ASA CONFERENCE 2023

AIM Solutions Consulting

- **PRESENTS:**
- ***Fundamentals of ATA Specification 300: Specification for Packaging of Airline Supplies***
- ***Packaging for the Government/Military per MIL-STD-2073***

The information presented in this class is based on this version of the specification

Note that '**Airlines for America**' was originally called the '**Air Transport Association**' (ATA).

Thus, when the specification was first written it was 'ATA Spec 300' and has remained so for industry familiarity despite the association's name change

WHY THIS SPEC?

- CASE Standard 3A, paragraph 5.A states: “The ... quality system shall require components and parts be shipped in an ATA 300 specification container or equivalent as appropriate for the unit being shipped, or as specified by the customer.”

- ATA SPEC 106 states: “The supplier shall use ATA spec 300 packaging or customer specified packaging when appropriate.”

- ASA Standard 100, paragraph 11.A States: “The ... quality system shall require components and parts be shipped in an ATA 300 specification container or equivalent as appropriate for the unit being shipped, or as specified by the customer.”

COMPONENT MAINTENANCE MANUAL

Document Part No.

ASSEMBLY (INCLUDING STORAGE)

TASK 71–50–03–500–801

1. Assembly (Including Storage)

A. Assembly Tools – Not applicable

B. Assembly Procedures – Not applicable

C. Storage.

(1) This section gives the instructions to give the protection to the wire harness while the harness is in the storage.

D. Preservation and Packaging (See Table 701).

NOTE: **YOU CAN USE ALTERNATIVE MATERIALS WITH THE SAME PROPERTIES TO REPLACE THE ITEMS SHOWN IN TABLE 701.**

DESCRIPTION	DESIGNATION	MANUFACTURER
Container	ATA 300, Class II	
Desiccant	MIL–D–3464D	Commercially Available
Grease–proof Paper		Commercially Available
Heat–sealable Covering		Commercially Available

Storage Materials Table 701
tb–715003–991–889

(1) Preservation.

(a) Put protective caps on the connectors.

(b) Put grease–proof paper on the harness.

(c) Put the desiccant packets on the harness.

(d) Put the harness in the heat–sealable cover.

(e) Put a desiccant packet and a humidity indicator behind the transparent window in the heat–sealable cover.

(f) Remove the air from the heat–sealable cover.

(g) Seal the heat–sealable cover.

WHY THIS SPEC?

Excerpt of a CMM

WHY THIS SPEC?

- Your customer's PO/RO or agreement may refer to it.

If this appears as a requirement, <u>make sure</u> your pricing includes a line for the cost of the box/container!

ValueFlite Airways
664 Beck St.
Bronx, NY 10455
718-665-0676
www.valueflite.aero

PURCHASE ORDER: 10258

DATE: 1 March 2021

ISSUED TO:
Lockheed Martin Commercial Engine Solutions
7171 Côte Vertu West
Saint-Laurent, Québec H4S1Z3 Canada
ATTN: Sal Scalone

SHIP TO:
ValueFlite Airways
664 Beck St.
Bronx, NY 10455

PN:	TEEC2000-04-AE
DESCRIPTION:	FADEC
CONDITION:	Overhauled
PRICE:	$11500.00

Notes:
1) Ship FedEx P1 to noted location, account number 2133456987
2) Trace to 121, 129, or 145
3) Dual Release
4) Packaged in ATA Spec 300 Category I Container

1) New parts must be traceable to the Production Approval Holder
2) OH, Repaired, Inspected, Tested, Modified parts:
   - Any AD's performed must be clearly noted
   - Trace must include non-incident statements

WHY THIS SPEC?

The Spec, first released in 1960, was created by the ATA by an airline committee for the purpose of standardizing packaging of airline parts so as to minimize shipping damage and preserve the parts.

1-1. Purpose

This functional specification establishes guidelines for the packaging of aircraft parts and supplies shipped to an airline and contains minimum recommendations of the airline industry to be used in the design, development, and procurement of effective packaging.

ARE THERE OTHER PACKING SPECIFICATIONS?

MIL-STD-2073-1E
w/CHANGE 1
7 January 2011
SUPERSEDING
MIL-STD-2073-1E
23 May 2008

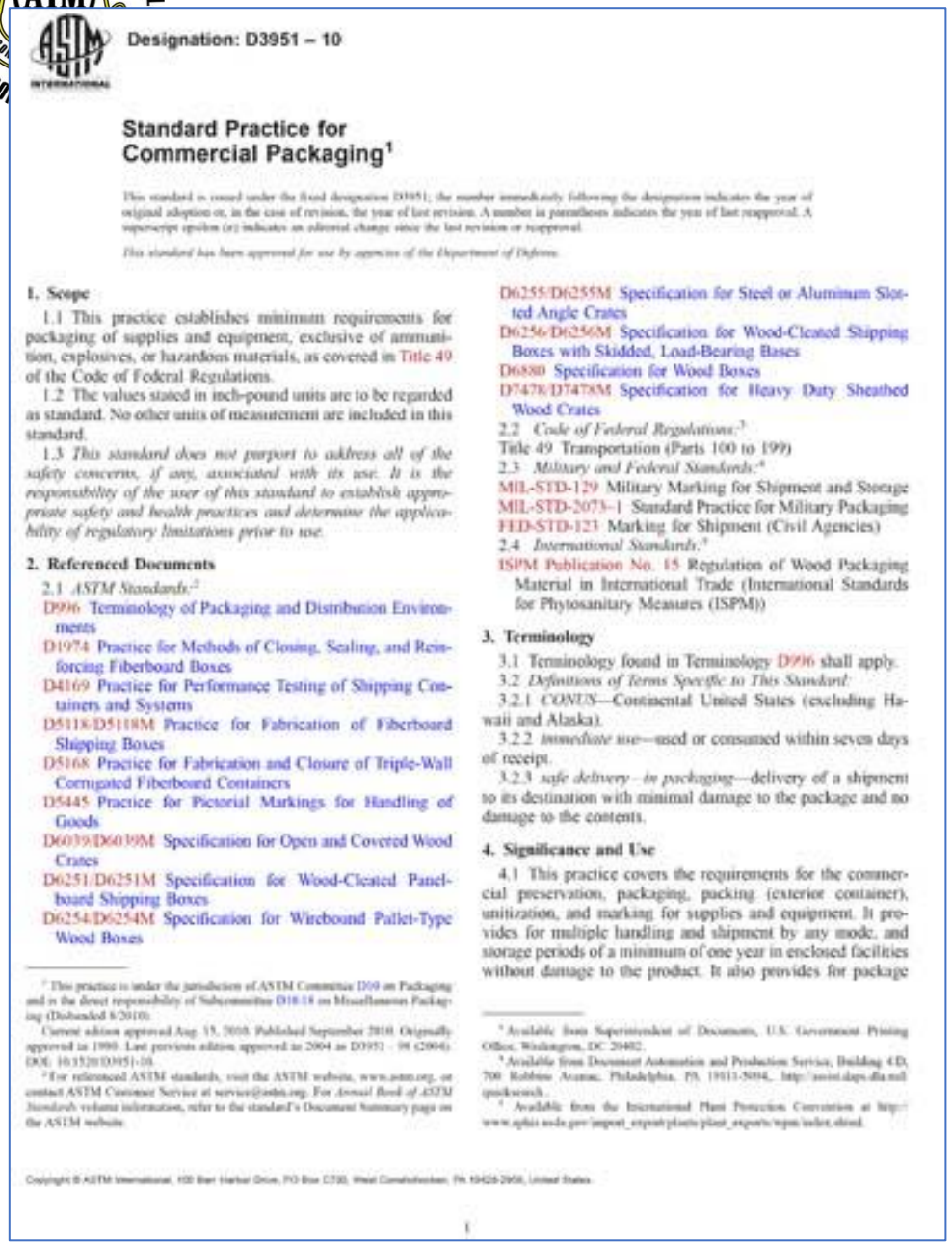
DEPARTMENT OF DEFENSE

STANDARD PRACTICE FOR MILITARY PACKAGING

Many DoD Solicitation Awards ***will*** cite this Standard you ***must*** be compliant to

We'll go over this later

ARE THERE OTHER PACKING SPECIFICATIONS?



Designation: D3951 – 10

Standard Practice for Commercial Packaging[1]

This standard is issued under the fixed designation D3951; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This practice establishes minimum requirements for packaging of supplies and equipment, exclusive of ammunition, explosives, or hazardous materials, as covered in Title 49 of the Code of Federal Regulations.

1.2 The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D996 Terminology of Packaging and Distribution Environments

D1974 Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes

D4169 Practice for Performance Testing of Shipping Containers and Systems

D5118/D5118M Practice for Fabrication of Fiberboard Shipping Boxes

D5168 Practice for Fabrication and Closure of Triple-Wall Corrugated Fiberboard Containers

D5445 Practice for Pictorial Markings for Handling of Goods

D6039/D6039M Specification for Open and Covered Wood Crates

D6251/D6251M Specification for Wood-Cleated Panelboard Shipping Boxes

D6254/D6254M Specification for Wirebound Pallet-Type Wood Boxes

D6255/D6255M Specification for Steel or Aluminum Slotted Angle Crates

D6256/D6256M Specification for Wood-Cleated Shipping Boxes with Skidded, Load-Bearing Bases

D6880 Specification for Wood Boxes

D7478/D7478M Specification for Heavy Duty Sheathed Wood Crates

2.2 *Code of Federal Regulations:*[3]

Title 49 Transportation (Parts 100 to 199)

2.3 *Military and Federal Standards:*[4]

MIL-STD-129 Military Marking for Shipment and Storage

MIL-STD-2073–1 Standard Practice for Military Packaging

FED-STD-123 Marking for Shipment (Civil Agencies)

2.4 *International Standards:*[5]

ISPM Publication No. 15 Regulation of Wood Packaging Material in International Trade (International Standards for Phytosanitary Measures (ISPM))

3. Terminology

3.1 Terminology found in Terminology D996 shall apply.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *CONUS*—Continental United States (excluding Hawaii and Alaska).

3.2.2 *immediate use*—used or consumed within seven days of receipt.

3.2.3 *safe delivery – in packaging*—delivery of a shipment to its destination with minimal damage to the package and no damage to the contents.

4. Significance and Use

4.1 This practice covers the requirements for the commercial preservation, packaging, packing (exterior container), unitization, and marking for supplies and equipment. It provides for multiple handling and shipment by any mode, and storage periods of a minimum of one year in enclosed facilities without damage to the product. It also provides for package

[1] This practice is under the jurisdiction of ASTM Committee D10 on Packaging and is the direct responsibility of Subcommittee D10.14 on Miscellaneous Packaging (Disbanded 8/2010).

Current edition approved Aug. 15, 2010. Published September 2010. Originally approved in 1980. Last previous edition approved in 2004 as D3951 – 98 (2004). DOI: 10.1520/D3951-10.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

[4] Available from Document Automation and Production Service, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, http://assist.daps.dla.mil/quicksearch/.

[5] Available from the International Plant Protection Convention at http://www.aphis.usda.gov/import_export/plants/plant_exports/wpm/index.shtml.

There is also this ASTM International Specification D3951:

Standard Practice for Commercial Packaging

(The revision shown is not the latest)

Two blondes walk into a building...

You'd think one of them would have seen it!!

THE BASICS:

For the purpose of this specification, reusable shipping containers are designated as follows:

Category I
Reusable for a minimum of 100 round-trips

Category II
Reusable for a minimum of 10 round-trips

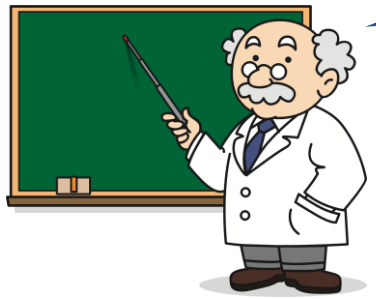
Category III
Usable for a minimum of 1 trip

THE BASICS:

Category I
Reusable for a minimum of 100 round-trips

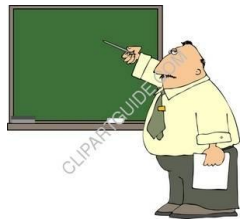
Informally, think of this category for crazy expensive parts or when specified by the customer

Category II
Reusable for a minimum of 10 round-trips



Whereas this category is generally for Rotables

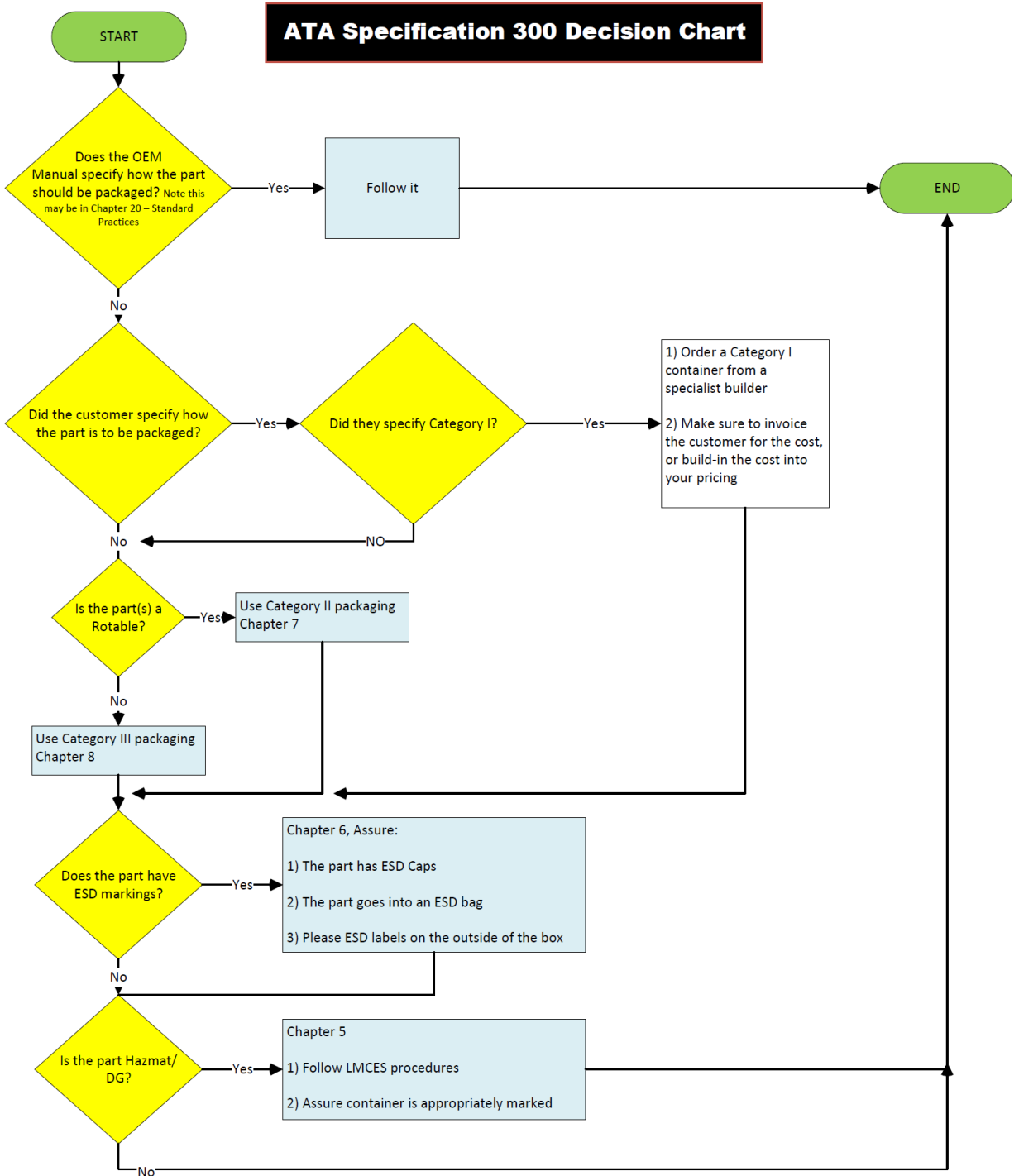
Category III
Usable for a minimum of 1 trip



III is generally for expendables or lower cost rotables

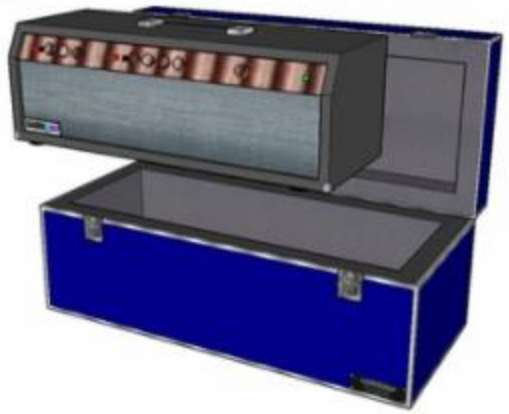
Let's zoom in to review this flow chart developed by AIM

ATA Specification 300 Decision Chart



These are all Category I containers

By the way, ATA Category 1 containers are also used for sensitive music equipment and in other industries



$391.00

1/2" ATA Music Case for 100 Watt Amp Head - Extra Heavy Duty

Small Amp Head - Hinged

$484.00

1/2" ATA Music Case for 115 Combo Amp - Extra Heavy Duty

115 Combo - POC

$434.00

1/2" ATA Music Case for 210 Combo - Extra Heavy Duty

210 Combo - POC

$434.00

1/2" ATA Music Case for 212 Amp - Extra Heavy Duty

212 Combo - POC

Why is that so?

1. Drop Test

Drop tests shall be conducted in accordance with [Table B-2-1.1] of this section. In each case, Face, Edge and Corner drops shall be performed. Conduct the drop tests in accordance with ASTM D5276, "Standard Test Method for Drop Test of Loaded Containers by Free Fall".

Condition test samples for a minimum of 24 hours to a standard atmosphere of 73.4 +/- 5°F (23 +/- 1°C) and 50% +/- 10 % relative humidity.

Tests should be conducted in the conditioned atmosphere whenever possible. If not possible, conduct the tests as soon after removal from the conditioning atmosphere as practicable.

The "number of drops" in [Table B-2-1.1] is the TOTAL drops in each testing regime (face, edge, corner).

The Face Drop Test total shall be equally divided between the top, bottom, and two adjacent sides (e.g. surfaces 1, 3, 4, and 5 of [Figure B-2-1.1]). However, the selection of faces shall include the two faces with the smallest area and the lid (if the lid is not one of the faces of smallest area).

The Edgewise Drop Test total shall be equally divided between two adjacent bottom edges, one vertical edge, and one top edge (e.g. 3-4, 3-5, 6-2, and 1-2 of [Figure B-2-1]).

The Cornerwise Drop Test total shall be equally divided between two diagonally opposite bottom corners and two adjacent top corners.

Table B-2-1.1 Height and Number of Drops

GROSS WEIGHT Not Exceeding	DIMENSIONS ON ANY EDGE Not Exceeding	FACE DROP TEST (Height & Number of Drops)		EDGEWISE DROP TEST (Height & Number of Drops)		CORNERWISE DROP TEST (Height & Number of Drops)	
		Category I	Category II	Category I	Category II	Category I	Category II
		160 Drops at	16 Drops at	80 Drops at	8 Drops at	40 Drops at	4 Drops at
50 lbs.	36 in.	30 in.	22 in.	36 in.	27 in.	36 in.	27 in.
100 lbs.	48 in.	21 in.	16 in.	36 in.	27 in.	36 in.	27 in.
150 lbs.	60 in.	18 in.	14 in.	36 in.	27 in.	36 in.	27 in.
200 lbs.	60 in.	16 in.	12 in.	36 in.	27 in.	36 in.	27 in.
600 lbs.	72 in.	16 in.	12 in.	36 in.	27 in.	36 in.	27 in.
3000 lbs.	No Limit	16 in.	12 in.	24 in.	18 in.	24 in.	18 in.
No Limit	No Limit	16 in.	12 in.	12 in.	9 in.	12 in.	9 in.

B-2-2. Flame Penetration and Thermal Resistance

Outer packaging used to transport as air cargo cylinders containing compressed oxygen, other compressed, oxidizing gasses, or oxygen generators must comply with applicable regulations including flame penetration and thermal resistance tests and documentation of the tests.

B-2-3. Water Resistance

Category I containers shall be resistant to normal precipitation.

B-2-4. Vibration Test for Category I Containers

Vibration tests shall be conducted on **Category I** containers in accordance with ASTM Designation D-999 [ASTM D-999], Procedural Method B, within the range of 5 to 50 cycles per second for a period of not less than two (2) hours.

B-2-5. Penetration Test for Category I Containers

All **Category I** containers must be capable of passing the impact resistance test which consists of a bar of 3.2 centimeters in diameter with a hemispherical end, weighing 6 kilograms being dropped with its longitudinal axis vertical, onto the weakest point of any exterior surface of the container. The drop shall be 0.5 meters from the bottom of the bar to the top of the container surface. Failure occurs if the bar either penetrates the outer wall or permanently damages it in a manner which will degrade the structural strength of the container or container wall.

Compliant Category I containers have to demonstrate conformity with numerous engineering-level specifications

Note:

The height of drop tests shall be determined by satisfaction of BOTH the Gross Weight and the Dimensions criteria. For example, a container weighing between 50 and 100 lbs, having a maximum dimension of any edge between 48 and 60 inches shall be face dropped 21 inches for Category I and 16 inches for Category II. For a Category I container, the total number of drops shall be 280 drops, all of which must be conducted on a single test specimen. For a Category II container, the total number of drops shall be 28 drops, all of which must be conducted on a single test specimen.

2. Impact Test

Impact Tests shall be conducted in accordance with [Table B-2-1.2] of this section.

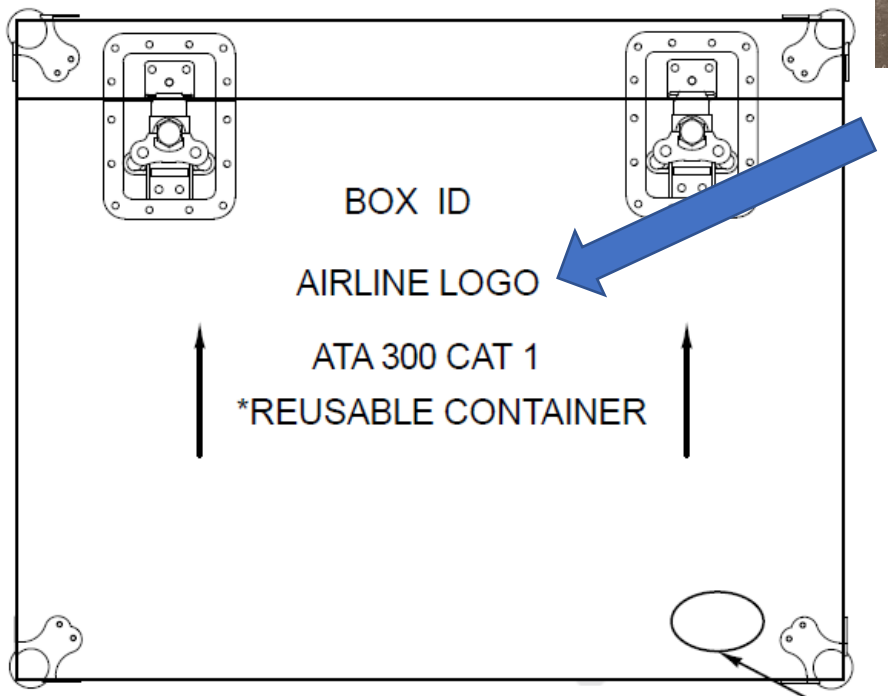
Table B-2-1.2 Impact Velocity and Sequence For Incline Impact Test

GROSS WEIGHT OF CONTAINER AND LOAD SHALL NOT EXCEED 1000 POUNDS	
EDGE IMPACT SEQUENCE AT EACH VELOCITY Edge Numbers 1-5, 1-2, 1-6, 1-4, 3-5, 3-2, 3-6, 3-4, 5-2, 5-4, 6-2, 6-4	This sequence will be performed with one impact on each edge in sequence shown, at the following velocities: 6 ft. per sec., 8 ft. per sec., 10 ft per sec., and 12 ft per sec. for a total of 96 impacts on the container edges (Two complete cycles of 48 impacts each).
CORNER IMPACT SEQUENCE AT EACH VELOCITY Corner Numbers 2-3-6, 6-3-4, 4-3-5, 5-3-2, 2-1-6, 6-1-4, 4-1-5, 5-1-2	This sequence will be performed with one impact on each corner in sequence shown at the following velocities: 6 ft. per sec., 8 ft. per sec., 10 ft. per sec., and 12 ft. per sec. for a total of 128 impacts on the container corners (Four complete cycles of 32 impacts each).

Figure A-3-2.2. **CAT I Container Sample Marking**

NOTE: AIRLINES SHOULD PROVIDE MARKING INSTRUCTIONS TO CASE SUPPLIER.
BELOW ARE SUGGESTED MARKING INSTRUCTIONS

*IF SPACE DOES NOT ALLOW "REUSABLE CONTAINER" CAN BE ELIMINATED



EXTERIOR VIEW OF FRONT PANEL
(BACK PANEL MARKING IS IDENTICAL)

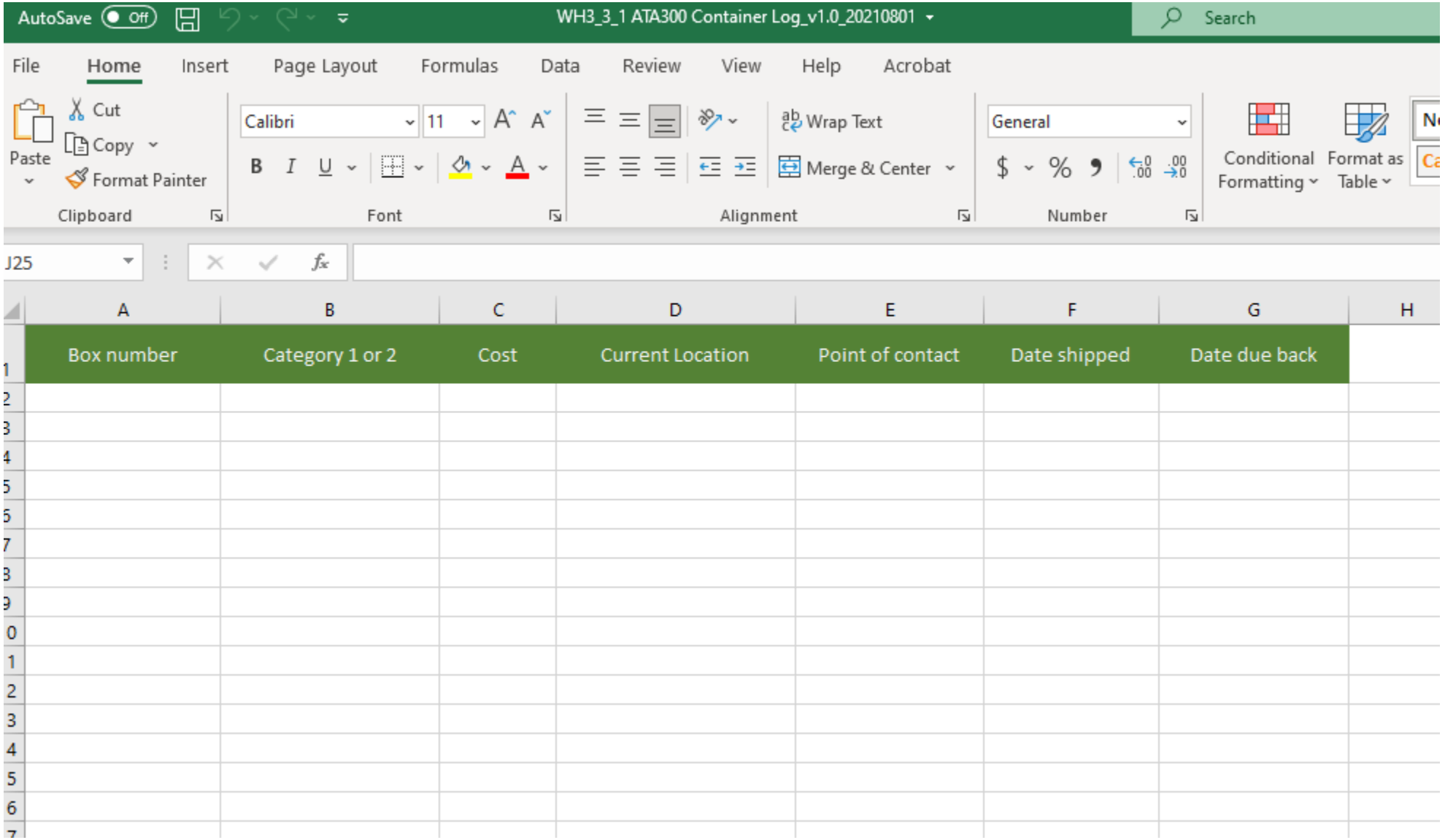
CONTAINER MANUFACTURER'S TAG OR STAMP

Customers want their Category I containers back!

1) ***They want their logo or name permanently marked on the box***

2) ***In some cases, they specify that their name be 'hot branded' into the case to make it harder for persons to peel off their name or logo***

Here is an example that a customer uses to track their ATA Spec 300 boxes which go to AMO/Repair Stations.



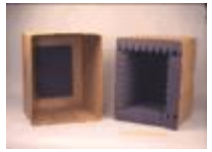

GROUND CREW ARE FRIENDS, NOT FOOD

Just a question:

If you're a Repair Station/AMO, does your receiving process account for documenting that a customer sent you a Category 1 container so that the shipping department can then re-use it to ship the part back?

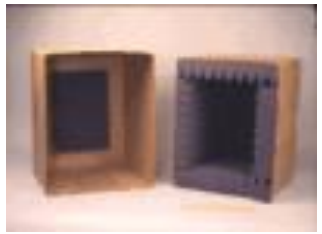
Category II


DELICATE UNIT
HA DLE WITH CARE
REUSABLE CONTAINER
ATA SPEC 300 CATEGORY II



Category II

All cushioning material shall be permanently attached to the container sides. Additional void fill material such as plastic bubble wrap or foam sheets may be added to restrict movement of an item within its container as long as the material is reusable and does not reduce the cushioning characteristics of the container.



Category II

It is acceptable to have dunnage material which is adjustable and interchangeable. Adjustable materials, while fixed to the containers, are capable of adjustment to receive varying sizes of units. Interchangeable materials may be switched between parts and / or containers. Containers using the "dunnage board" principle fall into this type.

Category III
(least prescriptive)

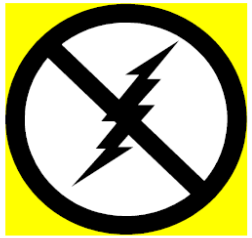
Excerpts from 8-2-1:

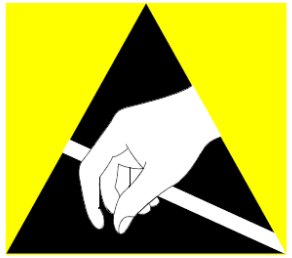
Materials shall be sufficiently durable to properly protect the packaged item during normal shipping and handling processes.

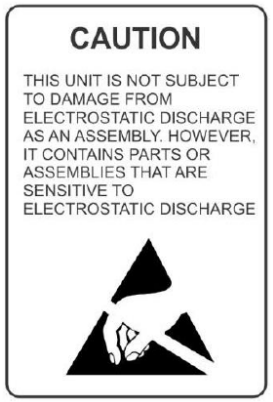
Foam sheets, bubble wrap, or other cushioning and void fill materials are acceptable but must be non-dust producing and mold resistant.

All packaging materials, including the outer containers and inner packings, shall be reusable to the greatest extent possible and shall utilize recycled post consumer waste where available and feasible.

Parts which are subject to ESD damage can be positively identified by these typical markings which include:”

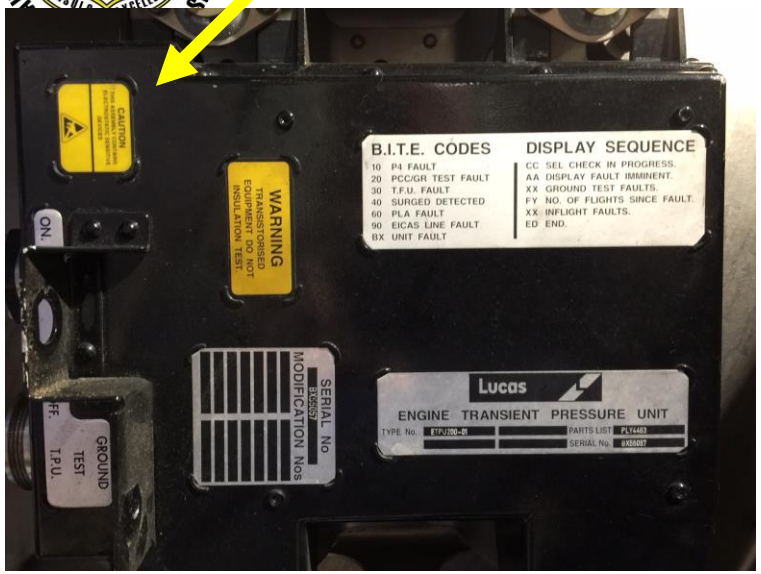






Are there any ESD parts on some engines?

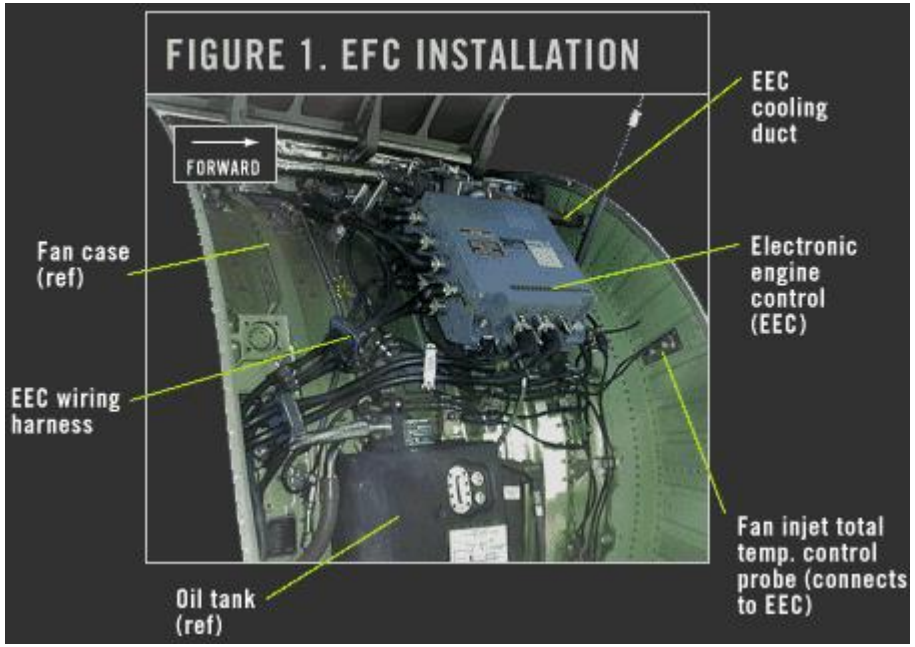
Are there any ESD parts on some engines?



YES!

For example:

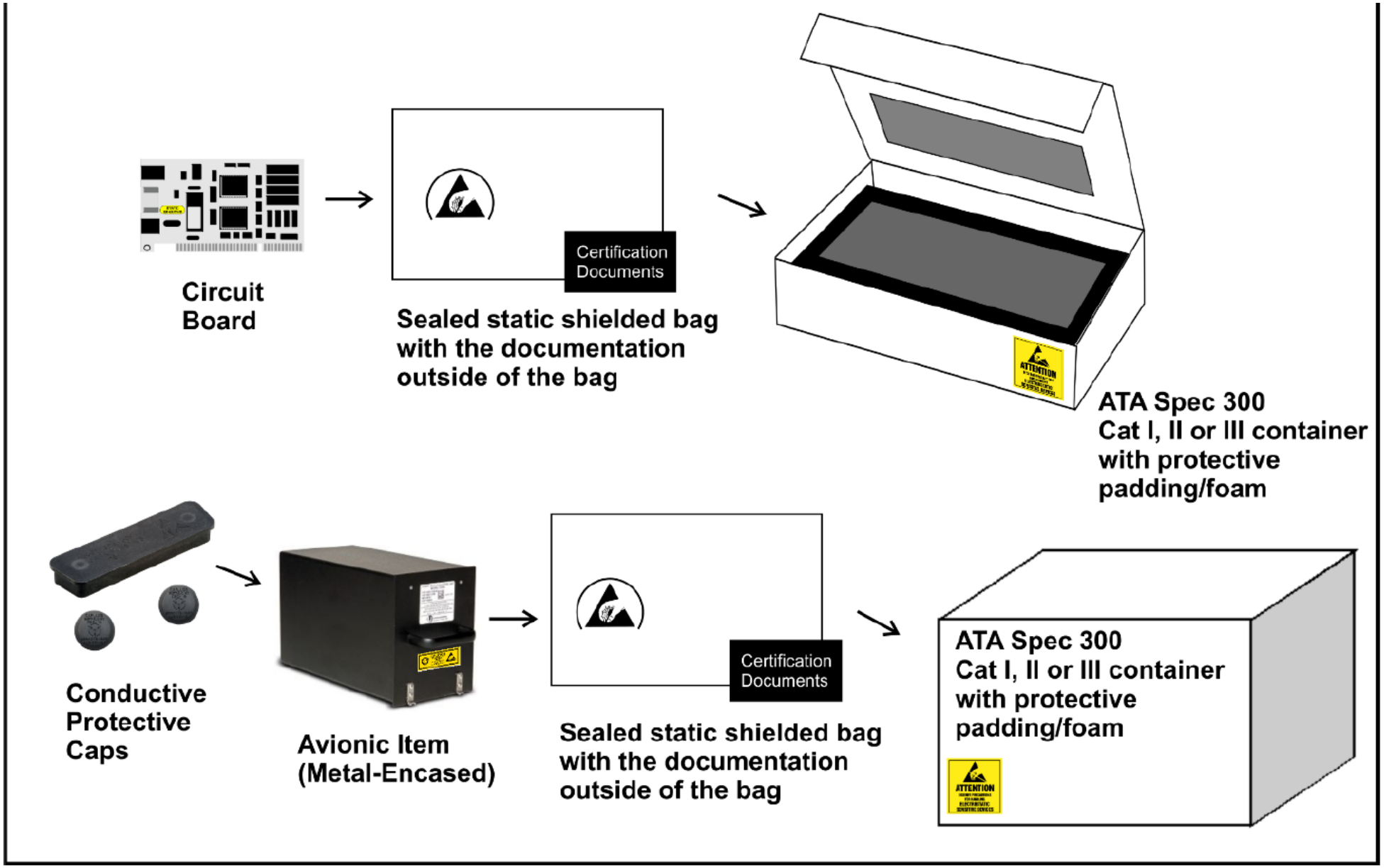
- ***EEC (Electronic Engine Control_***
- ***FADEC (Full Authority Digital Engine Control)***
- ***EPTU (Engine Transient Pressure Unit)***



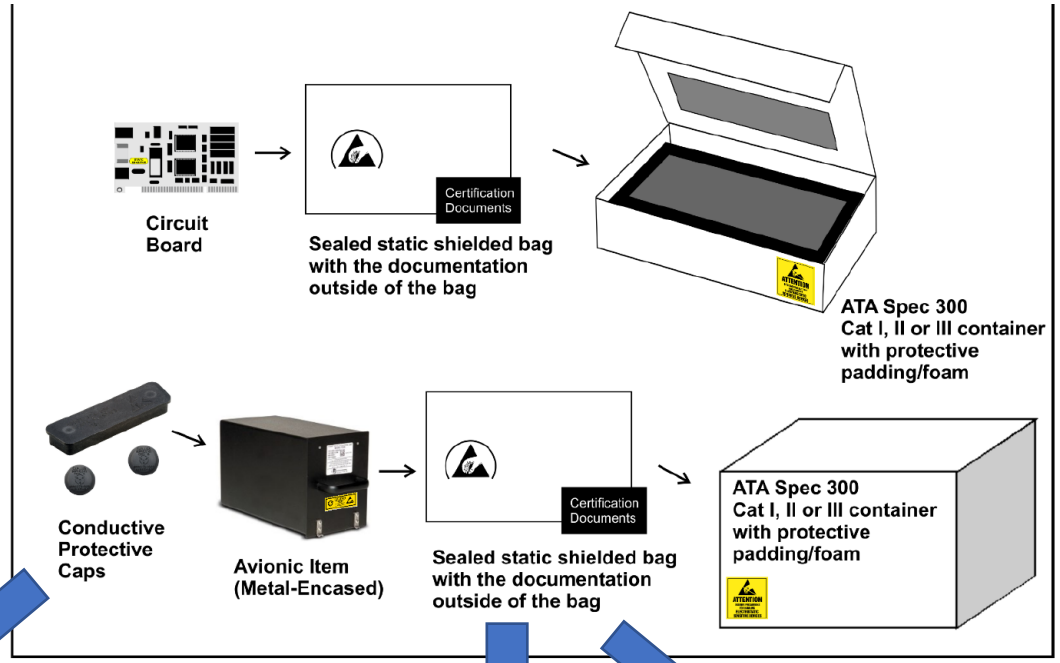
"Dress for the job you want, not the job you have."

Me, arriving to work:

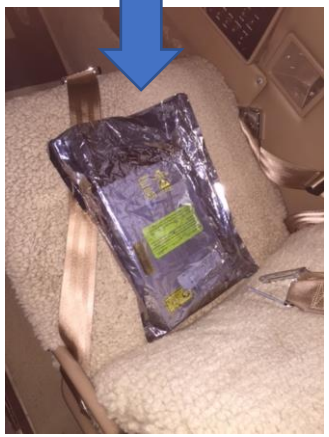
Chapter 6 of the ATA Spec 300 is for ESD



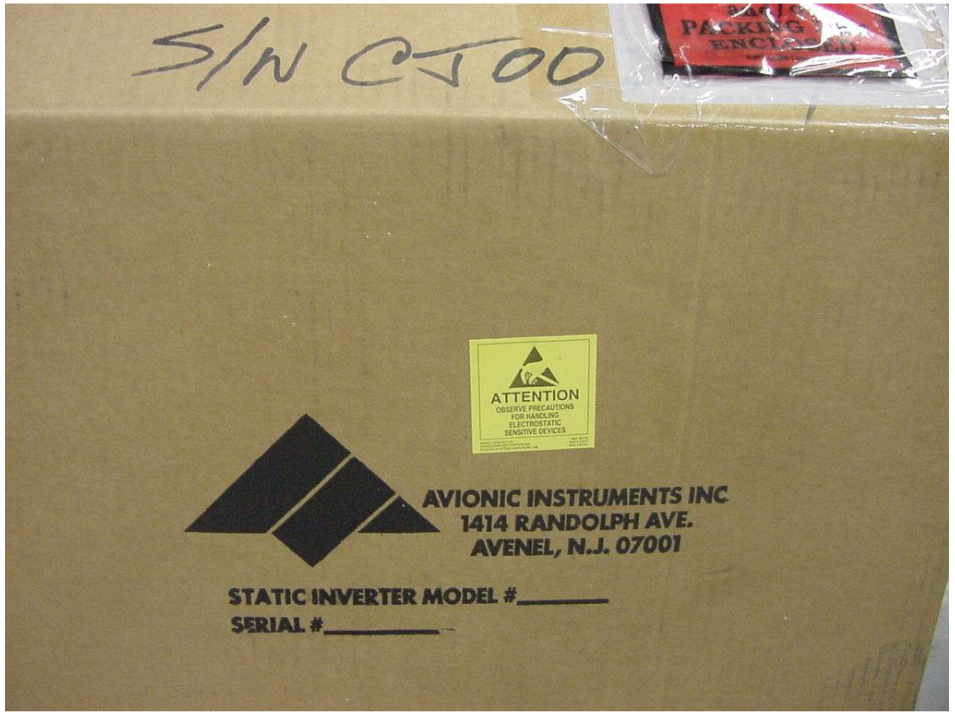
Chapter 6 of the ATA Spec 300 is for ESD



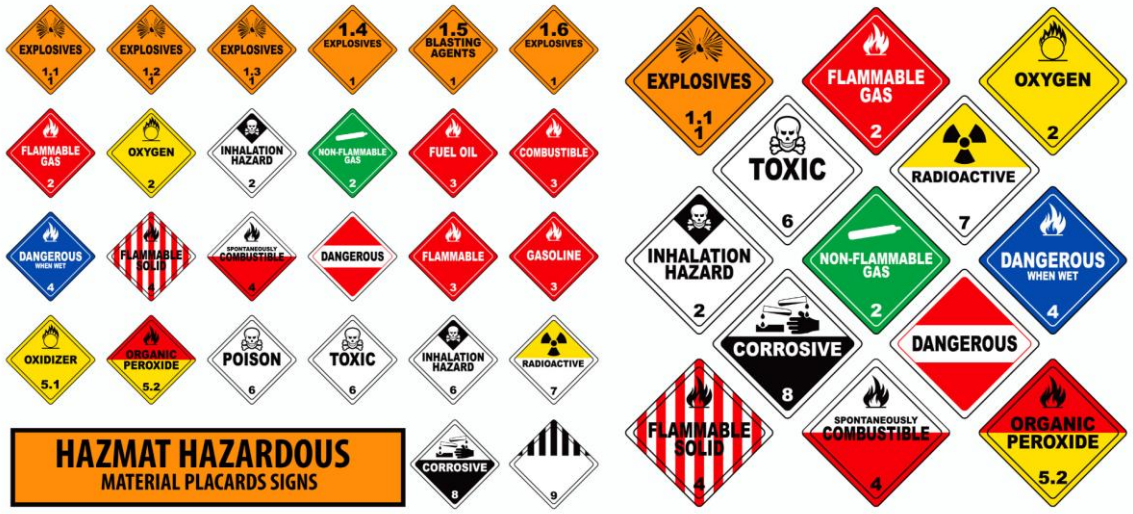
Typical ESD Caps



Make sure to place ESD decals on the outside of the box



Is the Part Hazardous Material / Dangerous Goods?



Is the Part Hazardous Material / Dangerous Goods?

Bottom Line

Chapter 5. Packaging of Hazardous Material

5-1. Purpose

The purpose of this specification is to identify the applicable regulatory documents that govern the commercial transport of hazardous materials and substances and to describe materials subject to those regulatory documents. Regulatory and legal requirements may change before the next revision of this specification. Therefore, it is the responsibility of the user of this specification to assure that all current regulatory and legal requirements are met.

The terms **Hazardous Materials, Dangerous Goods** and **Restricted Articles** are used interchangeably in this document, and include **Hazardous Substances**, **Hazardous Wastes**, **Marine Pollutants**, and **Elevated Temperature Materials**.

5-2. Application of Standards

These materials and substances are defined and listed in 49 CFR Parts 171, 172, 173 and as authorized in 49 CFR 171.11 [DOT Title 49], and the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air [ICAO Doc 9284].

5-3. Regulatory Documents

In determining the specifications for packaging designed, constructed, tested, maintained, and filled with Hazardous Materials, Dangerous Goods or Restricted Articles, the following regulatory documents must be consulted. Users should assure that they consult the most recent version of these documents.

[DOT Title 49]	*Code of Federal Regulations Title 49, Parts 100 through 199*. United States Department of Transportation (DOT) (www.dot.gov). More information is available online.
[ICAO Doc 9284]	*Technical Instructions for the Safe Transport of Dangerous Goods by Air*, International Civil Aviation Organization (ICAO) (www.icao.org). ICAO catalog Doc. 9284.
[IATA DGR]	*Dangerous Goods Regulations*, International Air Transport Association (IATA) (www.iata.org). Catalog is available online.
[IMO IMDG]	*International Maritime Dangerous Goods Code (for transport of dangerous goods by sea)*. International Maritime Organization (IMO) (www.imo.org). More information is available online.

5-4. Packaging and Documentation Requirements

Hazardous Materials or **Substances**, **Dangerous Goods** and **Restricted Articles** shall be properly classified, described, packaged, marked, labeled, documented and in condition for transport in compliance with applicable regulations and instructions. For packaging used to

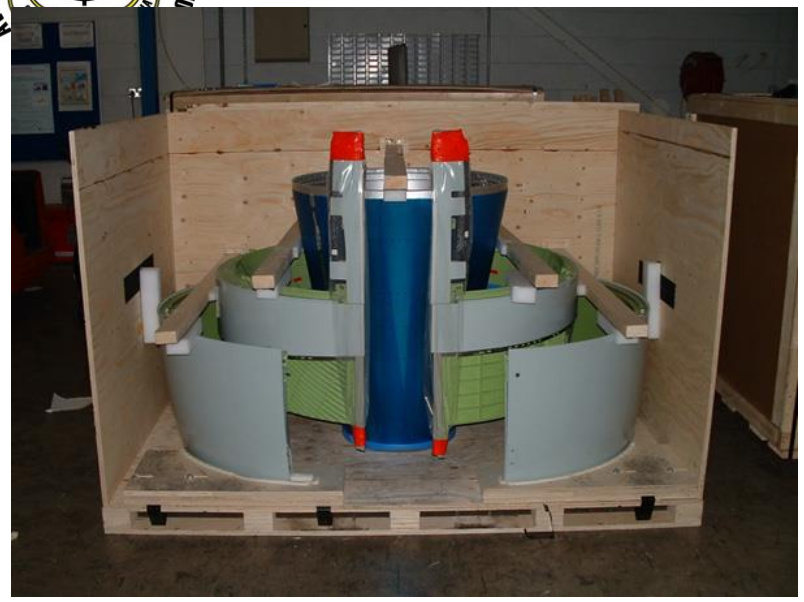
Are packaging ‘peanuts’ allowed by ATA Spec 300?

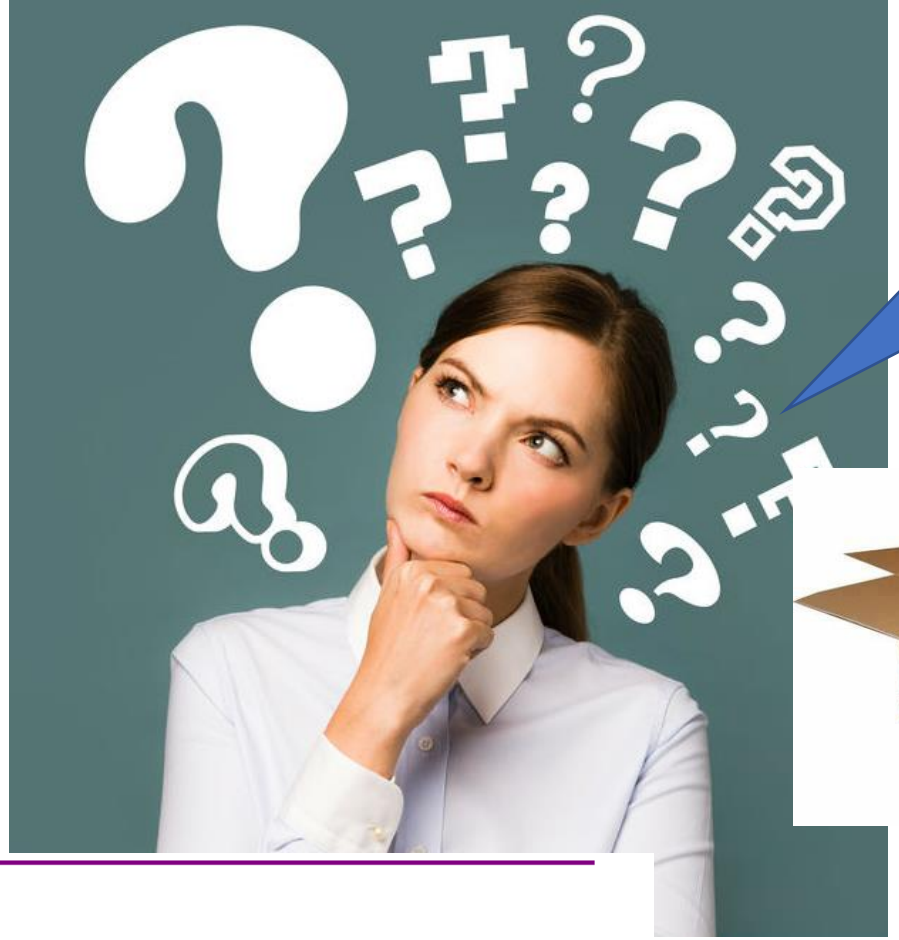
NO!

7-2-4 and 8-2-1:
“Miscellaneous wadding such as newspaper or rags, and loose fill packing materials such as plastic 'chips' or 'peanuts' shall not be used as dunnage or cushioning material.”

Are there any restrictions on foam in place packaging?

Foam-in-Place (FIP) dunnage is not acceptable for use in **Category I** containers.





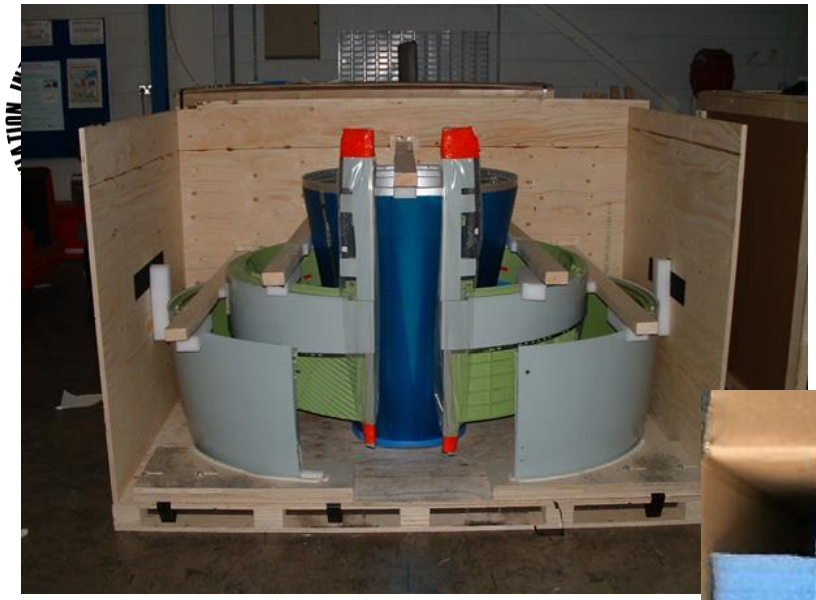
When do I have to use skids/pallets?

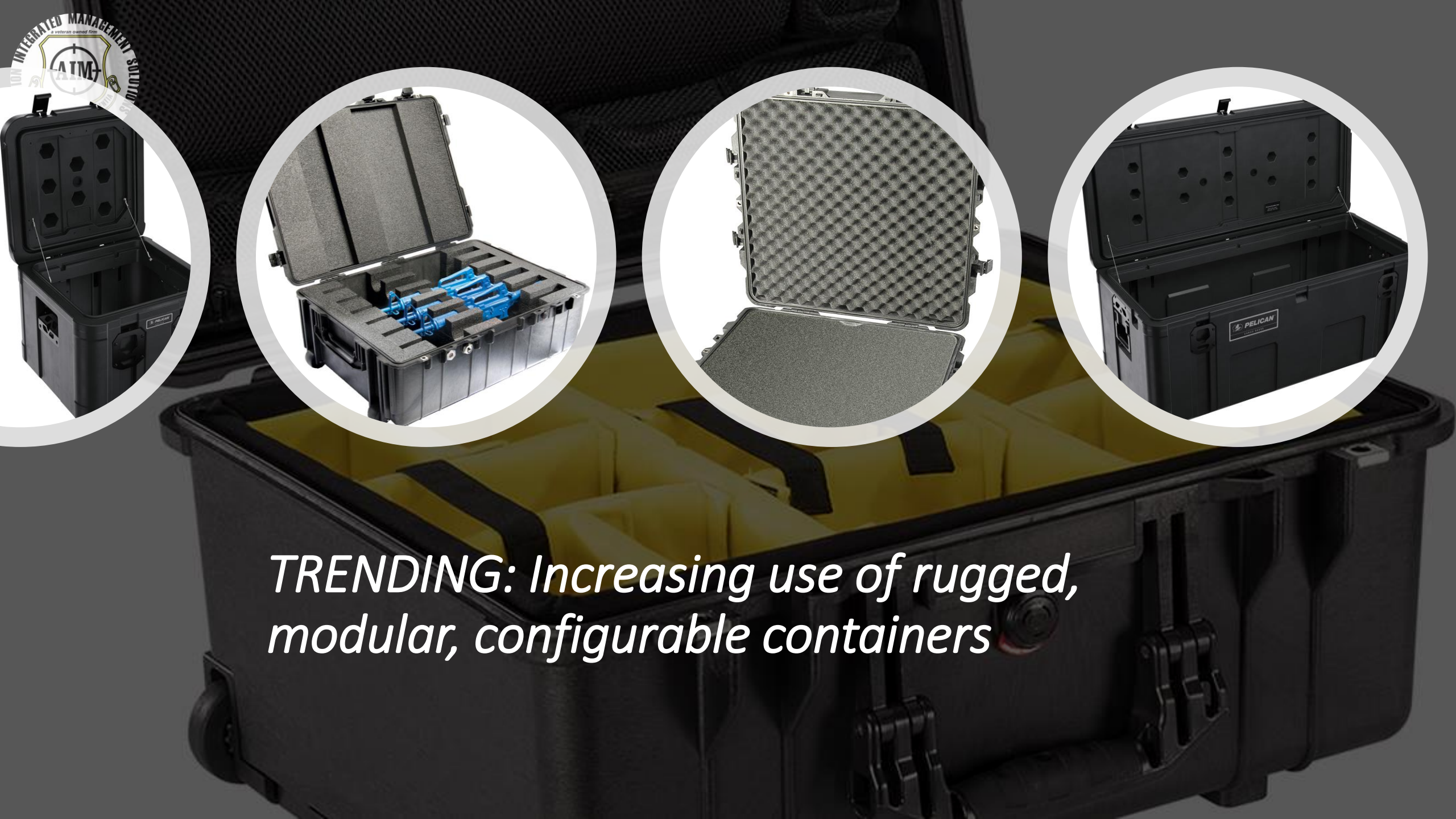
7-2-9. Skids

Containers designed for gross weights over 90 kg (200 lbs) or gross sizes over 0.028 cubic meters (27 cub. ft.) with minimum bottom area of 0.093 sq. meters (9 sq. ft), shall be equipped with skids or supports allowing at least 7.6 cm (3.00 in.) ground clearance for materials handling equipment. Skid height requirement is waived when it unduly restricts transportability or prevents shipment of the item due to the height of the shipping container.

Skids are to be permanently attached to ensure the skids can withstand severe impact on any side of the skid.

Don’t reinvent the wheel!
Your best source of ideas on how to package parts is how were the parts shipped to you!





TRENDING: Increasing use of rugged, modular, configurable containers

NEXT: Military/Government Packaging

Military/Government Packaging, this is the standard:

MIL-STD-2073-1E
w/CHANGE 1
7 January 2011
SUPERSEDING
MIL-STD-2073-1E
23 May 2008

DEPARTMENT OF DEFENSE

STANDARD PRACTICE FOR MILITARY PACKAGING

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED: SPE4A6-18-V-488A	PAGE 4 OF 10 PAGES

SECTION B

EXPORT CONTROL:

THIS ITEM HAS TECHNICAL DATA SOME OR ALL OF WHICH IS SUBJECT TO EXPORT-CONTROL REGULATIONS. DISTRIBUTION OF THE TECHNICAL DATA AND ELIGIBILITY FOR AWARD ARE LIMITED TO THOSE SUPPLIERS QUALIFIED THROUGH JCP CERTIFICATION, OR TO THOSE LICENSED BY EITHER THE DEPARTMENTS OF STATE OR COMMERCE; OR TO FOREIGN SUPPLIERS PURSUANT TO INTERNATIONAL AGREEMENTS.

TO APPLY FOR JCP CERTIFICATION, COMPLETE DD FORM 2345, MILITARY CRITICAL TECHNICAL DATA AGREEMENT, FORM IS AVAILABLE AT THE WORLD WIDE WEB ADDRESS:

https://public.logisticsinformationservice.dla.mil/PublicHome/jcp/default.aspx

OR BY WRITING TO:

DLA LOGISTICS INFORMATION SERVICE
FEDERAL CENTER
74 WASHINGTON AVE., NORTH
BATTLE CREEK, MI 49037-3084

TO MANUFACTURE THIS ITEM, NON-JCP CERTIFIED SUPPLIERS MUST SUBMIT A CURRENT MANUFACTURING LICENSE AGREEMENT, TECHNICAL ASSISTANCE AGREEMENT, DISTRIBUTION AGREEMENT OR OFF-SHORE PROCUREMENT AGREEMENT APPROVED BY THE DIRECTORATE OF DEFENSE TRADE CONTROLS WITH THE OFFER, UNLESS AN EXEMPTION UNDER THE PROVISIONS OF ITAR SECTION, 125.4 EXEMPTIONS OF GENERAL APPLICABILITY, AND/OR EAR PART 740 ARE APPLICABLE.

NON-JCP CERTIFIED SUPPLIERS SEEKING EXPORT CONTROLLED TECHNICAL DATA ARE REQUIRED TO PROVIDE THE CONTRACTING OFFICER WITH AN APPLICABLE AGREEMENT OR IDENTIFY WHICH ITAR/EAR EXEMPTION APPLIES TO RECEIVE A COPY OF THE EXPORT CONTROLLED TECHNICAL DATA.

NOTE: JCP CERTIFIED CONTRACTORS WHO RECEIVE TECHNICAL DATA PURSUANT TO THEIR DD FORM 2345 CERTIFICATION MAY NOT FURTHER DISSEMINATE SUCH DATA UNLESS FURTHER DISSEMINATION OF THE TECHNICAL DATA IS EXPRESSLY PERMITTED BY DODD 5230.25.

CRITICAL APPLICATION ITEM

ARROWHEAD PRODUCTS CORPORATION 70628 P/N 13382-8

CLIN	PR	PRLI	UI	QUANTITY	UNIT PRICE
0001	0075648543	0001	EA	2.000	21,825.00

NSN/MATERIAL:2835010328910

QTY VARIANCE: PLUS 00.00% MINUS 00.00%

INSPECTION POINT: ORIGIN

ACCEPTANCE POINT: ORIGIN

PREP FOR DELIVERY:

PKGING DATA - MIL-STD-2073-1D, 15 DEC 1999
QUP:001 PRES MTHD:41 CLNG/DRY:1 PRESV MAT:XX
WRAP MAT:XX CUSH/DUNN MAT:XX CUSH/DUNN THKNESS:X
UNIT CONT:D3 OPI:M
INTRMDTE CONT:E5 INTRMDTE CONT QTY:AAA
PACK CODE:U
MARKING SHALL BE IN ACCORDANCE WITH MIL-STD-129.

CONTINUED ON NEXT PAGE

PKGING DATA - MIL-STD-2073-1D, 15 DEC 1999
QUP:001 PRES MTHD:41 CLNG/DRY:1 PRESV MAT:XX
WRAP MAT:XX CUSH/DUNN MAT:XX CUSH/DUNN THKNESS:X
UNIT CONT:D3 OPI:M
INTRMDTE CONT:E5 INTRMDTE CONT QTY:AAA
PACK CODE:U
MARKING SHALL BE IN ACCORDANCE WITH MIL-STD-129.

This is a typical solicitation with the packaging information in the panel below

Wait just a minute, PLEASE! Let's take a look at this handy document

DLA
DEFENSE LOGISTICS AGENCY
Established 1961

The Nation's Combat Logistics Support Agency

DLA Packaging and Marking Guide

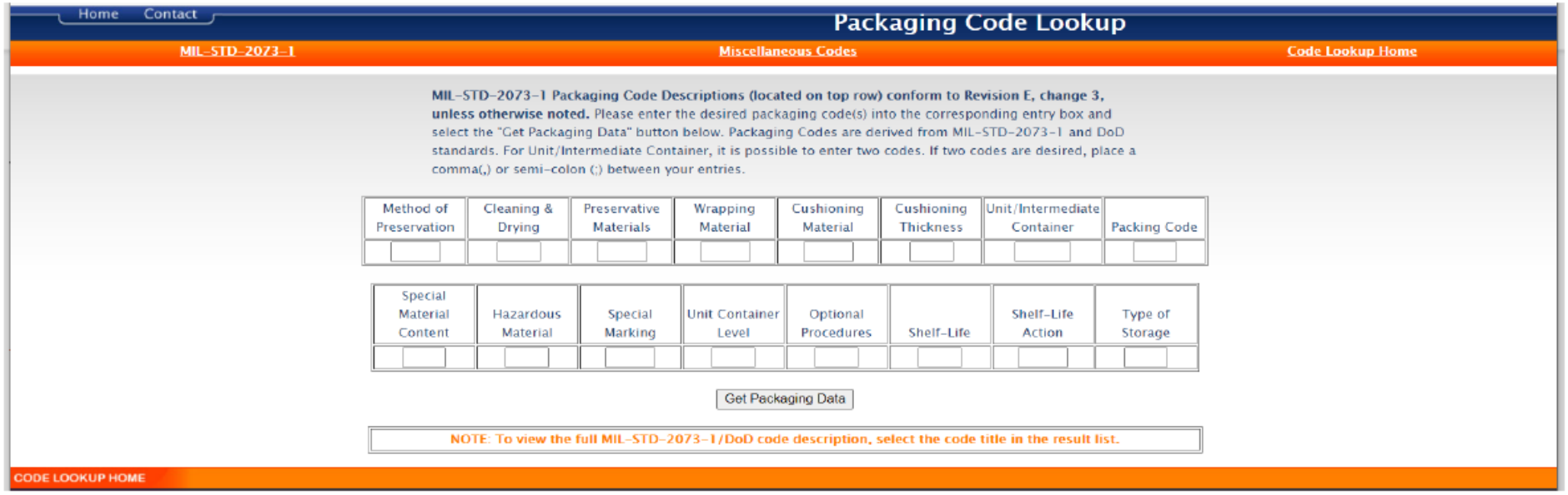
Jennifer Smith
DLA Packaging Program Manager
February 2021

WARFIGHTER ALWAYS

MIL STD 2037-1E, Packaging Code Lookup

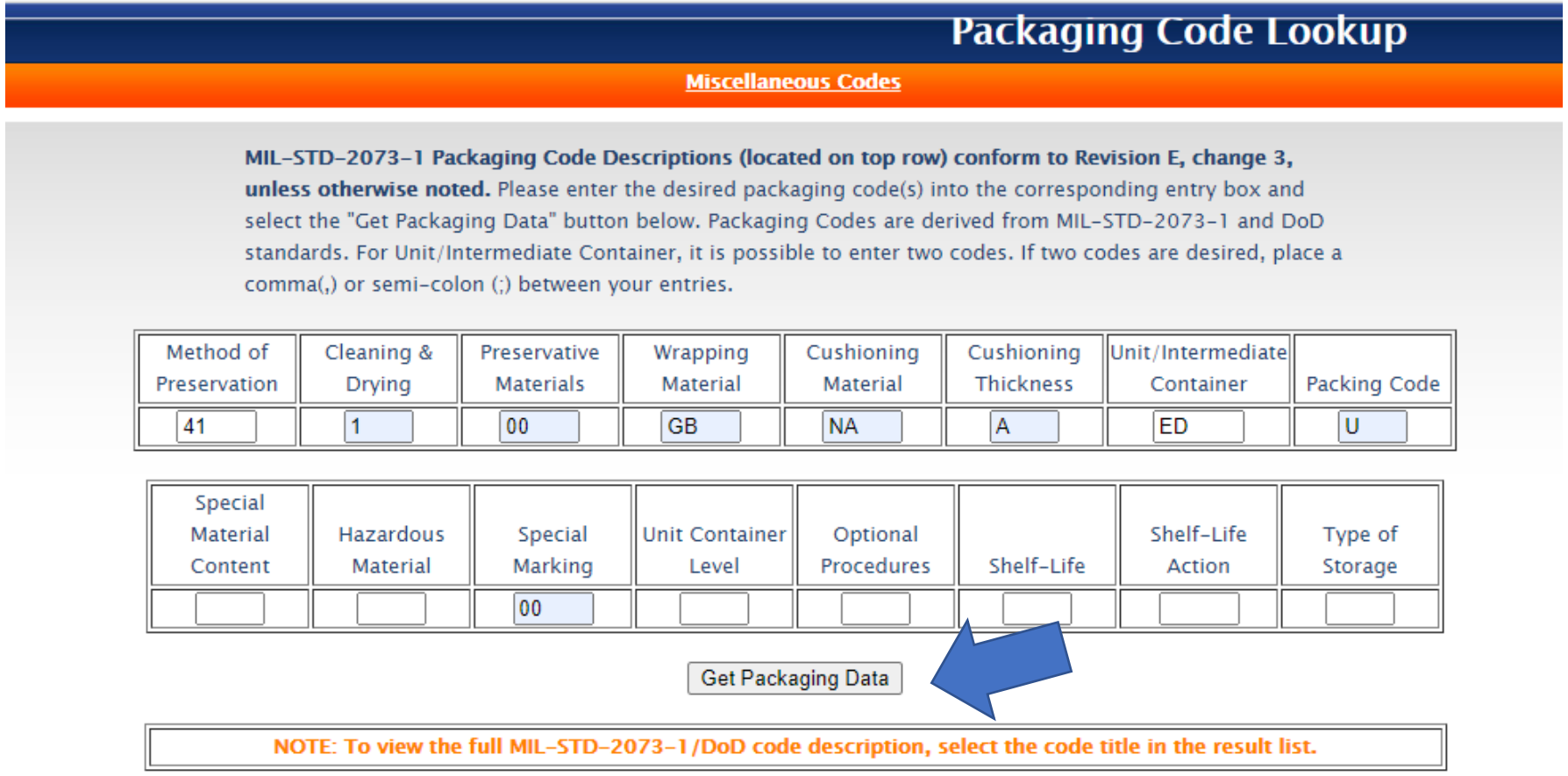
- https://camphill.leidos.com/code_lookup.nsf

- Input packaging codes into designated fields for definitions



Place the codes from the solicitation into these fields

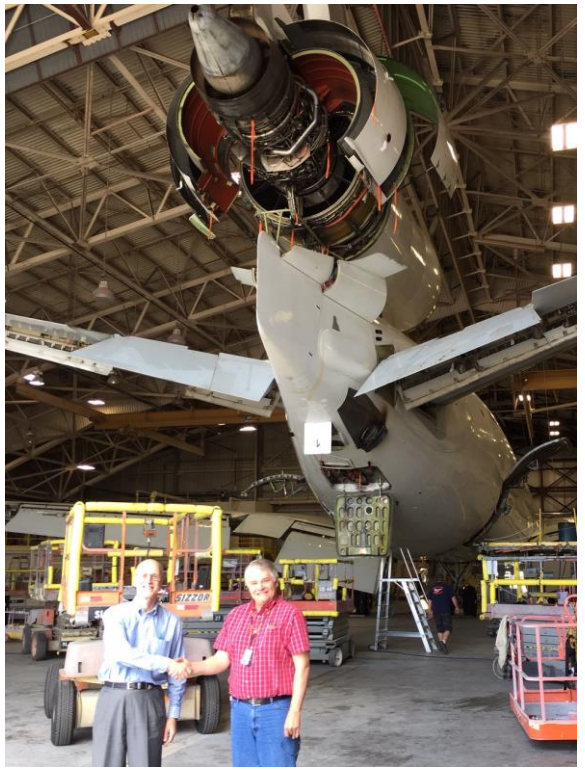
```
PKGING DATA - MIL-STD-2073-1D, 15 DEC 1999
QUP:001  PRES MTHD:41  CLNG/DRY:1  PRESV MAT:00
WRAP MAT:GB  CUSH/DUNN MAT:NA  CUSH/DUNN THKNESS:A
UNIT CONT:EC  OPI:M
INTRMDTE CONT:ED  INTRMDTE CONT QTY:AAA
PACK CODE:U
MARKING SHALL BE IN ACCORDANCE WITH MIL-STD-129.
SPECIAL MARKING CODE:00 -00 No special marking
```



NOTE: To view the full MIL-STD-2073-1/DoD code description, select the code title in the result list.		
Method of Preservation:	41	41: Watervaporproof bag, heat sealed. The item, preserved, wrapped and cushioned as required in 5.2.3.6, shall be enclosed in a close fitting heat-sealed bag conforming to one of the following: a. MIL-DTL-117, Type I, Class E, Style 1, 2 or 3 (see notes 2/, 4/). b. MIL-DTL-117, Type I, Class F, Style 1, use intended for ESD sensitive items only (see note 1/). c. MIL-DTL-117, Type II, Class E, Style 1 (see notes 2/, 3/). d. MIL-DTL-117, Type IV, Class E, Style 1 (see notes 2/, 4/). 1/ For electrostatic protection refer to 5.2.4.1. 2/ When specified in the contract or order, a carton or box shall be required to complete the unit container and the primary cushioning shall be placed between the outside of the bag and the inside of the carton or box. 3/ When MIL-DTL-117, Type II, Class E, Style 1 bags are selected, they shall be limited to the restrictions detailed in MIL-PRF-131 for Class 2 material. 4/ When it has been determined to protect items with VCI, they shall be preserved in accordance with 5.2.4.9.
Cleaning & Drying:	1	1: Any suitable process that is not injurious to the item.
Preservative Material:	00	00: No requirement.
Wrapping Material:	GB	GB: MIL-PRF-121, greaseproof, waterproof barrier.
Cushioning Material:	NA	NA: PPP-C-795, closed cell plastic cushioning; or A-A-3129, open cell plastic cushioning; or PPP-C-1797, polypropylene foam cushioning.
Cushioning Thickness:	A	A: 1/4 inch thick.
U/I Container:	ED	ED: ASTM-D5118, Type CF, Class weather resistant, corrugated fiberboard box.
Packing:	U	U: Items or packages that require packing for acceptance by the carrier shall be packed in exterior type shipping containers in a manner that will ensure safe transportation at the lowest rate to the point of delivery and shall meet, as a minimum, the requirements of the following rules and regulations, as applicable to the mode(s) of transportation to be utilized: (a) Postal Regulations (b) Department of Transportation Regulations (c) Civil Air Regulations (d) Uniform Freight Classification Rules (e) National Motor Freight Classification Rules (f) American Truckers' Association Rules (g) Other applicable carriers' rules (h) Military Air Regulations for dangerous materials. Dangerous goods shall be prepared for shipment according to applicable Department of Transportation (DOT) regulations and international regulations in effect at time of shipment. Shipments by parcel post must comply with Postal Regulations.
Special Marking:	00	00: No special marking

Roy Resto is an experienced aviation industry professional having served in management positions with several firms, and is currently President of AIM Consulting Solutions. Most recently he was Vice President of Technical Operations for Tracer Corp. and Messier-Bugatti-Tracer, a family of aviation companies. Prior to this position, he was the COO of Quality Management Solutions LP, a consulting firm specializing in aircraft maintenance. In addition, Roy worked with American Airlines in their Maintenance and Engineering center where he retired as a level 5 Manager, and before that, with McDonnell Douglas. He was also a member of the US Air Force in the Reserves/ANG having served 32 years in Electronic Warfare and Avionics. Resto has served on the FAA's Suspected Unapproved Parts Steering Committee and the Aviation Suppliers Association Board of Directors.

Roy has an MBA in Finance from Oklahoma City University, a BS from Oklahoma State University, an AAS in Avionics from the Community College of the Air Force, and is an Aviation High School graduate. Complementing these, he has an FAA A&P license, an FCC Radiotelephone license with a RADAR endorsement, is an FAA DAR (Designated Airworthiness Representative), Instrument Rated Pilot, and speaks fluent Spanish. His website is:
www.AimSolutionsConsulting.com
Email: royresto@aol.com



That’s all folks!