CHAPTER 607

MOVEMENT OF INTERMODAL CONTAINERS BY AIR

A. PURPOSE

This chapter provides guidance and procedures to both users and operators of the organic Department of Defense (DoD) airlift system on airlift of Internal Slingable Unit (ISU) containers (463L compatible), International Organization for Standardization (ISO)-configured containers, and ISO-configured tactical shelters across the range of military operations. Movement by air does not negate the container inspection criteria specified in Chapter 604.

B. GUIDANCE

1. Movement of ISO containers and shelters via Air Mobility Command (AMC)-controlled aircraft must be air eligible cargo with a transportation priority authorized under provisions of this regulation, Part II, or Joint Pub 4-01, Joint Doctrine for the Defense Transportation System.

2. AMC, as the operator of the DoD airlift system, will remain proficient in its ability to move and handle ISO containers and shelters by peacetime training.

3. Only up to 40-foot ISO containers and shelters will be moved in the DoD airlift system.

4. Airlift of 20' palletized containers up to 8' high may be accomplished on AMC-gained or -operated C-130 aircraft. Airlift of 20' palletized 8'6"-high containers may only be accomplished on AMC-gained or -operated C-130J aircraft.

5. ISO containers equipped with approved mobilizer sets may be loaded and flown on AMC aircraft. Quadruple Containers (QUADCON) and Triple Containers (TRICON) being shipped by air individually should be placed on an approved Land, Sea, and Air (LSA) adapter that fits to the base of the QUADCON/TRICON and configures the container to fit the 463L pallet system or shipped on 463L pallet trains with chains.

C. RESPONSIBILITIES

1. AMC will offer the following services at its aerial ports for the sustainment movement of ISO containers:
   a. Provide airlift support of all ISO containers and shelters to meet validated movement requirements.
   b. Remove the container or shelter from the chassis or trailer when it arrives at the aerial port of embarkation (APOE).
   c. Palletize and store the container or shelter and provide System 463L pallets, highline dock, palletizing and storage equipment, tie-down equipment, and palletizing personnel.
   d. Jointly inspect the containers and tactical shelters with the user.
   e. Load the aircraft and prepare documentation such as air manifests.
   f. Place the container or shelter on the chassis or trailer at the destination.

2. At non-AMC ports, the port operator will provide the following services during unit moves that do not originate at AMC aerial ports:
   a. Load the aircraft and prepare documentation such as air manifests.
   b. Place the container or shelter on the chassis or trailer at the destination.
3. Users and/or shippers will:
   a. Provide containers and shelters that meet ISO specification and International Convention for Safe Containers (CSC) standards as identified by this regulation.
   b. Move containers and shelters to the AMC aerial port or previously established APOE.
   c. Ensure containers and shelters are properly prepared for air movement. For unit moves, provide palletized loads to the AMC Contingency Response Element (CRE) or aerial port.
   d. Secure internal contents to prevent shifting during transit.
   e. Ensure hazardous materials (HAZMAT) installed or stowed inside of containers or shelters comply with the provisions of Air Force Manual 24-204, Preparing Hazardous Materials for Military Air Shipments (go to http://www.e-publishing.af.mil/ and then select “Air Force”, “Departmental”, “24 Transportation”, and “AFMAN24-204”).
   f. Ensure containers and shelters do not exceed maximum gross weights for air movement as contained in Table 607-1.
   g. Participate in joint inspections of palletized containers and shelters with supporting AMC CRE or Contingency Response Team (CRT).
   h. Provide shipping documentation for air movement of cargo.
   i. Provide load team assistance to aerial port personnel.
   j. Obtain a coordinated Air Transportability Test Loading Agency and AMC approval of any special adapter pallets or equipment to be used in lieu of standard System 463L pallet systems.
   k. Ensure movement of ISO containers will be reported to the Military Surface Deployment and Distribution Command (SDDC) and Service point of contact in accordance with (IAW) Chapter 605.
   l. Ensure systems internal to the container and/or support equipment for the container will not adversely affect the aircraft.

D. PROCEDURES

1. Air movement subjects containers and shelters to rapid acceleration and deceleration. Contents must be secured to preclude shifting of center of gravity of the container or shelter during flight.

2. Containers and shelters will be prepared for air movement IAW DoD Instruction 4540.07, Operation of the DoD Engineering for Transportability and Deployability Program.

3. HAZMAT installed or stowed in containers and shelters may be moved aboard DoD aircraft. Shippers obtain packaging and compatibility waivers according to Chapter 2 of Air Force Manual (AFMAN) 24-204.

4. Joint inspections will be performed by the shipping unit and the supporting CRE/CRT. Containers and shelters will be opened and verified for adequate security of cargo and compliance with hazardous cargo restrictions at the discretion of the supporting CRE/CRT.

5. Containers and tactical shelters prepared for air movement are restricted by weight based on pallet configuration, type aircraft, and load plan location. Maximum gross planning weights are provided in Table 607-1.
E. SPECIAL REQUIREMENTS

1. When movement will originate from other than an AMC aerial port, the shipper will:
   a. Coordinate all equipment and support needs, as soon as airlift requirements are identified, with the supporting affiliated AMC Wing, CRE, or CRT.
   b. Provide System 463L pallets, standard restraint equipment, and shoring unless previously coordinated IAW Paragraph E.1.a above.
   c. Pre-palletize containers or shelters. Plan for and obtain palletizing equipment and facilities (pallets, nets, shoring, cranes, rollerized flatbeds, storage areas, and/or highline docks) to ensure containers or shelters are pre-palletized to sustain planned airlift flow.
   d. Coordinate and/or provide Material Handling Equipment (forklifts or K-Loaders).
   e. Provide load team assistance to assist CRE/CRT personnel to load containers and shelters on aircraft.

2. AMC will assist the deploying unit and provide equipment that is not available.

3. Early coordination is essential to ensure successful mission accomplishment.

F. MOVEMENT OF HAZMAT BY AIR

1. Movement Considerations and Restrictions. The movement of HAZMAT as installed and/or stowed inside ISO and/or tactical shelter containers aboard AMC controlled aircraft is subject to the following considerations and restrictions. Requirements for the transportation of HAZMAT also apply to all other types of containers (e.g., Internal Airlift/Helicopter Slingable Container Units).
   a. Installed equipment containing HAZMAT must meet the restraint criteria of Military Standard (MIL-STD) 1791, Designing for Internal Aerial Delivery in Fixed Wing Aircraft.
   b. Stowed equipment containing HAZMAT must be packaged IAW AFMAN 24-204 and be restrained by the shipper within a container to meet the restraint criteria of MIL-STD 1791.
   c. Air transportation personnel must have access to the contents for inspection prior to loading aboard aircraft and during flight by the aircrew. The inspection and access to equipment and material determined to be “Sight-Sensitive” may only be waived by the AMC Director of Operations (AMC/A3) or Director of Logistics (AMC/A4).
   d. A Shipper’s Declaration for Dangerous Goods, Error! Reference source not found., will be prepared for all HAZMAT. The outside of each container will be marked and labeled to identify HAZMAT items IAW AFMAN 24-204.

2. Authorized “Inaccessible” HAZMAT. Only the following hazardous items are authorized for movement inside containers when considered “inaccessible” during flight:
   a. Fire extinguishers secured in holders or brackets.
   b. Vehicles, support equipment, or other mechanical devices must either be drained or drained and purged as specified in AFMAN 24-204. Installed batteries must be a nonspillable type and secured in an upright position.
   c. Properly packaged Class/Division 1.4S explosives.
   d. Non-flammable gases in cylinders or aerosols when packaged in strong outer containers.
   e. “Consumer Commodities” not containing a liquid or a flammable gas.
f. The following items installed or stowed IAW above restraint criteria or in packaging specified by AFMAN 24-204:

   (1) Magnetic material
   (2) Radioactive material
   (3) Thermometers (mercury, metallic)
   (4) Air conditioners and/or environmental control units.

3. **Approved HAZMAT.** There is no restriction on HAZMAT prepared/packaged IAW AFMAN 24-204 when it is loaded in a manner determined to be accessible during flight within any container.
**SHIPPER’S DECLARATION FOR DANGEROUS GOODS**

**SHIPPER**
Traffic Management Flight
5236 Chase St
Wright-Patterson AFB, OH 45433-5501

**PHONE NUMBER:**
(937) 257-4409

**CONSIGNEE**
FB 5612
435 ABW LRS
Ramstein AB, Germany

**AIRWAYBILL NO.**

**SHIPPERS REFERENCE NUMBER**

**TCN:** FB23006109001XXX

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**WARNING**

Failure to comply in all respects with applicable Hazardous Materials/Dangerous Goods Regulations may lead to breach of the applicable law, subject to legal penalties.

**SHIPMENT TYPE:**

- NON-RADIOACTIVE
- X21100000

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**NATURE AND QUALITY OF DANGEROUS GOODS**

<table>
<thead>
<tr>
<th>UN or ID NO.</th>
<th>PROPER SHIP NAME</th>
<th>CLASS or DIVISION</th>
<th>PACKING GROUP</th>
<th>QUANTITY AND TYPE of PACKING</th>
<th>PACKING INST</th>
<th>AUTHORIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN3528</td>
<td>ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED</td>
<td>3</td>
<td>1 DIESEL GENERATOR</td>
<td>A7.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**ADDITIONAL HANDLING INFORMATION**

- DIESEL FUEL, 3, 500 ML
- 1 EACH BATTERY WET FILLED WITH ACID, 8

**EMERGENCY TELEPHONE NUMBER:** 1-800-851-8061

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I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national government regulations. I declare that all of the applicable air transport requirements have been met.

**NAME/TITLE OF SIGNATORY**
Alex Lucent
Warehouse Supervisor

**PLACE AND DATE**
WPAFB, OH 45433 3 Aug 2017

**SIGNATURE**

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Figure 607-1. Shipper’s Declaration for Dangerous Goods (Sample-Engines)
### Table 607-1. Maximum Gross Container Weights*

<table>
<thead>
<tr>
<th>Configuration</th>
<th>C-130 E, H, &amp; J</th>
<th>C-5</th>
<th>C-17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any Floor Location</td>
<td>Any Floor Location</td>
<td>ADS Rail System (Centerline)</td>
</tr>
<tr>
<td>20' Container 2-Pallet Train</td>
<td>35,200</td>
<td>35,200</td>
<td>35,200</td>
</tr>
<tr>
<td>20' Container 3-Pallet Train</td>
<td>38,400</td>
<td>38,400</td>
<td>38,400</td>
</tr>
<tr>
<td>40' Container 5- or 6-Pallet Train</td>
<td>N/A</td>
<td>44,800</td>
<td>44,800</td>
</tr>
</tbody>
</table>

**Notes**

*Weights shown represent maximum gross weight in pounds of a standard ISO container and contents that the aircraft roller conveyor system is capable of supporting under flying conditions. Weights do not include pallets, shoring, or tie-down provisions. The working gross weight limit is influenced by several other factors to include weight carrying capability of aircraft loading equipment, allowable cabin load for mission range, and localized loading of individual rollers caused by non-uniform container loading.*

### Table 607-2. Assumptions Used in Development of Table 607-1

<table>
<thead>
<tr>
<th>Tare weight of one System 463L pallet</th>
<th>290 pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-strength floor area roller loading C-130 -- 2,333 lbs per roller station contact</td>
<td>High strength loading limits C-130 – 2,667 per roller station contact C-17 – 2,000 per roller contact</td>
</tr>
<tr>
<td>C-5 Roller limits (pounds per foot) 1 &amp; 2 roller conveyors contacted –1200 3 &amp; 4 roller conveyors contacted – 2400</td>
<td>Effective contact length 2-pallet train – 14 feet 3-pallet train – 19 feet 5-pallet train – 35 feet 6-pallet train – 36 feet</td>
</tr>
</tbody>
</table>