NASA Procedural Requirements

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COMPLIANCE IS MANDATORY

Requirements for Packaging, Handling, and Transportation for Aeronautical and Space Systems, Equipment, and Associated Components

Responsible Office: Logistics Management Division

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Preface

P.1. Purpose

This NPR establishes packaging, handling, and transportation requirements adequate to maintain the reliability of NASA items and to achieve their damage-free delivery to the place and time of ultimate use. The purpose of this NPR is to promote a standard, streamlined approach for transportation shipment activities and to provide guidance for meeting packaging, handling, and transportation requirements pursuant to institutional, program, and project goals and missions throughout NASA.

P.2. Applicability

This NPR is applicable to NASA Headquarters and NASA Centers, including Component Facilities. When incorporated contractually, its use is mandatory for all contractors, shipping on behalf of NASA, to satisfy contractual program and project obligations.

P.3. Authority

NASA Policy Directive (NPD) 6000.1, Transportation Management.

P.4. References

a. Air Force Interservice Manual 24-204, Packaging of Material, Preparing Hazardous Materials for Military Air Shipment.
b. 10 CFR Part 71, Packaging and Transportation of Radioactive Material
c. 49 CFR Part 173.151, Exceptions for Class 4
d. Department of Defense Manual 4000.25-M, Defense Logistics Management System (DLMS) Manual.
e. Federal Acquisition Regulation (FAR), Subpart 46.407, Nonconforming Supplies or Services
f. Military Standard 2073.1D, Department of Defense Standard Practice for Military Packaging
g. Military Standard 810F, Department of Defense Test Method Standard for Environmental Engineering Considerations and Laboratory Tests
h. Military Standardization Handbook 304C, Department of Defense, Package Cushioning Design
i. Military Handbook 1791, Designing for Internal Aerial Delivery in Fixed Wing Aircraft
j. NPR 6200-1, NASA Transportation and General Traffic Management.
k. National Aerospace Standards (NAS) 850 and 851, General Packaging Standard and Indexes
l. 42 Pub. L. No. 85-568, National Aeronautics and Space Act of 1958, as amended

P.5. Cancellation

This cancels NPR 6000.1F dated April 1999.

/S/
James L. Jennings
Associate Administrator for
Institutions and Management

Chapter 1. Basic Principles

1.1. Scope

1.1.1. This NPR defines general requirements for preservation, packaging, packing, marking, handling, transportation, and related data and documentation pertaining to all NASA procured software and hardware items. For the purposes of this NPR, the definitions in Appendix A shall apply.

1.1.2. The requirements of this NPR do not supersede detailed NASA-approved preservation, packaging, marking, handling, and transportation specifications or procedures. Contractual provisions regarding supersession will apply. This NPR may be used as part of, or as a supplement to, other approved specifications or procedures. Appropriate paragraphs of this publication may be incorporated by reference in a contract to spell out the obligations of the parties with respect to hazardous items, NASA critical item labeling, and special packaging, handling, and transportation data for mission-essential items.

1.1.3. When this NPR is incorporated contractually by reference, the procurement documents shall cite its title and date and, if desired, specific direction as follows:

1.1.3.1. Level of preservation and packaging and level of packing to be supplied (see paragraph 2.1.).

1.1.3.2. Listing of items requiring a Packaging, Handling, and Transportation Record (see paragraph 3.1.).

1.1.4. Specifications and procedures for preservation, packaging, packing, marking, handling, transportation, and related data and documentation shall be compatible with this NPR except to the extent that a deviation or waiver is approved in accordance with paragraph 1.2. herein. The mere citation of this NPR or the mere incorporation by reference of this NPR, or a part thereof, does not constitute compliance with any other applicable requirement that detailed or specific provisions be provided or stated in a particular document.

1.2. Deviation and Waiver Requests

Technical changes, deviations, or waivers sought from any requirement of the NPR shall be requested from, and approved in writing by, the applicable Contracting Officer with final approval from the Agency Manager of Transportation Programs, Institutional and Corporate Management Office located at NASA Headquarters. When requesting technical changes, deviations, or waivers, the requestor must provide detailed justification outlining the uniqueness associated with their request, timeline deviation and/or waiver is needed, program and/or project office supporting, Contract Number (if applicable), and suspense date needed for implementation.

1.3. Policy

1.3.1. General

Preservation, packaging, and packing shall comply with the basic NASA objective of achieving adequate protection of the contained items at minimum cost. However, exceptions are granted for items defined as mission essential. While nonessential requirements should be avoided, the protection afforded these items must not be marginal.

1.3.2. Preservation, Packaging, Packing, Marking, Handling, and Transportation Safety, Reliability, and Quality

Retention of item safety, reliability, and quality shall be a major consideration in the development or selection of preservation, packaging, packing, marking, handling, and transportation approaches throughout their implementation for mission-essential and/or sensitive items. Each Center Transportation Officer and contractors shipping on behalf of NASA shall have program establishing policies, procedures, and responsibilities for control of this process to achieve zero damage on delivery shall be implemented. Regulatory and programmatic requirements shall be identified, met, and verified by NASA Center safety, reliability, and quality management processes.

1.3.3. Contingency Planning for Emergency Incidents

Due to the hazardous materials content of some critical space item shipments, it is prudent that all reasonable precautions be taken during movement of material. All shipments shall be in strict compliance with 49 CFR, Subtitle B, Chapter I, as well as applicable Center emergency response plans.

Chapter 2. Supplier Packaging Requirements

2.1. Selection of Packaging

2.1.1. Levels of preservation and packaging and the levels of packing to be applied selectively are defined in Military Standard 2073 and are mandatory for use. Selection of levels shall be in accordance with the level selection chart in Military Standard 2073 and in Appendix A of this NPR.

2.1.2. Selection of the levels of packaging and packing to be applied shall be the responsibility of the Center Transportation Officer unless levels are specified by the procuring activity. Selection shall depend on the modes of transport, environmental control, conditions, and length of storage, and the anticipated requirements for redistribution.

2.1.3. When Level A or Level B packaging and/or packing is selected, the protective process, materials, and containers shall be in accordance with the requirements of Military Standard 2073. NAS 850 and 851 may be considered for Level B or Level C application where the standard meets the requirements for that level.

2.2. Special Design Packaging

For those items possessing characteristics requiring special design packaging as defined in Appendix A, the contractor shall develop the necessary designs, maintain packaging engineering data in sufficient detail to permit necessary review, and implement the packaging specified therein. Prior to developing a newly designed container, maximum effort shall be made to use container designs or containers from those already available commercially or from Government inventories (see paragraphs 2.9. and 2.10.). Specifically identified special design packaging may be screened through the Air Force Container Design Retrieval System (hereinafter called the System). Candidates for screening through the System shall be selected on the basis of cost, schedule, and complexity of design and fabrication. Unless otherwise specified, search requests through the System shall be sent directly to Air Armament Center, United States Air Force Material Command, Eglin Air Force Base, Florida 32542. (See Appendix C for the Container Design Retrieval System Search Request Form.) Each request shall establish a desired response date. Pending timely response, the Transportation Officer shall withhold package container development. When specified by the procuring activity, new design data and engineering drawings with specifications in accordance with Military Standard 2073, paragraphs 4.1.2 and 4.1.3, shall be submitted as stated in the contract .

2.3. Package Engineering Documentation

For purposes of this NPR, unless otherwise specified by the procuring activity, package engineering documentation shall be required only for special design packaging. Contractor documentation forms may be used unless otherwise specified in the contract. Submission and approval shall be in accordance with the Contract Data Requirements List or as otherwise authorized in the contract or by written direction of the contracting officer. Military Standard 2073 shall be used for guidance.

2.4. Environmental Analysis

2.4.1. The preservation, packaging, packing, and shipping techniques applied shall ensure protection of the contained item against the natural and induced environments to which it may be subjected. Analysis of these hazards is essential prior to item design and development of the packaging and shipping techniques to be applied. The contractor shall ensure that design engineering provides item fragility, engineering drawings, and sensitivity data to packaging engineering, line packaging, and transportation personnel by completing a NF 1426.

2.4.2. The contractor's packaging and transportation engineers and/or technicians shall participate in equipment design efforts from the earliest stages. They shall identify the ground handling, transport and storage environment requirements, including protection from contingency or emergency environments where the environmental analysis indicates that facility/carrier protection is more practical, reliable, or cost effective than providing the same protection by packaging and packing design; prepare or identify testing programs; prepare packaging and transportation data for use in management's configuration documents; and perform such other functions in the design effort as may be necessary or proper.

2.4.3. The environmental analysis shall include tradeoff considerations of the class of shipping and handling (probability of a loss, cost and schedule impact of loss, and cost of facility and carrier protection) versus cost of packaging and packing protection. The

following phases shall be considered:

2.4.3.1. In-plant storage, handling, and local transportation conditions and environments, both normally anticipated and contingency due to such emergencies as natural disasters, fires, spillage, and other accidents.

2.4.3.2. In-transit modes, normal and contingency environments.

2.4.3.3. Receiving, redistribution, handling, and storage conditions at the destination installation, range, test or launch facility including normal and contingency environments.

2.4.3.4. General guidance on transportation environments is available in the following documents: Military Standardization Handbook 304, Package Cushioning Design. (Also see Military Standard's 810, 1791.

2.5. Packaging and Packing of Hazardous Materials

2.5.1. Department of Transportation regulations listed in 49 CFR Subchapter B define federal requirements applicable to shipments of hazardous materials, such as explosives or radioactive materials, within the United States. Shippers must contact their export control offices as various international regulations may apply to international shipments. Requirements for U.S. Government material, materials offered for transportation by, for or to the Department of Defense or the Department of Energy, are listed in 49 CFR 173.7.

2.5.1.2 Shippers, those who offer packages for transportation in compliance with DOT requirements, must comply with provisions for hazardous materials classification, proper container selection, packing, marking, labeling, placarding, shipping paper preparation, emergency response information, training, and, in some cases, registration and security plan preparation. Additional packaging and packing requirements may be found in the General Provisions and the Safety Provisions of the contract and this NPR. Provisions of NPD 6000.1 and NPR 6000.2 pertaining to the shipment of hazardous materials shall be complied with as applicable. In addition, the transportation of these materials must be in compliance with applicable State and municipal rules and regulations. All hazardous materials offered for military airlift shall also be prepared in accordance with the requirements of Air Force Logistics Manual 24-204.

2.5.1.3 All persons who participate in any of the activities described in paragraph 2.5.1.2 above are defined as "hazmat employees" under 49 CFR, and must successfully complete training described in 49 CFR 172.704 at least every three years.

2.5.2. All items that are subject to ignition or detonation by electrostatic discharge and which are to be packed in bags or wraps manufactured from Military Barrier Material 22191, 121, 131, or other static-generating materials shall be wrapped individually in antistatic material, meeting the requirements of Military Barrier Material 81705. Antistatic packaging material shall, in all cases, be intimate to the item.

2.5.2.1. The following notation, shall be affixed to each unit package:

WARNING

CONTENTS SUBJECT TO IGNITION OR DETONATION BY ELECTROSTATIC DISCHARGE. GROUND INNER ANTISTATIC WRAPPING BEFORE AND DURING REMOVAL FROM THIS PACKAGE.

NOTE: THIS WARNING DOES NOT TAKE PRECEDENCE OVER OR SERVE IN LIEU OF REQUIREMENTS SPECIFIED IN APPLICABLE REGULATIONS AND TARIFFS.

2.5.2.2. Where considerations of precision, cleanliness, flammability, or compatibility with propellants preclude the use of antistatic material meeting Military Barrier Material 81705, Type II, contractors are authorized to use commercially available antistatic materials. Preapproval for such use shall be granted by the Contracting Officer or the Center Transportation Officer.

2.5.3. In addition to the regulations cited in paragraph 2.5.1, further requirements regarding the packaging and transport of radioactive materials are contained in 10 CFR Part 71.

2.6. Degradation by Electrostatic Discharge

2.6.1. Many electronic devices such as thin or thick film resistors, semiconductors, field effect transistors, or circuitry containing any of these can be degraded by static electricity. The contractor shall assure that design engineering identifies such items and provides the essential precautions to all in-plant handling and packaging personnel.

2.6.2. Items shall be packaged in accordance with paragraph 2.5. Each package shall bear a label warning that the contents can be destroyed by static electricity and should be handled only by personnel instructed in the necessary precautions.

2.7. Kits (Parts and Modifications)

Preservation, packaging, and packing of kits (parts and modifications) shall be in accordance with Military Standard 2073, Appendix D.

2.8. Weight and Cube

Accomplished packs shall be as simple as possible and of minimum tare weight and cube, consistent with the protection required. Consolidation containers and pallets shall be properly used to reduce multiple handling; however, items bearing the NASA Critical Item Label (NASA Form 1368) shall not be commingled with noncritical items in any container. When the gross weight of the individual pack or consolidation exceeds 100 pounds or when the package cube exceeds 10 cubic feet, use of skids or pallets should be considered.

2.9. Reusable Containers

2.9.1. Reusable containers are those that are designed to provide adequate protection when reused for return shipments and/or throughout several shipping cycles or sequences. Reusable

containers shall be considered for all items that require periodic shipments to and return from repair activities and where adequate provisions to control the containers make reuse economical. The quantities of reusable containers authorized shall be the minimum essential to meet anticipated needs. The contractor shall identify reusable containers and provide storage to assure their maintenance in a serviceable condition for use. The container specifications issued by the International Air Transport Association merit consideration for application to air shipping cycles. Requirements for reusable containers for U.S. hazardous materials shipments are defined in 49 CFR Part 173.28. Inspection and testing are typical requirements for reusable containers.

2.9.2. Existing reusable containers available commercially or from Government or contractor inventories shall be used to reduce package design and fabrication costs. Modification of existing containers and container designs shall be considered when this is a cost-effective approach.

2.9.3. Multiapplication containers are especially useful for return of repairables since each size and type is suitable for shipment of a large number of different items within certain limits of size, weight, and fragility. These containers are described in Military Standard 2073, Appendix E. Use of this type of container is authorized for Level A, B, and C applications where the multiapplication containers will provide equivalent protection to the contained item.

2.10. Reuse of Packaging Materials

Packaging materials shall be considered for reuse to the maximum extent practicable.

The determination for reuse shall be based on the quality and condition of the material, the economics of storage and handling of the used material, and the incidence of usage anticipated.

2.11. Disassembly

Disassembly of major components to facilitate packaging, or to provide more effective procedures, is permissible unless otherwise specified. Normally, components shall remain assembled if previous inspection or test acceptances are invalidated by disassembly. Efforts shall be made to secure assembly hardware to one of the mating parts when disassembly is accomplished.

2.12. Matchmarking

When necessary to facilitate reassembly or repackaging, removed parts shall be matchmarked. Matchmarking information shall be put on cloth shipping tags or on metal tags using waterproofed ink or paint, and attached to mating parts. The marked cloth shipping tags shall be water proofed with a water resistant spar varnish, a water resistant paper label adhesive or any other suitable colorless waterproofing material. At no time shall tags or adhesive create interference with item reassembly.

2.13. Container Markings

2.13.1. Markings on unit packages, intermediate packages, and exterior shipping containers shall be in accordance with the applicable requirements of Military Standard 2073 and this NPR.

2.13.2. Items designated as Class I, Class II, or Class III, in accordance with Appendix A, shall normally bear an appropriate NASA Critical Item Label (NASA Form 1368). The label shall be affixed to each side, end, and top of the container. Labels shall not interfere with other required markings. Drums shall be marked with a label on the top and on opposite sides.

2.13.3. Shelf life terminal and preservation expiration dates shall be identified by marking, by tagging, or in log books as specified by design engineering requirements.

2.13.4. Marking and labeling of hazardous materials shall be in accordance with appropriate regulations as cited in paragraph 2.5 and with other contractual provisions. Marking of hazardous materials needed for compliance with DOT regulations must be

displayed on a background of sharply contrasting color and not obscured by other container marking or labeling per 49 CFR Part 172.304.

2.14. Testing

2.14.1. Testing of packages, packing methods, and materials shall be in accordance with design engineering requirements. When specific guidance is not provided, tests shall be performed as specified in Appendix B of Military Standard 2073. In all instances, only standardized packaging testing techniques will be utilized.

2.14.2. Shipping contractors shall ensure that all special testing data is furnished, as required by the contract.

2.14.3. Preproduction tests shall be performed in accordance with the design requirements of the contract. The necessity for such testing will be determined by considering the following factors:

2.14.3.1. The contractor has data or other evidence to indicate that prior successful tests were conducted and are accepted by the contracting officer as being equivalent to those now being proposed.

2.14.3.2. The packaged item has been subjected to similar tests as a part of other testing programs.

2.14.3.3. The container for a specific item of equipment is developed under an end-item specification, with engineering and testing approval through configuration management procedures and reviews.

2.14.3.4. Detailed packaging instructions are imposed by the procuring activity.

2.14.4. Provisions for the testing of hoisting and material handling equipment shall be performed as required.

Chapter 3. Supplier Handling and Transportation Requirements

3.1. Classes of Shipping and Handling

The classes of shipping and handling, defined in Appendix A, shall apply to all equipment, components, and associated parts.

3.2. Packaging, Handling, and Transportation Record

3.2.1. A Packaging, Handling, and Transportation Record, NASA Form 1426, or equivalent information shall be developed from engineering data for each Class I item.

3.2.2. Each Center Transportation officer shall ensure procedures are initiated to ensure that changes in packaging data, handling, and transportation methods are reflected in amended or revised records in a timely manner. Information, when reproduced, shall not be altered in size or content.

3.3. Approval of Packaging, Handling and Transportation Record

The NASA Form 1426 (or an equivalent form), shall be submitted and approved by the Center Transportation Officer or delegated to the quality representative of the procuring location as well as a designated representative of the procuring activity. Shipment shall not proceed without this approval. Procedures for interim approval in emergency cases shall be as established by the procuring activity.

3.4. NASA Critical Space Item Label

Shipping contractors shall ensure that the NASA Critical Space Item label, NASA Form 1368, is prominently displayed on the exterior of all Class I, Class II, and Class III interior packages and exterior shipping containers to alert handling personnel to the criticality of the item. Its use is intended to assure special handling by carrier, receiving, and storage personnel in accordance with NPR 6200.1. The label is obtainable from procuring activities in the three different sizes.

3.5. Monitoring Devices for Class III Shipments

When use of a monitoring device is indicated or has been recommended, and its use authorized, such devices shall be of a type and nature that will detect and provide a permanent notation that the packaged contents have been subjected to adverse conditions such as temperature, shock, or moisture that could impair their ability to perform their principal function in a satisfactory manner. Monitoring devices shall be installed in a manner that will permit their observation and inspection with a minimum of assembly or disassembly of the container. The location of devices, including shock-measuring instruments, shall be marked prominently on the exterior container. Shock measuring instruments shall be used in accordance with applicable standards.

3.6. Transportation Planning

3.6.1. Modes of shipment shall be in accordance with transportation and logistics support plans, implemented in accordance with contractual requirements. When such direction is not provided, the mode that shall be employed is one that provides the most reliable protection to the items involved and takes into account the time, schedule, and cost. The contractor shall establish and implement procedures for the control of premium transportation costs to be incurred, such as special mission airlift, chartered aircraft, exclusive use of carrier equipment, and unusual and excessive accessorial charges.

3.6.2. Upon request, transportation data for items requiring special design transportation and handling equipment, special commercial carrier or Government services, shall be submitted in accordance with the contract. The contractor's format may be used unless otherwise specified. Approval shall be as specified or as otherwise authorized in the contract or by written direction of the contracting officer. Approval shall be obtained prior to shipment.

3.6.3 All shipments made to out of Continental United States locations shall comply with NPR 2190.1 NASA Export Control

Program.

3.7. Restraining Systems

During highway, air, rail, and marine shipments, items in their shipping configuration, and skidded and wheeled equipment, shall be provided with tie-down and lifting provisions commensurate with their size and weight. Additional safety measures may be required and should be considered during the design of the restraining system due to peculiarities of the cargo, carrier safety considerations, or accident effects, especially where hazardous materials are involved.

3.8. Monitoring of Transportation and Handling Process

Contractors are responsible for monitoring each class of shipment and shall ensure necessary coordination with the transportation officer of the procuring activity, with carrier representatives and with transportation officials at the destination to ensure that the following has taken place:

3.8.1. An inspection has been performed prior to shipment to include verification of compliance with the Packaging, Handling, and Transportation Record, or equivalent information.

3.8.2. NASA Critical Space Item labels have been affixed to the shipping container for Class I, II, and III items.

3.8.3. Shipment routing requests include special handling and monitoring instructions and provide necessary notification to en route transfer agents.

3.8.4. Advance shipping and handling information is provided to requisite en route parties.

3.8.5. Arrangements are made for escort or courier services as may be necessary.

3.8.6. Transportation, preservation, packaging, handling, and logistics plans are accomplished.

3.8.7. Class IV items are shipped via the most advantageous commercial transportation means considered to be in the best interest of the Government.

3.8.8. Shippers shall provide Packaging, Handling, and Transportation Records, or equivalent information, for mission-essential items to destination transportation officers to ensure proper receiving, damage-free handling and storage, and essential protection through redistribution and final use.

3.8.9. Receiving organizations shall provide originating transportation officers with timely advice concerning losses in transit or handling due to inadequate packaging protection or failure to follow established transportation and handling procedures.

3.8.10. Prior to shipping radioactive materials regulated by the Nuclear Regulatory Commission, or any State agency, that the designated receiving facility is authorized to receive the type, form, and quantity of radioactive material to be transferred.

3.8.11. The contractor shall maintain carrier performance data when service issues are encountered with carriers. Data shall include any corrective actions taken by the carrier in responding to service failures. The contractor shall submit carrier performance data to the Center Transportation Officer annually, by October 31 of each calendar year.

Appendix A: Definitions

1. Classes of Shipping and Handling

1.1. Class I. Mission-essential items that, in the event of loss, damage, or delay in shipment, would adversely affect the program or project.

1.2. Class II. Delicate or sensitive items not covered by Class I or Class III. These items are those that may be damaged readily by improper handling.

1.3. Class III. Items requiring special handling and monitoring.

1.4. Class IV. Those items that may be transported or handled through the use of normal commercial transportation means.

2. Contract Data Requirements List

A listing of the technical information and reports required for a contract including submittal and approval criteria and instruction.

3. Contractor

The Center transportation support services contractor or a program or project contractor responsible for shipping on behalf of NASA.

4. Levels of Protection for Preservation, Packaging, and Packing

4.1. Level A. Maximum protection level required for protection of material against the most severe worldwide shipment, handling, and storage conditions.

4.2. Level B. Intermediate protection level required for protection of material under anticipated favorable conditions during worldwide shipment, handling, and storage conditions.

4.3. Level C. Minimum protection level required for protection of material under known favorable conditions.

5. Mission Essential Item

An item of equipment or a part for which the lack of immediate issue on call at the demand source would adversely affect a program or project schedule, safety, or reliability.

6. NASA Critical Space Item Label

A standardized, distinctive label that is prominently displayed on all interior and exterior shipping containers for items on the Transport Critical Item List. Labels shall only be affixed to the exterior container for items not on the Transport Critical Item List but requiring special transportation consideration due to schedule or program constraints. The label alerts shipping and handling personnel to the criticality of the item.

7. Packaging

The application and use of adequate protective measures to prevent damage during transportation and storage, including application of package wraps, cushioning, and complete identification markings.

8. Packaging, Handling, and Transportation Record, NASA Form 1426

The official record defining the specific levels and means of preservation, packaging, packing, marking, handling, and shipping

instructions for mission-essential items.

9. Packing

The final placement of items or packages in exterior shipping containers or other media, including necessary blocking, bracing, cushioning, weatherproofing, exterior strapping, and marking.

10. Preservation

The application and use of adequate protective measures to prevent deterioration from environmental hazards. Measures shall include appropriate cleaning and drying methods, preservatives, and wrapping for protection from chemical danger.

11. Special Design Packaging

Packaging that is used for items possessing characteristics requiring specially designed cushioning, blocking and bracing, or specially designed containers to provide necessary protection. The approval of a packaging engineer or specialist shall be required. Special design packaging applies to items that present the following:

11.1. Special handling, packaging, or transportation problems because of restrictive shock or vibration characteristics.

11.2. A requirement for special environmental control.

11.3. A requirement for maintenance within special or critical pressure or temperature limits.

11.4. A requirement for specialized container design, special handling devices, fixtures, or monitoring devices.

11.5. A requirement to meet special conditions and limitations of storage.

11.6. Special kitting requirements containing hazardous materials.

11.7. Kitting processes containing special design packaging.

12. Transport Critical Item List

A list of items prepared by the contractor and approved by a Center Transportation Officer. The list shall include items that are deemed mission essential, require special handling, monitoring, or an escort.

13. Transportation Official

The official(s) assigned the central responsibility for implementing traffic management functions.

14. Unit Package

The first tie wrap or container applied to a single item or several items of the same identifying number or nomenclature, or a group of items included under one identifying number or nomenclature that comprise a complete or identifiable package.

Appendix B: Packaging, Handling and Transportation Record (NASA Form 1426)

Click here: NASA Form 1426 and Instructions

Appendix C: Container Design Retrieval System Request Form

CONTAINER DESIGN RETRIEVAL SYSTEM
DEPARTMENT OF DEFENSE

Search Request Form

Submit Completed Form to:

AAC/888 ARSS (CDRS)
615 Apalachicola Rd.
Eglin AFB, FL 32542-6845
or FAX: 850-882-1688
(DSN 872-1888)

Requestor Information

Name (Project Lead): _____ Date: _____

o Contractor: _____ o DOD/Government Activity: _____
(Company Name and Cage Code if available.) (Government Agency/Office Symbol.)

Contract #: _____ Government POC: _____
(Contractors must provide a current government contract number for this project and a government sponsor point of contact--POC.)

Address: _____ Address: (POC) _____

Telephone: _____Ext. _____ Telephone: (POC)_____ Ext. ____

FAX: _____ FAX: (POC) _____

Email: _____ Email: (POC) _____

Item Description (Dimensions assumed inches unless otherwise specified)

1. Nomenclature: _____
2. NSN/Part#: _____
3. Dimensions: Length: _____ Width: _____ Height: _____
   Diameter: _____
4. Weight (lbs): _____
5. Fragility of Item: _____
6. Item DOD Hazard Class: _____
7. Drawing available: o Yes o No
8. Special Handling Requirements or Constraints: _____

Container Requirements

9. Quantity: _____
10. Date Required: _____
11. # Items per Container: _____
12. Container Composition: o Any o Steel o Aluminum o Plastic o Fiberglass o Other _____
13. Shock Mitigation System: o Cushion o Shock Mount o Any
14. Opening Style: o Any o Centerline o Bottom (butterdish) o Top o End
15. Other Required Features: _____