberG.

_____**(3) EVIDENCE OF SHIPMENT (FMS) FOREIGN MILITARY SALES**

1-B._____CLASSIFIED MATERIAL: TRANSPORTATION MUST BE BY CARRIERS THAT PROVIDE DOD CONSTANT SURVEILLANCE SERVICE (CSS) AND CUSTODY SERVICE (CIS) IAW DOD 4500.9-R.

1-C._____ SHIPPING INSTRUCTIONS (See Page 3)

1-D. _____SAME AS BASIC PR WITH NOTED CHANGES

1. D.1 _____BASIC CONTRACT NUMBER: _____

1-E. _____F.O.B. POINT FOR U.S. SHIPMENTS ORIGINATING OUTSIDE THE CONTINENTAL U.S. (SEE CONTINUATION)

1-F._____52.247-38 – F.O.B. – INLAND CARRIER, POINT OF EXPORTATION.(FEB 2006)

1-G._____ NOTE TO CONTRACTOR: PRIOR TO SHIPPING, Contractor must contact the DCMA Transportation Officer for the current aerial or water point of embarkation (APOE/WPOE) and assistance with required export documentations.

1-H._____NOTE TO CONTRACTOR: PRIOR TO SHIPPING, Contractor must contact the DCMA Transportati Officer for assistance with required export documentations.

1-I.___NOTE TO BUYER: IF NECESSARY TO DEVIATE FROM THIS DOCUMENT, CONSOLIDATE WITH ANOTHER PR, MIPR, SI, ASI OR ANTICIPATE AWARD TO OVERSEAS ORIGIN POINT REQUEST YOU RECOORDINATE WITH 406 SCMS/GUMA FOR INCLUSION OF ADDITIONAL FAR CLAUSES OR CHANGES TO OUR ORIGINAL RECOMMENDATIONS.

_ESTIMATED SHIPPING CHARACTERISTICS: _____WEIGHT, LENGTH, _____WIDTH, _HEIGHT OR _____ TO BE PROVIDED BY BIDDERS.

3. TRANSPORTATION APPROPRIATION CHARGEABLE.

[ ] ZERO DOLLAR

[ ] 97-11X8242.L009 8401** _____ GBL 843000 [___] FRS6 [__] F8E0 (ANG)

Figure A4.3. SAMPLE DD FORM 1653, TRANSPORTATION DATA FOR SOLICITATIONS (PAGE 4).

[___] 97-11X82422 4820** _____ GBL 595600 [__] F8HA [__] F6RS
[_ _] NMF-*-N _____ [_] F8MT [_] F8WR
[__] SEE PR/MIPR BLOCK_____. [___] [ ] FE08
[__] FOB ORIGIN-FY99-FY05: TBD WHEN FUNDING IS OBTAINED FROM THE APPLICABLE PROGRAM OFFICE.
[____] MORD _____CLAUSE U352.232.NOTE TO BUYER: CONTRACT MUST INCLUDE MORD AND LOA.
* INSERT CURRENT FISCAL YEAR
** INSERT TWO DIGIT ALPHA COUNTRY CODE, SERVICE CODE & THREE DIG

4. _____ FAST TRANSPORTATION

_____ (a) Domestic shipments – use door-to-door carriers for all shipments regardless of
_____ (b) Export shipments – use Worldwide Express (WWX) for all shipments of 0-300
Contact the Cognizant transportation Officer (CTO) if commercial services are not availabl
_____ (c) Foreign Military Sales (FMS) shipments are excluded from these requirements.

5. _____ NOTE TO BUYER: FOR TRANSPORTATION BID EVALUATION PURP
DIFFERENCE BETWEEN BIDDERS EXCEEDS $_____, TRANSPORTAT WILL NOT BE A
DETERMINING FACTOR IN CONTRACT AWARD.

6. _____TRANSPORTATION RECOMMENDATIONS TO BE CITED ON FUTURE PR COORDINATION.

7._____ FIRST ARTICLE SHIP TO ADDRESS: FD2060 DDWG ER DLA CENTRAL RCVG
455 BYRON STREET
Robins AFB, GA 31098

//signed//
Beverly Brown / SUPERVISOR
Transportation & Packaging Section (406 SCMS/GULAA)
Mission Support Section Chief (10/14/2015)
M/F

Additional Ship to address and information:
PR: **Page 3**

SHIP TO
M/F

Attachment 5

FIGURE A5.1. VENDOR TRANSPORTATION INSTRUCTIONS TO CONTRACTING OFFICERS. INSERT THE SELECTED CLAUSE(S) INTO SECTION F OF THE CONTRACT FOR APPLICABLE ITEM (S) AS INDICATED (PAGE 1).

VENDOR TRANSPORTATION INSTRUCTIONS Check all that apply	
DCMA Transportation Instructions	"Contact DCMA Transportation on ALL "DCMA Administered" contracts prior to shipment for shipping instructions using the DCMA Shipment Instruction Request (SIR) eTool System, at http://www.dcma.mil for ALL FOB: Origin, SA/SC Military Sales (FMS), and FOB: Destination OCONUS/Export movements to obtain the appropriate DOD regulatory clearances, shipping documentation and instructions from your cognizant DCMA Transportation Office. If you are new to DCMA, and do not already have a SIR eTool account, you will first need to request an account via DCMA External Web Access Management (EWAM) application which can be accessed at http://www.dcma.mil. If you need additional assistance, email DCMA Transportation Group at: Transportation.Division@dcma.mil. Do not move any freight to a water or aerial port prior to contacting DCMA or it will become frustrated." Failure to contact the DCMA may result in additional expenditures borne by the vendor.
F.O.B. Origin, Freight Prepaid	Shipment(s) shall be made with freight transportation costs prepaid by the Contractor, who shall verify with the freight shipment company that rates for this/these shipment(s) are equal to or lower than those used for U.S. Government shipments. If rates are not equal to or lower than those for Government shipments, contact the Contracting Officer for additional instructions. Shipping charges are to be shown as a separate item on the payment invoice. If the charges are $100 or more, a copy of the freight charges invoice must be attached to the payment invoice. Failure to properly annotate the invoice and provide a copy of the carrier's bill may result in those costs being disallowed.
F.O.B. Point for U.S. Shipments Originating Outside the Continental U.S.	(a) F.O.B. point means the U.S. Aerial Port/Water Port of Embarkation (APOE/WPOE). The current APOE and WPOE for a particular location is available from the Contractor's area U.S. contract administration office. (b) The Contractor shall specify the APOE and WPOE which is nearest the Contractor's facility for contract item deliveries. The APOE/WPOE for delivery of items shall be the nearest accessible APOE/WPOE to the Contractor's facility. If the user activity is in the Contractor's own country the f.o.b. point will be the user activity. The Contractor shall pay for transportation costs to the APOE/WPOE or user activity for the contract items to be delivered. Movement or closure of the designated

Figure A5.1. VENDOR TRANSPORTATION INSTRUCTIONS TO CONTRACTING OFFICERS. INSERT THE SELECTED CLAUSE(S) INTO SECTION F OF THE CONTRACT FOR APPLICABLE ITEM (S) AS INDICATED (PAGE 2).

F.O.B. Point for SA/SC Shipments Originating Outside the U.S.	(a) The F.O.B point for SA/SC shipments originating outside the continental U.S. shall be the country's freight forwarder, nearest accessible DTS Aerial / Water Port of Embarkation, or user activity, as applicable, identified below. (b) The Contractor shall pay transportation costs to the F.O.B. point(s) and identify the transportation costs for each line item as provided below. When more than one F.O.B. point is shown for a single line item (i.e., freight forwarder is on CONUS east and west coasts), the point of delivery shall be the F.O.B. point nearest to the Contractor's facility. Contractor assures exportability to the F.O.B. point(s) listed below: F.O.B. Point Contractor Line Item(s) (City and State) Transportation Cost (c) The Contractor transportation cost shall be used in the negotiation of an equitable adjustment if the F.O.B. point is changed.
VENDOR TRANSPORTATION INSTRUCTIONS **Check all that apply**	
Unilateral Amended Shipping Instructions (ASIs), F.O.B. Origin	(a) An ASI is a change to the shipping instructions of one or more units or shipment lots of a line item. Multiple ASIs for multiple line items may be issued under one document. (b) Unilateral ASIs with changes only to the "Ship To and Mark For" instructions, issued 20 calendar days or more before the contract scheduled delivery date, shall be accepted by the Contractor at no change in contract price. (c) All other ASIs, including those requiring a change to the "Ship To and Mark For" which are issued 19 days or less before the contract scheduled delivery date; and those for changes to the preservation, packaging, and packing requirements or the f.o.b. point, shall be subject to the negotiation of an equitable adjustment under the contract.
Temporary Storage of SA/SC Munitions Items	The contracting officer may authorize the contractor to ship in place, store in a bonded storage area, and upon submission of proper invoice or DD Form 250, Material Inspection and Receiving Report, receive payment for units shipped when the clear text shipping address and transportation instructions are not available at the time that deliveries are accepted by the U.S. Government on behalf of the SA/SC customer. The requirement for "Evidence of Shipment" shall be postponed until after receipt of the clear text shipping instructions. The contractor shall store and safeguard the units in bonded storage at no change in contract price while waiting for shipping instructions.

Figure A5.2. VENDOR TRANSPORTATION INSTRUCTIONS TO CONTRACTING OFFICERS. INSERT THE SELECTED CLAUSE(S) INTO SECTION F OF THE CONTRACT FOR APPLICABLE ITEM (S) AS INDICATED (PAGE 3).

Instruction: F.O.B. Point for Delivery of Government-Furnished Property	The F.O.B. point for delivery of Government-furnished property, as defined in FAR 52.247-55, F.O.B. Point for Delivery of Government-Furnished Property, shall be: *(contractor insert f.o.b. point of delivery).*
Direct/On-Demand Shipment of Serviceable Items	Completed serviceable items shall be direct shipped from the contractor's facility to designated user destinations identified by the Materiel Release Order (MRO) received in G009 (Government Furnished Materiel and End Item Transaction Reporting System) through D035A (Materiel Manager Wholesale Requisition Process). Although the MRO is the primary source for disposition instructions for shipment, they may also be provided by the government via facsimile or other electronic means.
Fast Transportation	(a) Domestic shipments - use door-to-door carriers for all shipments regardless of weight. (b) Export shipments - use worldwide Express for all shipments of 150 pounds or less. Only carriers providing door-to-door and customs clearance services shall be used for shipments over 150 pounds. Contact the cognizant transportation officer (CTO) if commercial service is not available. (c) SA/SC shipments are excluded from these requirements.
F.O.B. Origin, First Destination Transportation	a) First Destination Transportation (FDT) covers shipment of newly acquired items from the contractor to their first point of usage, storage, or embarkation for items going outside the Continental United States (OCONUS). Shipment of repaired items and all shipments beyond the first point of usage or storage are second destination transportation. FDT costs for items shipped F.O.B. destination are included in the item's price. (b) FDT F.O.B. origin costs are not paid on the contract that procures the item, but information referenced in the contract is used in their payment. This information comes from the requiring activity and should be on the purchase request. (c) The Accounting Classification Reference Number (ACRN) that funds the acquisition of the Line Item Number (LIN)/SubLIN must be used to pay for its transportation on the LINs/SubLINs listed below. The Miscellaneous Obligation Reimbursement Document (MORD) Number associated with the long line of accounting (LOA) shall be entered into Syncada to fund the transportation charges needed to transport the item. LIN/SubLIN Long Line of Accounting (LOA) MORD Number/MORD ACRN
NOTE: These instructions are to be considered if applicable when not using Purchase Request Process System (PRPS).	