1.0 SCOPE

This standard provides for the individual cushioning and packaging of an item in a container.

2.0 REFERENCES

2.1 Lockheed Packaging Standard LPS 40–001 (General Requirements Specification)
2.2 Lockheed Packaging Standard P–201 “Thermal Control Labels”
2.3 NAS Packaging Standard 3408

3.0 REQUIREMENTS

3.1 GENERAL

3.1.1 The quantity per unit package shall be one (1) each.
3.1.2 Any loose item(s) required per part shall be enclosed in a separate plastic bag and secured within the unit package.
3.1.3 Exposed silver or silver-plated parts shall be protected with tarnish-inhibitor material. Minimum surface area of the tarnish inhibitor shall be twice the area of the silver surface of the item.

NOTE: The treated side of the inhibitor material must be facing the item.

CAUTION: ITEMS HAVING ANY SURFACES INCOMPATIBLE WITH THE TARNISH INHIBITOR SHALL BE COMPLETELY WRAPPED WITH A NEUTRAL MATERIAL PRIOR TO APPLICATION.

3.1.4 Tarnish inhibitor may be adjacent to but shall not be allowed to come in contact with chemically finished surfaces such as anodize, iridite, chromate coatings and other nonferrous metals (e.g., cadmium, copper and brass).
3.1.5 Protect all exposed or projecting pins, contacts or similar areas with proper size and style of protective caps.
3.1.6 Shipments of items/materials classified as hazardous, e.g., flammable, toxic, combustible, corrosive, compressed gas, magnetic, radioactive, poisons, oxidizing materials, etc., shall be properly identified, packaged and marked in compliance with applicable carrier/state/federal regulations.
3.1.7 The operational integrity of the item(s) shall be protected against damage during shipment from the supplier to destination. Critical areas and/or surfaces of the item(s) shall be protected from abrasion by wrapping, blocking, cushioning, etc.

3.2 UNIT PACKAGING – (See Figure 1)

3.2.1 Wrap each item with a neutral material or place in a plastic bag (heat seal closure preferred). Include tarnish inhibitor and provide protective caps as applicable (Ref Paragraph 3.1.3, 3.1.4, 3.1.5). Place item in a snug fitting container and provide adequate cushioning to protect against damage during handling/shipment.

3.2.2 Items normally furnished by suppliers in containers other than described herein, may be acceptable providing that other provisions of this standard are met and does not result in additional cost to LMSSC.

3.3 INTERMEDIATE PACKAGING – (Consolidation of unit packages, when applicable, See Figure 2)

3.3.1 Unless otherwise specified, the number of unit packages per intermediate container (containing identical parts) shall be limited to the dimensions and gross weight provisions of the container specification (Ref Carrier Regulations).
3.3.2 Fill all voids with suitable dunnage, blocking or bracing to prevent damage during handling/shipment.
Figure 1. Unit Package

Figure 2. Intermediate/Shipping Container
3.4 PACKING

3.4.1 Pack appropriate number of intermediate containers uniformly into each shipping container.

3.4.2 Shipping containers as packed, shall protect the item from damage during ordinary handling/shipping and shall meet the minimum requirements of common carriers for safe transportation at the lowest rate to the point of delivery.

3.4.3 Unit or intermediate containers which meet the requirements of Paragraph 3.4.2 may be used as shipping containers.

3.4.4 Enclose or attach a copy of packing slip to the shipping container.

3.5 MARKING (Unless otherwise specified in the contract or Purchasing Document use the following criteria)

3.5.1 Unit Package Marking – Label or mark each package to show at least the part number contracting document, quantity, and supplier identity.

Packages containing tarnish inhibitor shall be marked/labeled: “Protected with Tarnish Inhibitor – Do Not Open Until Ready for Use or Inspection.” Additional markings may be specified in the item detail specification or drawing.

3.5.2 Intermediate Packaging Marking – Label or mark each container to, at least, show part number per contracting document, supplier and quantity of parts.

3.5.3 Shipping Container Marking – Label or mark each container to show part number per contracting document, the LMSSC contracting document number, supplier, destination and quantity of parts.

3.5.4 Special, precautionary and handling markings shall be applied as required.

4.0 QUALITY ASSURANCE

4.1 Packaging shall be accomplished in such a manner as to prevent physical damage to, or degradation of, the packaged items during delivery to the using activity. It shall be the prerogative of LMSSC to return damaged items, at supplier’s expense, when such damage is attributable to improper or inadequate protection.

5.0 NOTES

5.1 The following information is intended as a guide or aid to suppliers in meeting the requirements of this specification.

5.1.1 DEFINITION – Unprotected Silver Surfaces. All metallic silver surfaces (having stringent reflectivity or conductivity requirements, close-tolerance finishes and/or dimensions, without supplementary tarnish-resistant treatment), the deterioration of which may result in premature failure or malfunction of the item or equipment having such surfaces.

5.1.2 REFERENCES

For corrugated box and corrugated fiberboard, the class and grade should be optional; for cellulosic cushioning, size should be optional.
<table>
<thead>
<tr>
<th>Commodity</th>
<th>Military/Commercial Specification</th>
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<tr>
<td>Box, Folding</td>
<td>PPP–B–566</td>
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<td>Box, Setup</td>
<td>PPP–B–676</td>
</tr>
<tr>
<td>Box, Corrugated</td>
<td>ASTM D5118, Type CF, Class Domestic, SW (optional), Style RSC, Grade 44 ECT or 200 Mullen (optional)</td>
</tr>
<tr>
<td>Cushioning, Cellulosic</td>
<td>A–A–1898, Grade 1, Class C, Style 1, Size L. (optional) Kraft Backed</td>
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<tr>
<td>Cushioning, Bound Fiber</td>
<td>PPP–C–1120</td>
</tr>
<tr>
<td>Cushioning, Polyurethane</td>
<td>MIL–PRF–26514, Type 1, Class 2, Grade B</td>
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<tr>
<td>Cushioning, Polystyrene</td>
<td>MIL–P–19644, Type 1, Class 2 or 3</td>
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<td>Cushioning, Flexible Plastic</td>
<td>PPP–C–795, Class 2</td>
</tr>
<tr>
<td>Fiberboard, Corrugated</td>
<td>ASTM D4727, Type CF, Class Domestic, SW (optional), Grade 200 (optional)</td>
</tr>
<tr>
<td>Corrugation, Flexible</td>
<td>A–A–1051</td>
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<tr>
<td>Paper, Neutral</td>
<td>MIL–P–17667, Type 2, Class 1</td>
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<tr>
<td>Sheet, Plastic</td>
<td>A–A–3174, Type 1, Class 1, Grade B</td>
</tr>
<tr>
<td>Protective Caps</td>
<td>AS–90376 or NAS 831; NAS 813, NAS 820</td>
</tr>
<tr>
<td>Silver Tarnish Inhibitor</td>
<td>Commercially Available (Must be approved by LMSSC PMP)</td>
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<tr>
<td>Fiber Box, Closing</td>
<td>ASTM D1974</td>
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