

CHAPTER 607

MOVEMENT OF INTERMODAL CONTAINERS BY AIR

A. PURPOSE

This chapter provides guidance and procedures to both users and operators of the organic DOD airlift system on airlift of ISU containers (463L compatible), ISO-configured containers and ISO configured tactical shelters across the range of military operations.

B. GUIDANCE

1. Movement of ISO containers via 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 20-foot ISO containers and shelters with up-to-date CSC inspections will be moved in the DOD airlift system.
4. Airlift of palletized 8'6" high containers will not be accomplished on AMC gained or operated C-130 aircraft.
5. ISO containers equipped with approved mobilizer sets may be loaded and flown on AMC aircraft. ISO-configured QUADCON and TRICON containers being shipped by air individually should be placed on an approved Land, Sea and Air (LSA) Adapter which fits to the base of the QUADCON/TRICON and configures the container to fit the 463L pallet system.

C. RESPONSIBILITIES

1. AMC will provide the following capabilities at their aerial ports for sustainment movement of ISO containers:
 - a. 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. Provide System 463L pallets, highline dock, palletizing and storage equipment, tiedown 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. AMC will provide the following capabilities during unit moves that do not originate at AMC aerial ports:
 - a. Jointly inspect containers and tactical shelters with the user.
 - b. Load the aircraft and prepare documentation such as air manifests.
 - c. 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 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 HAZMAT installed or stowed inside of containers or shelters comply with the provisions of Air Force Manual 24-204_IP (Interservice), Technical Manual 38-250, Marine Corps Order P4030.19I, Naval Supply Pub 505, Defense Logistics Agency Instruction 4145.3, and Defense Contract Management Agency Directive 1, CH 3.4 (HM24) Preparing Hazardous Materials for Military Air Shipments: <http://www.e-publishing.af.mil/>, then select Air Force-Departmental-24 Transportation-AFMAN 24-204.
 - 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. Movement of ISO containers will be reported to SDDC and Service POC IAW Chapter 605.
 - l. Insure 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, AFMAN 24-204_IP (Interservice), TM 38-250, MCO P4030.19I, (NAVSUP Pub 505, DLAI 4145.3, and DCMAD 1, CH 3.4 (HM24).
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](#).
6. Tare weights of containers will be included in all TWCF charges computed for airlift services. Users must include these weights when estimating airlift costs.

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 Para 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 (MHE) (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 MIL-HDBK - 1791, Designing for Internal Aerial Delivery in Fixed Wing Aircraft.
 - b. Stowed equipment containing HAZMAT must be packaged IAW AFMAN 24-204_IP (Interservice), TM 38-250, MCO P4030.19I, (NAVSUP Pub 505, DLAI 4145.3, and DCMAD 1, CH 3.4 (HM24) and be restrained by the shipper within a container to meet the restraint criteria of MIL-HDBK-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, Figure 607-1, will be prepared for all HAZMAT. The outside of each container will be marked and labeled to identify HAZMAT items IAW AFMAN 24-204_IP (Interservice), TM 38-250, MCO P4030.19I, (NAVSUP Pub 505, DLAI 4145.3, and DCMAD 1, CH 3.4 (HM24).
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_IP (Interservice), TM 38-250, MCO P4030.19I, (NAVSUP Pub 505, DLAI 4145.3, and DCMAD 1, CH 3.4 (HM24). 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_IP (Interservice), TM 38-250, MCO P4030.19I, (NAVSUP Pub 505, DLAI 4145.3, and DCMAD 1, CH 3.4 (HM24):
 - (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_IP (Interservice), TM 38-250, MCO P4030.19I, (NAVSUP Pub 505, DLAI 4145.3, and DCMAD 1, CH 3.4 (HM24) when 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: (793)257-4409 DSN: 787-4409				AIRWAYBILL NO. PAGE 1 OF 1 PAGES SHIPPER'S REFERENCE NUMBER ICN: FB230061809001XXXX		
CONSIGNEE FB 5612 435 ABWLES RAMSTEIN AB, GERMANY						
TWO COMPLETED AND SIGNED COPIES OF THIS DECLARATION MUST BE HANDED TO THE OPERATOR.				WARNING Failure to comply in all respects with applicable Hazardous Materials/Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.		
TRANSPORTATION DETAILS						
THIS SHIPMENT IS WITHIN THE LIMITATIONS PRESCRIBED FOR: [DELETE NON-APPLICABLE]			AIRPORT OF DEPARTURE DOV DOVER AFB, DE		SHIPMENT TYPE: [DELETE NON-APPLICABLE]	
<input type="checkbox"/> PASSENGER AND CARGO AIRCRAFT			<input checked="" type="checkbox"/> XXXXXXXXXXXX		<input type="checkbox"/> NON-RADIOACTIVE	
AIRPORT OF DESTINATION RAMSTEIN AB, GERMANY				<input checked="" type="checkbox"/> XXXXXXXXXXXX		
NATURE AND QUANTITY OF DANGEROUS GOODS						
DANGEROUS GOODS IDENTIFICATION				QUANTITY AND TYPE OF PACKING	PACKING INSTRUCTIONS	AUTHORIZATION
UN or ID NO.	PROPER SHIPPING NAME	CLASS or DIVISION (SUBSIDIARY RISK)	PACKING GROUP			
UN3166	ENGINES, INTERNAL COMBUSTION	9		1 DIESEL GENERATOR	A13.5	
ADDITIONAL HANDLING INFORMATION DIESEL FUEL, 3,500 ML BATTERY, WET FILLED WITH ACID, 8.5 LITERS						
EMERGENCY TELEPHONE NUMBER: 1-800-851-8061/604-279-3131						
I hereby declare that the contents of this consignment are fully and accurately described above by 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 airtransport requirements have been met.				NAME/TITLE OF SIGNATORY Alex Lucent Warehouse Supervisor		
				PLACE AND DATE WP AFB, OH. 45433 3 Jan 2007		
				SIGNATURE (SEE WARNING ABOVE)		

Figure 607-1. Shipper's Declaration for Dangerous Goods

Table 607-1. Maximum Gross Container Weights*

CONFIGURATION	C 130 E&H	C 5	C 17
	LOW STRENGTH FLOOR AREA	ANY FLOOR LOCATION	ADS RAIL SYSTEM (CENTERLINE)
20' Container 2 Pallet Train	37,328	33,000	32,000
20' Container 3 Pallet Train	44,800**	44,700	48,000
	High Strength Floor Area	Any Floor Location	ADS Rail System (Centerline)
20' Container 2 Pallet Train	42,672	33,000	32,000
20' Container 3 Pallet Train	44,800**	44,700	48,000

Notes

- * Weights shown represent maximum gross weight in pounds of a standard ISO container and contents that the aircraft roller conveyer system is capable of supporting under flying conditions. 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.
- ** This value is the design limit for ISO surface mode containers and it is also the maximum payload for a C-130 in peacetime operation. Present air-land containers are design limited to 25,000 pounds gross weight.

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

Tare weight of one System 463L pallet	300 pounds
Low strength floor area roller loading C-130 -- 2,333 lbs per roller contact	High strength loading limits C-130 -- 2,667 per roller contact C-17 ---- 2,000 per roller contact
C-5 Roller limits (pounds per foot) 1 & 2 roller conveyors contacted -1200 3 & 4 roller conveyors contacted - 2400	Effective contact length 2 pallet train -- 14 feet 3 pallet train -- 19 feet