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SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 11-2MC-130  
VOLUME 3, ADDENDA B**



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***Flying Operations***

***MC-130H OPERATION  
CONFIGURATION/MISSION PLANNING***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This publication implements Air Force Policy Document (AFPD) 11-2 *Aircrew Operations* and Air Force Instruction (AFI) 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*. This instruction establishes basic cargo compartment configuration, standard equipment, and location of such equipment aboard the MC-130H aircraft. This instruction applies to Air Force Special Operations Command (AFSOC) and Air Education and Training Command (AETC) units charged with configuring and operating the MC-130H aircraft. This publication does not apply to the Air National Guard (ANG). This publication does not apply to Air Force Reserve Command (AFRC) units. This publication requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by 37 USC 301a, *Incentive Pay: aviation career*; Public Law 92-204, *Appropriations Act for 1973*; Section 715 Public Law 93-570, *Appropriations Act for 1974*; Public Law 93-294, *Aviation Career Incentive Act of 1974*; DOD Instruction 7730.57, *Aviation Incentive Pays and Continuation Bonus Program*; and Executive Order 9397 (*SSN*) as amended by Executive Order 13478, *Amendments to Executive Order 937 Relating to Federal Agency Use of Social Security Numbers, November 18, 2008*. The applicable SORN, F011 AF XO A, *Aviation Resource Management Systems (ARMS)*, is available at: <https://dpclo.defense.gov/privacy/SORNS/SORNS.html>. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Unless prescribed within this publication, requests for waivers must be submitted through chain of command to the OPR listed above for consideration and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN)

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**SUMMARY OF CHANGES**

This document revises the MC-130H Standard equipment chart and updates Form F corrections for Rapid-1 and Rapid-2 configurations. Tier requirements have been annotated.

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## Chapter 1

### POLICY

**1.1. General.** Those who use this instruction should bear in mind that an infinite number of variations are available and that the cargo compartment configurations listed here are the most typical encountered day-to-day.

1.1.1. Tier requirements refer to waiver authority based on level of risk.

1.1.1.1. “Tier 1” (T-1) requirements are reserved for requirements that non-compliance may put airman or mission strongly at risk, and may only be waived by the MAJCOM/CC or delegate. This AFI contains Tier 1 requirements.

1.1.1.2. “Tier 2” (T-2) requirements are reserved for requirements that potentially put the mission at risk or potentially degrade the mission or program, and may only be waived by the MAJCOM/CC or delegate.

1.1.1.3. “Tier 3” (T-3) requirements are reserved for requirements that non-compliance has a remote risk of mission failure, and may be waived by the Wing/CC but no lower than the OG/CC. There are no Tier 3 requirements in this AFI.

**1.2. Responsibilities.** Personnel engaged in planning operations must consider the most appropriate configuration that will satisfy mission requirements and permit minimum variations and man-hours to change. Units performing services on the MC-130H aircraft (e.g., maintenance, aircrew flight equipment) are responsible for configuring the aircraft IAW this instruction and as outlined in mission directives to include the stowage/installation of equipment IAW the configuration and equipment tables outlined herein. (T-2)

**1.3. Codes.** Use the following codes when referring to MC-130H cargo compartment configuration. The letter code will be followed by a number identifying configuration capability. (T-2)

1.3.1. AE - Aeromedical Evacuation

1.3.2. C - Cargo

1.3.3. CP - Cargo and Passengers

1.3.4. LP - PSYOPS

1.3.5. P - Passenger

1.3.6. RAPID - Infil/Exfil Equipment or Personnel

1.3.7. TAC - Tactical Airdrop Cargo

1.3.8. TAP - Tactical Airdrop Personnel

**1.4. Modifications.** The coded configurations of this regulation may require modification for a specific mission. Each modification must be carefully evaluated prior to mission execution to ensure maximum flight safety and compatibility with aircraft equipment. Each mission directive will identify the basic configuration by code and the modification, if necessary, to satisfy mission requirements. For example, a cargo mission may require additional seats or equipment such as a

bulldog winch not in the C-cargo configuration. Indicate the mission directive configuration C (number as applicable) and modification, e.g., two additional seats and bulldog winch required. (T-2)

### 1.5. Weight and Balance.

1.5.1. Configuration and necessary equipment changes to conduct special operations missions affect the weight and balance of the aircraft. To standardize equipment and the location of equipment, items shown in **Table 2.1** will be included in the basic weight of the aircraft and remain on the aircraft except for maintenance, inspection and when removal is directed by this AFI. Equipment listed in **Table 2.2** will be added as necessary and entered on DD Form 365-4, *Weight and Balance Clearance Form F – Transport/Tactical*, reference 5, 6, or 7. For simplicity the loadmaster will (when preparing the DD Form 365-4 Form F) enter the weight contained in the equipment tables for the applicable configuration. Adjustments will be made when the actual on-board weight of an item varies from data shown. DD Form 365-4 will be completed IAW instructions in **Chapter 5**. (T-2)

1.5.2. When a configuration change that removes items listed in **Table 2.1** is accomplished at a Forward Operating Location (FOL) and no Quality Assurance Branch (QA) weight and balance authority is deployed to the location, maintenance personnel will put an info note in the AFTO Form 781A, *Maintenance Discrepancy and Work Document*, indicating the weight, fuselage station and moment of any equipment added or removed. The loadmaster will add or subtract the listed weight and moment from the last entry in the DD Form 365-3, *Chart C – Basic Weight and Balance Record*. Annotate the new weight and moment in Block 1 of DD 365-4. Configuration changes accomplished at home station require a QA update to the DD Form 3653. **Exception:** Minor equipment changes after crew reporting may be annotated on the DD Form 365-4, by the loadmaster. (T-2)

**1.6. Distribution.** Commanders are responsible for bringing this publication to the attention of all affected personnel. At least one copy will be maintained in the unit operations section. It will be readily accessible to operations and aircrew personnel. Additional distribution will be as follows: (T-2)

- 1.6.1. Staff operations, all levels.
- 1.6.2. All levels of aircrew standardization offices.
- 1.6.3. Command posts/operations centers.
- 1.6.4. Air terminal operations centers (ATOC).
- 1.6.5. Aerial Delivery Support Branch (ADSB)/Aerial Delivery Flight (ADF).
- 1.6.6. Aircraft maintenance squadrons/units, Dash 21 equipment sections, QA sections.
- 1.6.7. Aircrew flight equipment (AFE) sections.
- 1.6.8. One located in the supplemental weight and balance handbook binder on each aircraft.
- 1.6.9. One copy to each MC-130H loadmaster.

**1.7. Revisions.** All revisions will consist of electronic interim change (IC) or new publication. Personnel at all echelons are encouraged to make recommendations to improve this instruction. Direct proposed changes to HQ AFSOC/A3V in accordance with AFI 11-202, Vol 2, *Aircrew*

*Standardization/Evaluation Program, and AFI 11-215, USAF Flight Manual Program (FMP). Use AF Form 847, Recommendation for Change of Publication. (T-2)*

**1.8. Supplements.** Subordinate unit supplements to this instruction that change the basic policies, procedures, or formats prescribed herein are prohibited. **Exception:** Groups may supplement **Table 2.2** with additional items. They may also supplement **Chapter 3** with specified configuration modifications (MOD) to accommodate theater unique requirements. Forward supplements to HQ AFSOC/A3V for approval. (T-2)

**1.9. Aircrew Flight Equipment Requirements.** **Table 2.1** and **Table 2.2** reflect minimum numbers and the prescribed locations on the aircraft.

1.9.1. The unit or service being airdropped will furnish the required number of life preservers for airdrop of personnel over or near bodies of water. Wear of flotation devices will be in accordance with AFI and user service directives. (T-2)

**1.10. Overhead Rack.** Only troop seats will be stowed in the overhead rack. Under no circumstances will oil, hydraulic fluid or any other liquids be placed in the overhead racks. (T-2)

## Chapter 2

## CONSOLIDATED EQUIPMENT TABLES

**2.1. General.** Configure MC-130H aircraft with the equipment listed in **Table 2.1**. Include the items listed in **Table 2.1** in the aircraft basic weight on the DD Form 365-3. (See exception in **Paragraph 1.5** of this AFI.) Add items listed in **Table 2.2**, as necessary, to attain a specific configuration and/or comply with mission directives. Items in **Table 2.2** will be annotated on the DD 365-4. (T-2) **Note:** Armor is not required for all missions. When Armor is installed it will be annotated on the DD 365-3. If individual pieces of armor are added for a specific mission the loadmaster will annotate on the DD 365-4. (T-2)

**Table 2.1. MC-130H Standard Equipment.**

ITEM	EQUIPMENT	QUANTIT Y	LOCATION
1.	Aircraft Generator/starter pad	1	Stowed/attached in TO bin at Flight Station (FS) 245.
2.	Aircraft Armor	1 set	Installed IAW flight manual.
3.	ADS pendulum pivot arm cover	1	Stowed on pivot arm.
4.	Air conditioning Plugs	4	Stowed as required when not installed.
5.	AN-44 cover/DIRCM cover	1 set	AN-44 in bag at FS 245, DIRCM covers behind right paratroop door above toilet.
6.	Anchor cable center support braces	4	Stowed aft of left paratroop door.
7.	Anchor cables with reels	4	Two cables are installed and two cables with four reels are stowed at FS 891 left and right side.
8.	Auxiliary ground loading ramps <sup>2</sup>	2	Cargo door stowage bin.
9.	APU exhaust plug	1	Stowed as loose equipment.
10.	Avfuels identiplate	1	Stowage in single point refueling door.
11.	Axe, hand emergency	2	Installed IAW flight manual.
12.	Belt, seat safety	77	Installed or stowed with seat. Stowed FS 340 left side and FS 360 right side or stowed in cargo door bin #3.
13.	Cargo door down locks	2	Stowed in overhead equipment rack or A/R.

ITEM	EQUIPMENT	QUANTIT Y	LOCATION
14.	Center seat back /beam support (extensions)	2	Stowed aft of left wheel-well.
15.	Center seat back support beams (lower)	8	4 stowed aft of left wheel-well, 1 stowed in cargo door, and 3 stowed forward of left and right wheel-well.
16.	Center seat back support beams (upper)	8	Stowed in forward cargo compartment.
17.	Chain, tie-down 10,000 lb	34	Storage container aft of left troop door.
18.	Chain, tie-down 25,000 lb	8	Stowed in container at FS 830 right side.
19.	Coffee/water jugs	2	Galley FS 188.
20.	Crank, main landing gear and flap emergency	2	Stowed forward of each wheel-well.
21.	Curtain, blackout	1	Installed or stowed overhead FS 245 left side.
22.	Curtain, flight deck	1 set	Installed/stowed overhead flight deck area.
23.	Curtain, porthole blackout	1 set	One curtain stowed next to each porthole window.
24.	Device, tie-down 10,000 lb	34	Stowed in rack at FS 790 left and FS 925 right as well as at FS 245.
25.	Device, tie-down 25,000 lb	8	Stowed at FS 925, right side.
26.	Dual Rails A/A32H-4/A	1 set	Cargo Compartment.
27.	Emergency escape ladder	1	Stowed on left side forward of wheel-well or FS 245 bulkhead.
28.	Engine intake/exhaust covers	1 set	Stowed as loose equipment.
29.	Equipment Rack, overhead	2	Installed left forward side of cargo compartment.
30.	External Winching Sheaves 25,000 lb	2	Stowage box, right side, FS 245.
31.	Fire Extinguisher	4	Installed IAW flight manual.
32.	First aid kits	12	Two on flight deck, 10 stowed in cargo compartment.
33.	Fluid, hydraulic cases	1	One case stowed in cargo net bins FS

ITEM	EQUIPMENT	QUANTIT Y	LOCATION
			891 left and right side.
34.	Fluid, Oil Case	1	One case stowed in left cargo net bin at FS 830.
35.	Fuel tank drain tube (pogo stick)	1	Overhead bracket FS 980.
36.	Ground wires	2	Stowed as loose equipment.
37.	Guard assembly, ramp Actuator	2	Stowed on anchor cable center support braces aft of left paratroop door.
38.	Hot cup	2	Galley FS 188.
39.	ICS cords, 4-75 ft., 1-15 ft, 3-6 ft., 2 Pilot Interphone Cords <sup>7</sup>	10	1 each 6 ft. w/o push-to-talk (PTT) installed at pilot & copilot inter-communications system (ICS) station. 1 each 6 ft. installed at the flight engineers, navigators, electronic warfare officer (EWO) ICS station. 1 each 15 ft. installed at instructor pilots ICS station. 1 each 75 ft. cord installed at each loadmaster ICS station.
40.	Jack and tow fitting	2	Stowed in cargo door storage bin #1.
41.	Jack pads	1 set	Stowed BH FS 245 right side.
42.	Lamp, ALDIS with lens kit	1	On Flight Deck.
43.	Latrine curtain	1	Cargo door stowage bin when not installed.
44.	Life rafts <sup>3,4</sup>	4	In left and right wing well compartments.
45.	Light, emergency exit with NVIS filter	8	Adjacent to each emergency exit, IAW flight manual.
46.	Liquid container, emergency <sup>5</sup>	8	Installed IAW flight manual.
47.	Litter brackets	128	5 installed on each side of center litter stanchions, 4 installed on each sidewall litter stanchions, 20 installed on emergency escape ladder, and 4 installed/stowed on troop door litter stanchion.
48.	Litter stanchion, left	1	Stowed in cargo door storage bin #7.

ITEM	EQUIPMENT	QUANTIT Y	LOCATION
	paratroop door		
49.	Litter straps with brackets (center and sidewall)	26	Attached/stowed in respective container bags.
50.	Loadmaster Crashworthy Seats <sup>6</sup>	2	Forward of each paratroop door.
51.	Locking device, paratroop doors	2	Stowed as required when not installed.
52.	Locking device, side exits	2	Stowed as required when not installed.
53.	Main Landing Gear Emergency Tie-down Fixture	2	Stowed in TO bin at FS 245.
54.	Main landing gear locking assembly	2	In cargo door storage bins #1.
55.	Maintenance ladder	1	Stowed on top of dual rail right side next to forward cheek rack or A/R.
56.	MCARS RAT Guard	2	Stowed as required for MCARS equipped aircraft.
57.	Microphone, hand held	3	One each at pilot/copilot side panels, one BH FS 245 left side.
58.	Oxygen bottle, walk around, A-6 with harness	4	Install IAW Flight Manual.
59.	Oven	1	Galley FS 188.
60.	Paratroop Jump Platforms	2	Stowed and secured with TYPE III nylon above structural bars left and right at FS 747 when not installed.
61.	Pitot covers	2	Stowage bag, FS 245 bulkhead.
62.	Ramp air deflectors	2	Installed on cargo ramp.
63.	Rings, tie-down 25,000 lb	2	Stowed in container at FS 830 right side.
64.	Rope, emergency escape	3	Installed aft of each overhead escape hatch.
65.	Seat support brackets wheel-well (lower)	16	Stowed FS 640 left side.
66.	Seat support tubes, wheel-well (upper)	2	Installed in left and right wheel-well.

ITEM	EQUIPMENT	QUANTITY	LOCATION
67.	Secondary release system cable and arming box	1	Installed on right anchor cable.
68.	Sextant	A/R	Stowed in case on forward side of bulkhead at FS 245.
69.	Stanchions (litter/seat)	8	8 Stowed at forward bulkhead FS 245, or 6 at FS 245 and 2 left side cargo compartment FS 357.
70.	Straps, tie-down 10,000 lb <sup>1</sup>	16	Stowed in survival vest bin right side.
71.	Straps, tie-down 5000 lb <sup>1</sup>	40	12 may be stowed at FS 390, left sidewall, remainder will be stowed in cargo door stowage bin #5.
72.	Sun visors	2	Stowed above pilot/copilot side windows.
73.	Towed Paratroop Retrieval System	2	Stowed in cargo door storage bin #6.
74.	Technical pubs	1 set	Stowed at FS 245, left side TO bin.
75.	Troop seat, one man	3	Stowed in overhead equipment rack.
76.	Troop seat, two-man	37	Installed IAW this AFI or stowed in overhead equipment rack.
77.	Wheel chocks	4	Stowed as required when not in use.
78.	Wrench, emergency main landing gear	1	Stowed at FS 437, left sidewall litter stanchion.
79.	Winch, static line retriever	2	FS 245 bulkhead.
80.	"Y-Cable" assembly, static line	2	Cargo door storage bin #1.

**Notes:**

1. Minimum equipment required. Units may add more equipment to meet specific mission or theater requirements. At all times the amount of tie-down equipment required will include enough equipment to secure the landing gear in an emergency as well as secure all cargo and loose equipment. When additional equipment is added, QA will update the DD Form 365-3, (See exception in **Paragraph 1.5** of this AFI). (T-2)

2. Minimum number of ground loading ramps required. More ramps will be added for RAPID configurations. Generation IV ramps are the only type authorized for RAPID configurations. A full set of Canary Slides may be used in lieu of ground loading ramps. (T-2)

3. Minimum AFE equipment required IAW AFI 11-301, Vol 2, *Maintenance and Configuration Requirements for Mobility Air Forces (MAF) Aircrew and Aircraft-Installed*

ITEM	EQUIPMENT	QUANTITY	LOCATION
<i>Aircrew Life Support Equipment (ALSE).</i>			
4. The number of raft spaces dictates the total number of personnel (crew and passengers) that may be on the aircraft for over-water missions. In other words, if you have three 20 man rafts installed you can only have 60 personnel, including crew, on board for over-water missions.			
5. All two-gallon emergency water containers will be stored empty. If mission dictates, containers will be sanitized and filled with water by support personnel. Annotate in 781K, <i>Aerospace Vehicle Inspection, Engine Data, Calendar Inspection and Delayed Discrepancy Document</i> , emergency water containers are full. After the mission, sanitize and dry containers then reinstall. When the water containers are filled the DD Form 365-3, will be updated to reflect the added weight. (See exception in <b>Paragraph 1.5</b> of this AFL.) (T-2)			
6. When Loadmaster Crashworthy Seats are installed two additional seats may be offered.			

**Table 2.2. MC-130H Mission Equipment.**

ITEM	EQUIPMENT	QUANTITY	LOCATION
1.	Airdrop kit (container delivery system (CDS), container release system (CRS), combat rubber raiding craft (CRRC), high-speed low-level aerial delivery system (HSLADS) and rigging alternate method zodiac (RAMZ))	A/R	Cargo door storage bin #6.
2.	Anti-exposure suit <sup>1,8</sup>	8	Stowed in lower bin, FS 803, right side.
3.	Belt, Modified loadmaster infiltration/exfiltration (infil/exfil) safety device	2	Installed or stored in cargo door stowage bin #6 as required.
4.	Blackout kit	1	Installed or stowed as loose equipment.
5.	Buffer stop assembly	1	As required.
6.	Canary slide ramps	1 set	As required.
7.	Centerline vertical restraint (CVR)	1 Set	As required.
8.	Crew bunk	A/R	Installed in the cargo compartment A/R.
9.	Direct Current (DC) power cable (winch)	1	As required.
10.	Emergency Escape Breathing Devices or Emergency	4	Stowed on litter stanchions left or right side forward cargo compartment as

ITEM	EQUIPMENT	QUANTITY	LOCATION
	Passenger Oxygen System (EPOS) <sup>1</sup>		required.
11.	Forward Area Refueling Point (FARP) equipment	A/R	As required.
12.	Firefighter's smoke mask and bag <sup>1</sup>	4	Attached to portable oxygen bottle harness.
13.	Flash blindness goggles	A/R	As required.
14.	High-altitude low-opening (HALO) (oxygen console)	A/R	As required.
15.	Hostile environment repair procedures (HERP) Tool Kit	1	Stowed IAW local directives.
16.	Life preserver unit LPU-10/P Adult or Child <sup>1,2</sup>	30	Stowed in lower bin FS 803 right side.
17.	Loadmaster drop kit	1	Stowed as loose equipment.
18.	MBU-10/P quick don oxygen/smoke mask <sup>1</sup>	5	Stowed near gallery at FS 223.
19.	Mission kit	1	Stowed as loose equipment.
20.	ML-4 seat kits <sup>1,3,7</sup>	8	Stowed in upper bins at FS 781 and 803, right side.
21.	Parachutes, back <sup>1,4</sup>	8	Chute rack, left side or lower storage bin at FS 781, right side.
22.	Parachute, rack	2	Secured in cargo compartment as required.
23.	Passenger oxygen kit (POK)	A/R	As required.
24.	Protective clothing kit	A/R	Cargo door storage bin #4.
25.	Pry bar	1	Stowed under RT forward cheek rack.
26.	Ramp Support <sup>5</sup>	1	As required.
27.	Safe	1	Installed/stowed at FS 257 as required.
28.	Restraint harness <sup>1</sup>	5	One on the flight deck, four stowed in the cargo compartment A/R.
29.	Snatch blocks, winching (13,000 pound capacity)	2	Stowed with external winching sheaves at FS 245.
30.	Survival vests <sup>1,6</sup>	8	Stowed in bin at FS 935 left side or A/R.
31.	Tool box	1	As required.

ITEM	EQUIPMENT	QUANTITY	LOCATION
32.	Water container (Igloo)	1	As required.
33.	Weapon storage box	1	As required.
34.	Winch, cargo handling <sup>5</sup>	1	As required.
<b>Notes:</b>			
1. Minimum life support equipment required IAW AFI 11-301, Vol 2.			
2. Every person on board during over-water missions will have a suitable flotation device. (T-2)			
3. Aircraft will be equipped with one ML-4 kit for each aircrew member. See AFI 11-2MC-130, Vol 3, <i>MC-130 Operations Procedures</i> , for exception. (T-2)			
4. Aircraft will be equipped with one parachute for each aircrew member. (T-2)			
5. Required for all off station missions.			
6. Not required for local training missions if ML-4 kits are onboard the aircraft.			
7. Not required for local training missions if the mission will not fly overwater and survival vests are onboard. (T-2)			
8. Anti-exposure suits are required when overwater or beyond power-off gliding distance from land and the water temperature is 60° Fahrenheit (F) or below. (T-2)			

## Chapter 3

### CARGO COMPARTMENT CONFIGURATION

**3.1. Configuration.** This chapter contains basic cargo compartment configurations for the MC130H aircraft. Although modifications to the basic configuration are authorized to meet special requirements, the following factors should be considered:

3.1.1. Sidewall and wheel-well seats should be installed/stowed on all missions unless otherwise depicted by this instruction. One-man sidewall seats will not be used unless connected to a two-man seat. (T-2)

3.1.2. Normal spacing for paratroopers is 24 inches. Aircraft without accommodations for 24 inch spacing will be configured for 20 inch spacing. (T-2)

3.1.3. Pallet position six is limited to 4,527 pounds when dual rails, rollers, and ramp air deflectors are installed. With only dual rails and ramp air deflectors installed, (rollers removed) pallet position six is limited to 4,687 lbs. See TO 1C-130A-9, *Cargo Loading Manual*, for other restrictions.

3.1.4. Drawings in this volume are not drawn to scale with respect to actual aircraft locations.

3.1.5. Safety aisle requirements are depicted in [Paragraph 4.2](#) and [Figure 4.1](#).

3.1.6. When the load consists of palletized netted cargo or is secured with straps, maintain a 30-inch space between cargo and the nearest forward litter, occupied seat or nuclear cargo. When cargo, either palletized or non-palletized, is secured with chains, 30-inch spacing is not required. **Exception:** Always maintain the 30-inch spacing on AE missions, when carrying litters. (T-2)

### 3.2. Legend of Configurations.

3.2.1. AE-1. This configuration provides 25 litter spaces (high density) and total of 31 seats, seat belts on 20 inch centers, 25 seats offered. A minimum of six seats are required for medical and flight personnel. (Reference [Figure 3.1](#) and [Table 3.1](#))

3.2.2. AE.2. This configuration is the maximum litter and attendant arrangement. It offers 57 litters and one sidewall and wheel-well seat; however 53 litters and 6 more sidewall seats can be obtained. (Reference [Figure 3.2](#) and [Table 3.2](#))

3.2.3. C-1. This configuration provides for floor loaded cargo or rolling stock. (Reference [Figure 3.3](#) and [Table 3.3](#))

3.2.4. C-2. Provides six pallet positions for loading palletized cargo. Seating is dependent on cargo load. (Reference [Figure 3.4](#) and [Table 3.4](#))

3.2.5. CP-1. 29 sidewall and wheel-well seats, seat belts on 20 inch centers, 28 seats offered. Center seats may be installed as required. (Reference [Figure 3.5](#) and [Table 3.5](#))

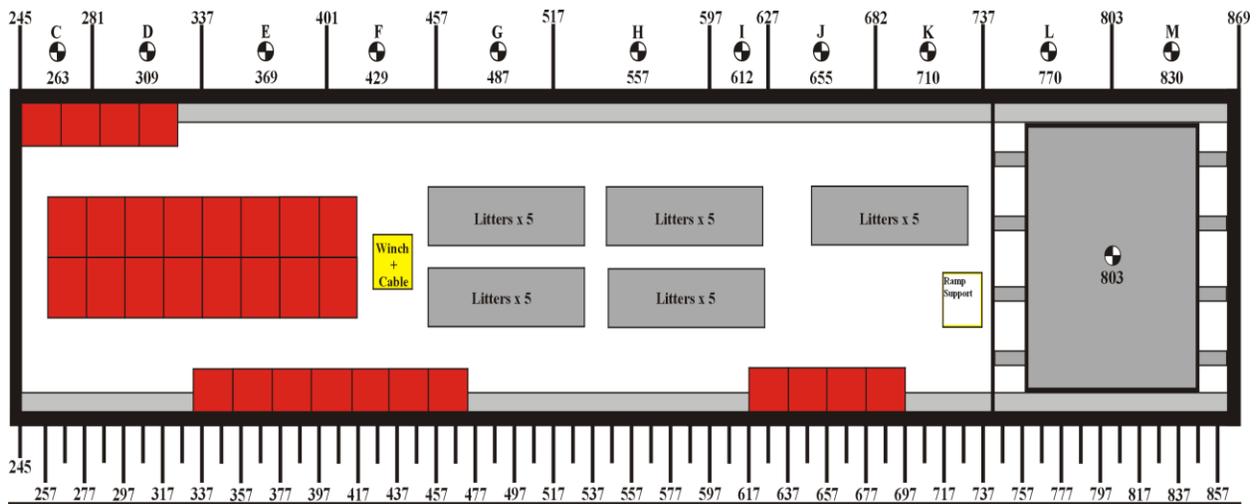
3.2.6. CP-2/CP-2A. 57 sidewall, wheel-well, and center-aisle seats, seat belts on 20 inch centers, 55 seats offered. Two pallet positions provided. CP-2 has rollers installed. CP-2A has the rollers stowed. (Reference [Figure 3.6](#) and [Table 3.6](#))

- 3.2.7. CP-3/CP-3A. Provides three pallet positions and 35 seats on 20 inch centers, 33 seats offered. CP-3 has rollers installed. CP-3A has the rollers stowed. (Reference [Figure 3.7](#) and [Table 3.7](#))
- 3.2.8. CP-4/CP-4A. Provides four pallet positions and 24 seats on 20 inch centers, 22 seats offered. CP-4 has rollers installed. CP-4A has the rollers stowed. (Reference [Figure 3.8](#) and [Table 3.8](#))
- 3.2.9. CP-5/CP-5A. Provides 12 sidewall and center-aisle seats, seat belts on 20 inch centers, 10 seats offered. CP-5 has rollers installed. CP-5A has the rollers stowed. (Reference [Figure 3.9](#) and [Table 3.9](#))
- 3.2.10. P-1. Provides 77 sidewall, wheel-well, and center-aisle seats with seat belts on 20 inch centers, 75 seats offered. (Reference [Figure 3.10](#) and [Table 3.10](#)) **Note:** The number of personnel on board is limited on over-water flights by the number of life rafts available. The emergency escape ladder will be installed on over-water flights, cargo permitting. Required emergency equipment must be ordered from Life Support. (T-2)
- 3.2.11. RAPID-1. Provides maximum utilization of cargo compartment for rapid infil/exfil of cargo and personnel. Also provides for limited airdrop capability. (Reference [Figure 3.11](#) and [Table 3.11](#))
- 3.2.12. RAPID-2. Provides for rapid infil/exfil of helicopters. (Reference [Figure 3.12](#) and [Table 3.12](#))
- 3.2.13. TAC-1. Provides for airdrop of platform loads. Available seating is dependent on number and size of platforms. (Reference [Figure 3.13](#) and [Table 3.13](#))
- 3.2.14. TAC-2. TAC-2/TAC-2A. Provides for airdrop of various combinations up to 16 A-22 Container Delivery System (CDS) bundles in single/double stick configuration. Seating availability dependent on number of containers. TAC-2A is when Centerline Vertical Restraint (CVR) rail system is required. (Reference [Figure 3.14](#) and [Table 3.14](#))
- 3.2.15. TAC-3. Provides for airdrop of High Speed Low Level Aerial Delivery System (HSLADS) and Container Release System (CRS) containers. Seating availability dependent on number and size of containers. (Reference [Figure 3.15](#) and [Table 3.15](#))
- 3.2.16. TAC-4. Provides for airdrop of up to 2 Combat Rubber Raiding Craft (CRRC) platforms. Provides 30 troop seats with seat belts on 20-inch centers, 28 troop seats offered. (Reference [Figure 3.16](#) and [Table 3.16](#))
- 3.2.17. TAC-5. Provides for airdrop of Single Platform CRRC. 38 troop seats, seat belts on 20-inch centers, 36 troop seats offered. (Reference [Figure 3.17](#) and [Table 3.17](#))
- 3.2.18. TAP-1/1A. Provides for 52 troop seats, with seat belts on 24 inch centers, 50 seats offered. TAP-1 will be used for cargo ramp and door only. TAP-1A will be used for paratroop doors only. (Reference [Figure 3.18](#) and [Table 3.18](#)) (T-2)
- 3.2.19. TAP-2/2A. Provides for 41 troop seats, seat belts on 24 inch centers, 39 offered. TAP-2 will be used for airdrop out the cargo ramp and door. TAP-2A will be used for paratroop door airdrops only. (Reference [Figure 3.19](#) and [Table 3.19](#)) (T-2)

3.2.20. TAP-3/3A. Provides for 29 troop seats, seat belts on 24 inch centers, 27 offered. TAP-3 will be used for airdrop out the cargo ramp and door. TAP-3A will be used for paratroop door airdrops only. (Reference [Figure 3.20](#) and [Table 3.20](#)) (T-2)

3.2.21. LP-1. Provides the basic configuration for leaflet missions. Center anchor cable supports (A frame) installed. The right anchor cable will be reinstalled to the inboard U-bolt, Bulkhead FS 245, center anchor cable support (A frame) outboard cable guide, and aft anchor cable support arm outboard U-bolt. For leaflet airdrop the ramp air deflectors will be installed. (Reference [Figure 3.21](#) and [Table 3.21](#)) (T-2)

**Figure 3.1. AE-1 (Aeromedical).**



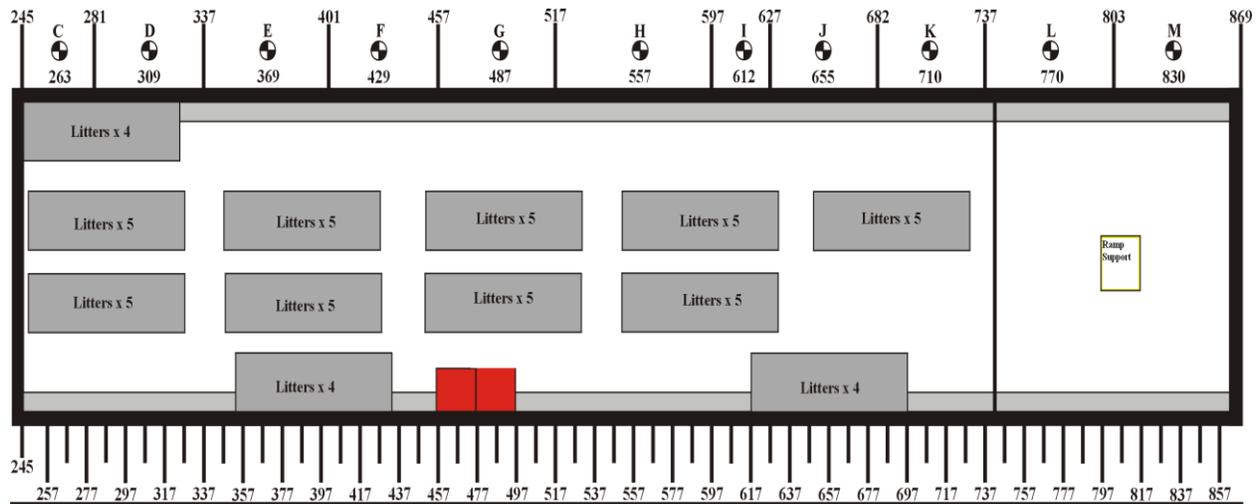
**Notes:**

1. This configuration provides 25 litter spaces (high density) and total of 31 seats, seat belts on 20 inch centers, 25 seats offered. A minimum of six seats are required for medical and flight personnel.
2. The number in the litter spaces indicates the maximum number of litters per tier.
3. Five (5) extra oxygen bottles will be available for medical personnel. (T-2)
4. Roller conveyors are stowed on top of dual rail covers, except as required for baggage pallet.
5. Cargo may be loaded with concurrence of medical crew director.

**Table 3.1. AE-1 Extra Equipment.**

1. Crew Bunks.
2. Blackout Kit.
3. Ramp Support.
4. Cargo Winch and Power Cable.
5. As required by mission directives.

**Figure 3.2. AE-2 (Aeromedical).**



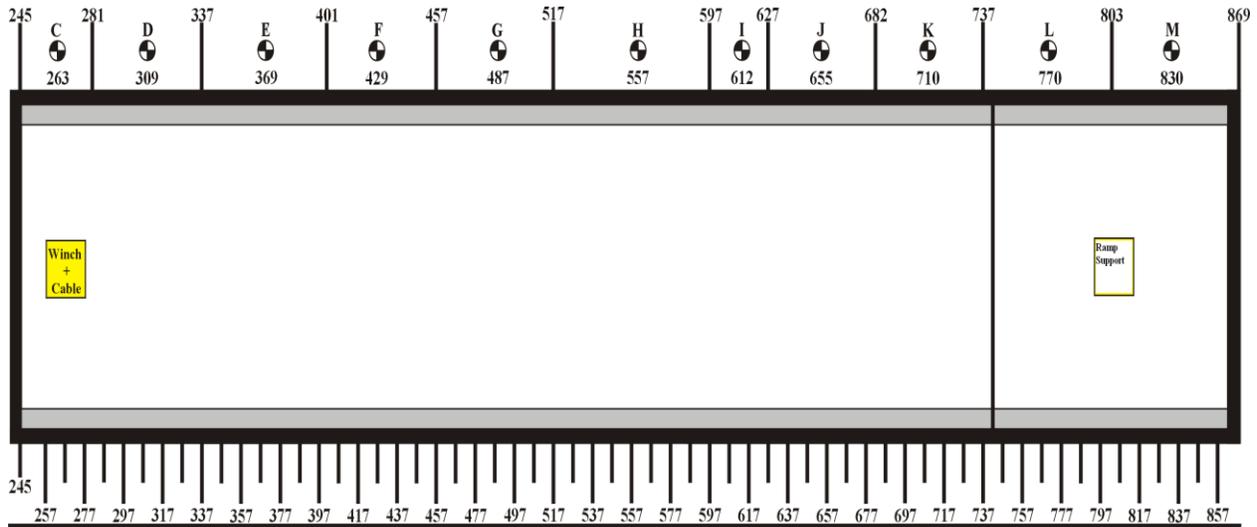
**Notes:**

1. This configuration is the maximum litter and attendant arrangement. It offers 57 litters and one sidewall and wheel-well seat; however 53 litters and 6 more sidewall seats can be obtained.
2. The number in parentheses in the litter spaces indicates maximum number of litters per tier.
3. Five (5) extra oxygen bottles will be available for medical personnel. (T-2)
4. Roller conveyors are stowed on top of dual rail covers, except as required for baggage pallet.
5. Cargo may be loaded with concurrence of medical crew director.

**Table 3.2. AE-2 Extra Equipment.**

1. Blackout Kit.
2. Ramp Support.
3. As required by mission directives.

**Figure 3.3. C-1 (Cargo).**



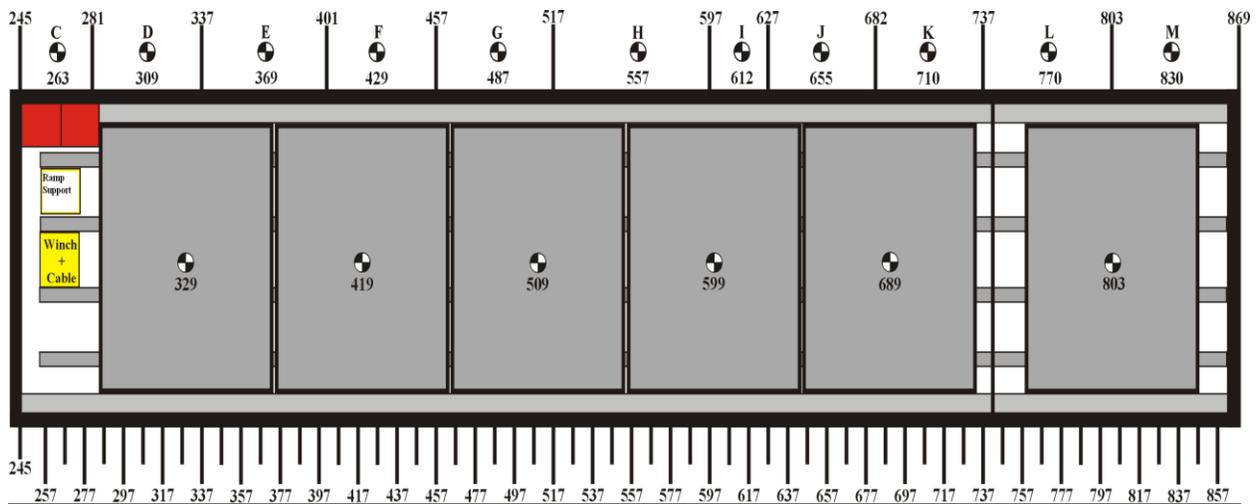
**Notes:**

1. This configuration provides for cargo on floor/rolling stock.
2. Roller conveyors are stowed on top of dual rail covers.
3. Seating availability dependent on amount and type of cargo loaded.

**Table 3.3. C-1 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. MA-1 Pry Bar.
4. Crew Bunks.
5. As required by mission directives.

**Figure 3.4. C-2 (Cargo).**



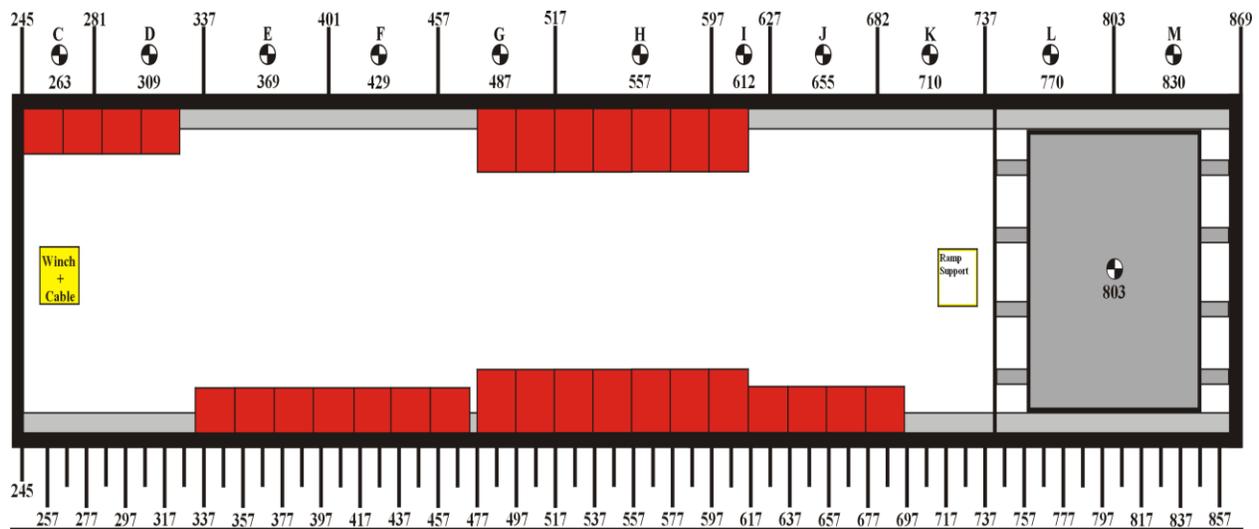
**Notes:**

1. Provides six pallet positions for loading palletized cargo.
2. Restraint rails and intermediate roller conveyors installed to provide maximum pallet utilization.
3. Seating availability dependent on number of pallets.

**Table 3.4. C-2 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. As required by mission directives.

**Figure 3.5. CP-1 (Cargo and Passengers).**



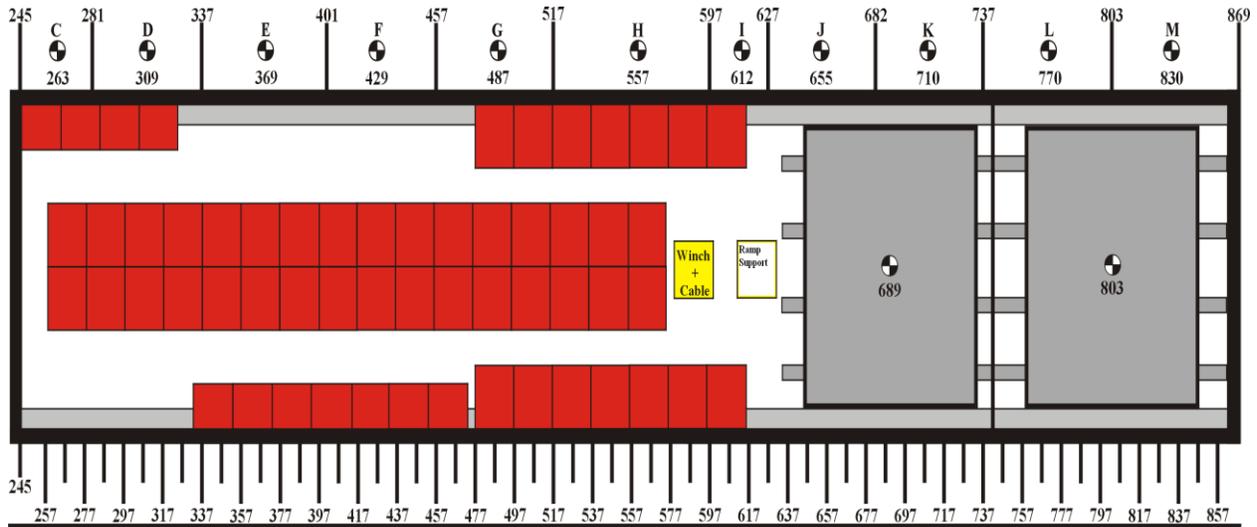
**Notes:**

1. 29 sidewall and wheel-well seats, seat belts on 20 inch centers, 28 seats offered. Center seats may be installed as required.
2. Cargo space limited to small cargo or rolling stock.
3. Roller conveyors will be removed and secured on top of dual rail covers (no more than two high) except for ramp roller conveyor sections. (T-2)

**Table 3.5. CP-1 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. MA-1 Pry Bar.
4. Crew Bunks.
5. As required by mission directives.

**Figure 3.6. CP-2/CP-2A (Cargo and Passengers).**



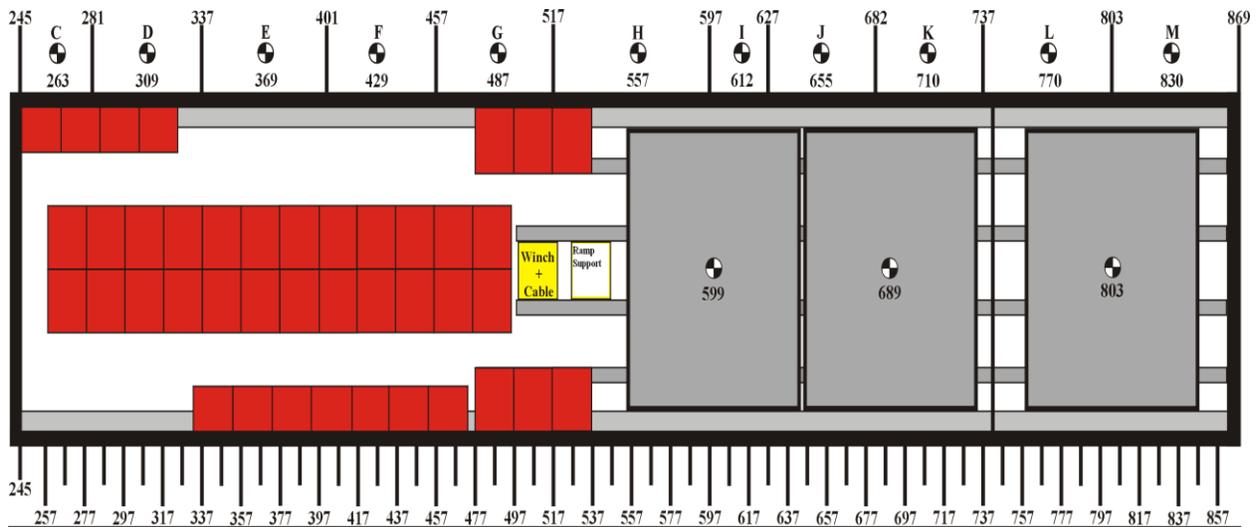
**Notes:**

1. 57 sidewall, wheel-well, and center-aisle seats, seat belts on 20 inch centers, 55 seats offered.
2. Two pallet positions for cargo and baggage.
3. Outboard roller conveyors that are not required will be removed and secured under the center-aisle seats or on top of the dual rails as required. (T-2)

**Table 3.6. CP-2/CP-2A Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. As required by mission directives.

**Figure 3.7. CP-3/CP-3A (Cargo and Passengers).**



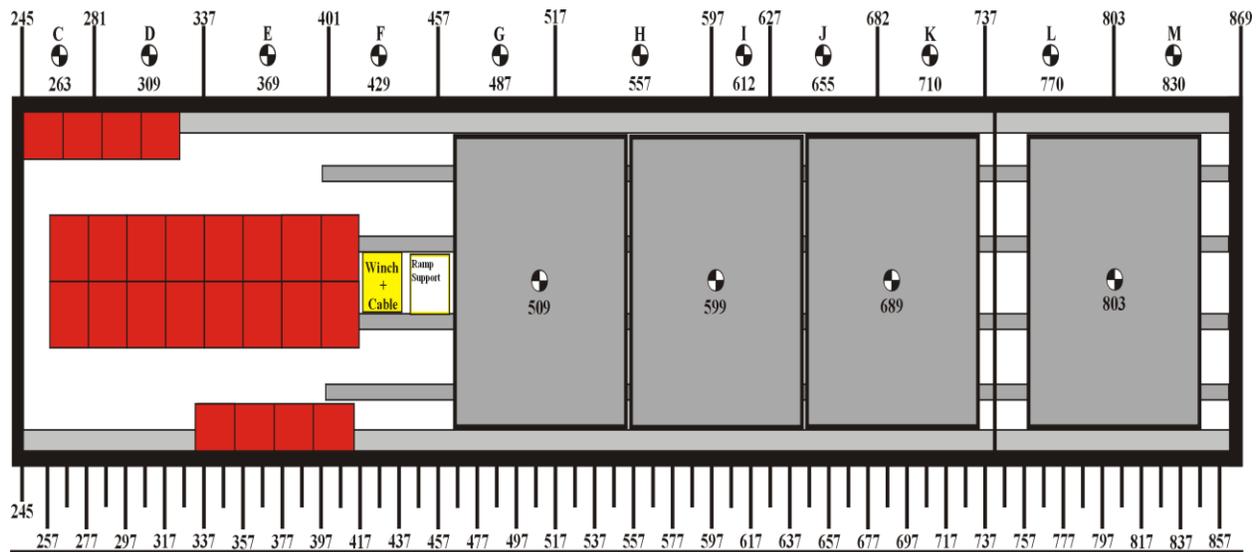
**Notes:**

1. 35 sidewall, wheel-well, and center-aisle seats, seat belts on 20 inch centers, 34 seats offered.
2. Three pallet positions for cargo and baggage.
3. Outboard roller conveyors that are not required will be removed and secured under the center-aisle seats or on top of the dual rails as required. (T-2)

**Table 3.7. CP-3/CP-3A Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. As required by mission directives.

**Figure 3.8. CP-4/CP-4A (Cargo and Passengers).**



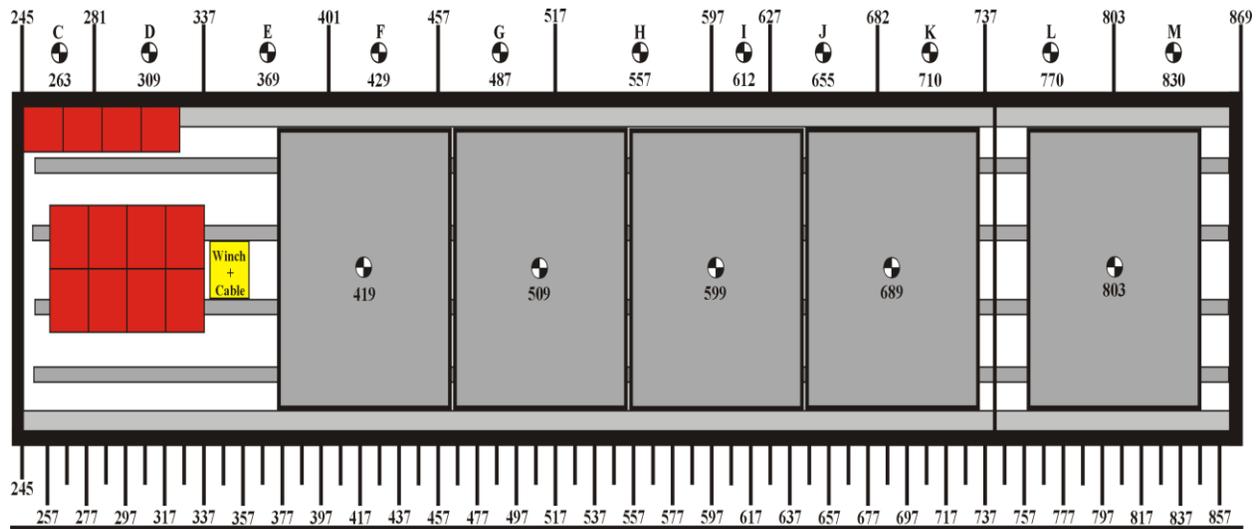
**Notes:**

1. 24 sidewall and center-aisle seats, seat belts on 20 inch centers, 22 seats offered.
2. Four pallet positions for cargo and baggage.
3. Outboard roller conveyors that are not required will be removed and secured under the center-aisle seats or on top of the dual rails as required. (T-2)

**Table 3.8. CP-4/CP-4A Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. As required by mission directives.

**Figure 3.9. CP-5/CP-5A (Cargo and Passengers).**



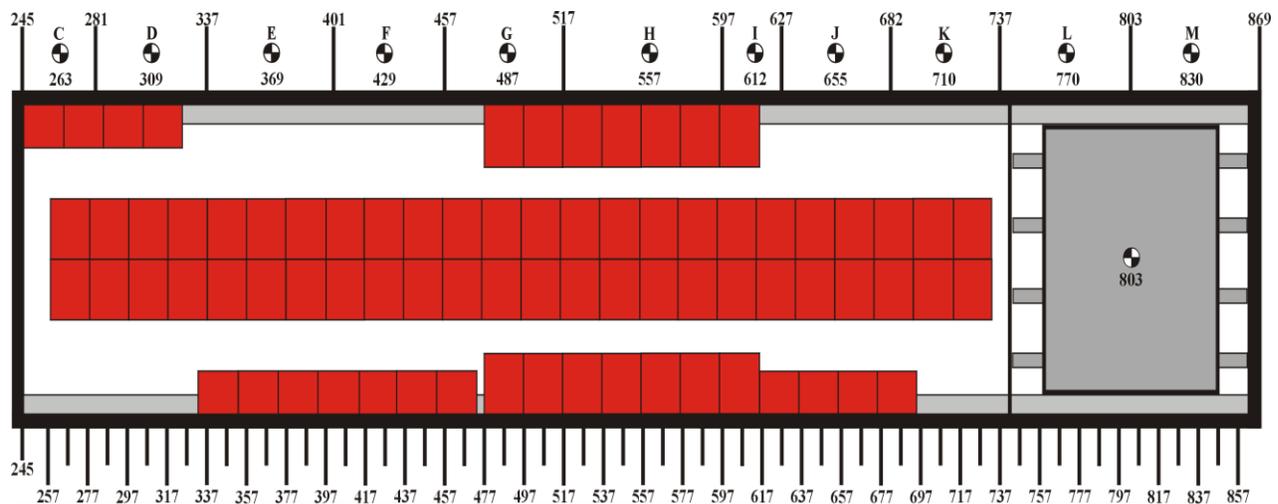
**Notes:**

1. 12 sidewall and center-aisle seats, seat belts on 20 inch centers, 10 seats offered.
2. Five pallet positions for cargo and baggage.
3. Outboard roller conveyors that are not required will be removed and secured under the center-aisle seats or on top of dual rails as required. (T-2)

**Table 3.9. CP-5/CP-5A Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. As required by mission directives.

**Figure 3.10. P-1 (Passenger).**



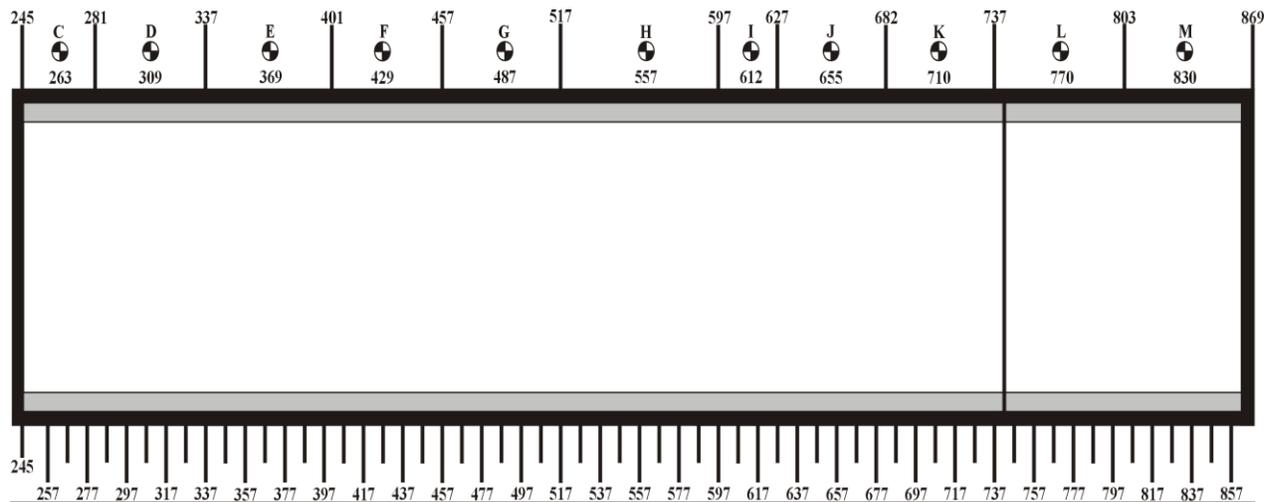
**Notes:**

1. 77 sidewall, wheel-well, and center-aisle seats, seat belts on 20 inch centers, 75 seats offered.
2. Outboard roller conveyors are removed and stowed in the inboard location under center-aisle seats or on top of the dual rails as required.
3. Ramp roller conveyors installed.

**Table 3.10. P-1 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. As required by mission directives.

**Figure 3.11. RAPID-1 (INFIL/EXFIL).**



**Notes:**

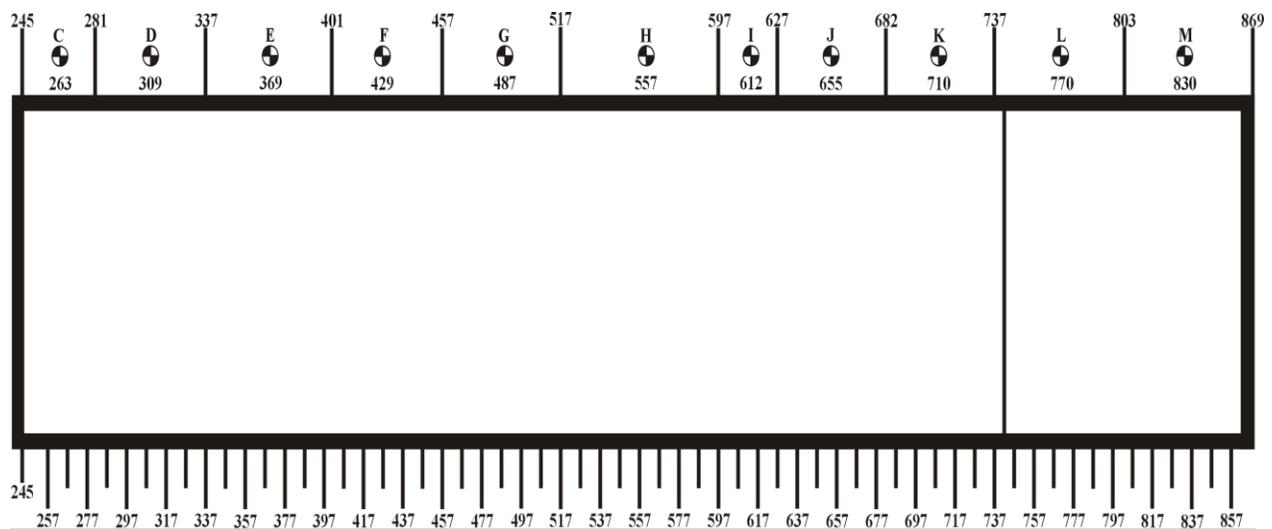
1. All intermediate roller conveyors removed.
2. Two roller conveyor section 16's are required for airdrop of ramp bundle.
3. All stowed and installed seats removed, except seats stowed in overhead stowage rack.
4. All upper and lower seat support beams removed, except lower seat support beam number 9.
5. Wheel-well upper seat support tubes removed.
6. All litter stanchions and escape ladder removed.
7. Heavy box boom crane, turn table, and track equipment removed if installed.

**Table 3.11. RAPID-1 Extra Equipment and Form F Corrections.**

1. Canary Slide Ramps (1 set).
2. Generation IV Ground Loading Ramps (3).

3. Blackout Kit.		
4. Cargo Winch and Power Cable.		
5. Roller Conveyors.		
6. As required by mission directives.		
<b>Form F Corrections:</b>	<b>Weight (WT)</b>	<b>Moment (MOM)</b>
	-1,551	-793
With 2 #16 rollers	-1,470	-727
With all roller conveyors	-912	-419

**Figure 3.12. RAPID 2 (INFIL/EXFIL).**



**Notes:**

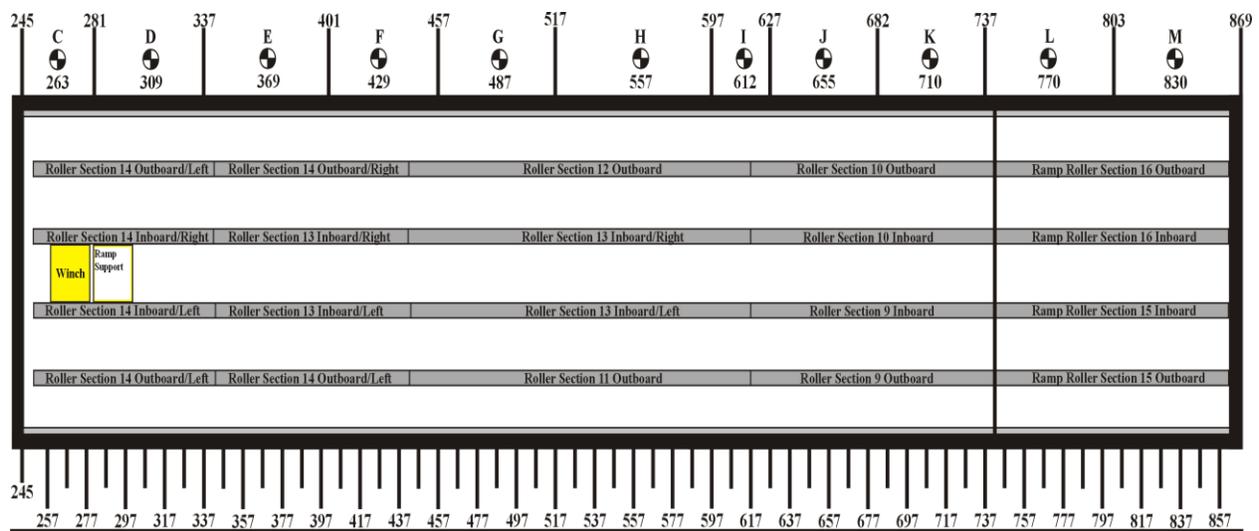
1. All intermediate roller conveyors and dual rail assemblies removed.
2. All stowed and installed seats removed.
3. All upper and lower seat support beams removed.
4. Wheel-well upper support tubes removed.
5. All litter stanchions and escape ladder removed.
6. Heavy box boom crane, turn table, and track equipment removed if installed.
7. Installed anchor cables removed and stowed.
8. Rotate and secure the overhead seat stowage rack in the up position.
9. Paratroop jump platforms removed.

**Table 3.12. RAPID-2 Extra Equipment and Form F Corrections.**

1. Canary Slide Ramps (1 set).
--------------------------------

2. Generation IV Ground Loading Ramps (5).		
3. Blackout Kit.		
4. Cargo Winch and Power Cable.		
5. Roller Conveyors		
6. Crew Bunks		
7. As required by mission directives.		
<b>Form F Corrections:</b>	<b>WT</b>	<b>MOM</b>
	-2,934	-1,525

**Figure 3.13. TAC-1 (Equipment Airdrop).**



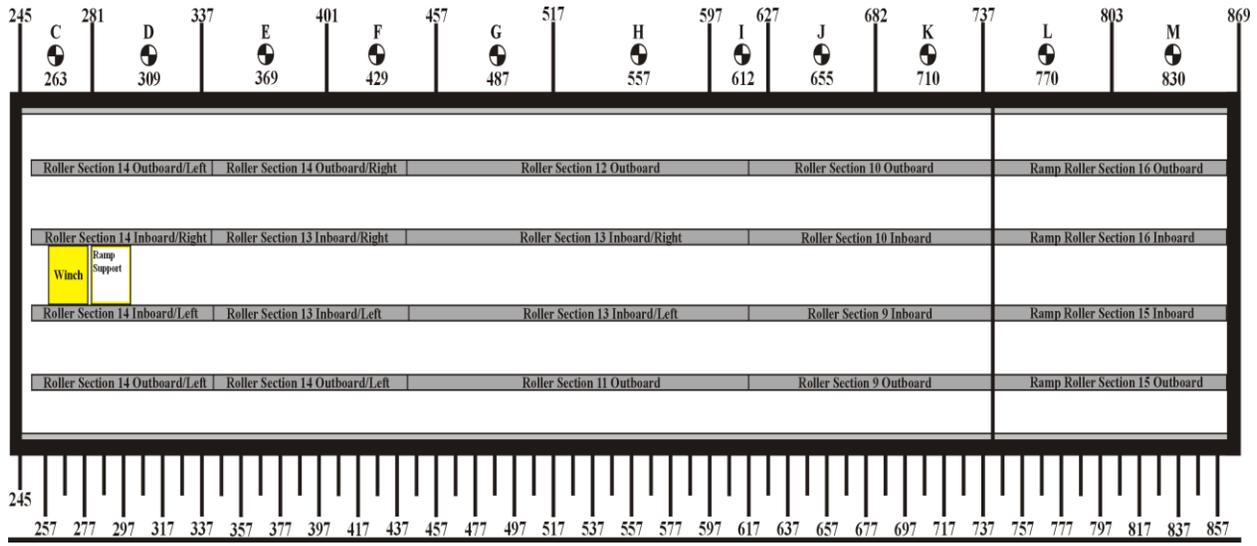
**Notes:**

1. All restraint rails down and roller conveyors installed.
- CAUTION:** Do not plan more than 36 ft combined length of airdrop platforms (**Exception:** see note below). Minimum space between platforms is two inches due to side rail detents and dual rail lock alignment. See TO 1C-130A-9 for other restrictions.
2. Seating availability is dependent on number of platform loads.
  3. A maximum of 40 ft combined platform length may be used in 16/24 foot combinations only.

**Table 3.13. TAC-1 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. Blackout Kit.
5. As required by mission directives.

**Figure 3.14. TAC-2 (Container Airdrop).**



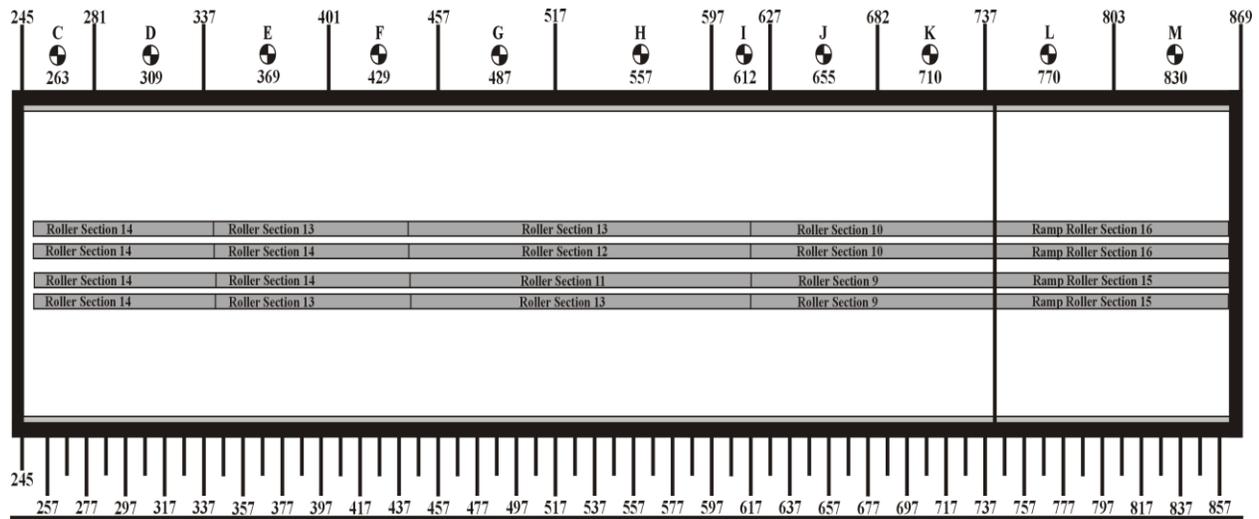
**Notes:**

1. Individual A-22 containers, single stick up to 8 containers or double stick up to 16 containers (any even number) may be airdropped utilizing this configuration. A maximum of 10 A-7A or A-21 containers may be airdropped over the ramp using this configuration.
2. Mission tasking units will schedule the buffer stop assembly for CDS missions when the combined load weight for a single pass is more than 5,000 pounds. (T-2)
3. CVR rail will be installed as required for number of bundles being dropped. (T-2)
4. CVR must be installed after buffer stop assembly (BSA) is loaded. See TO 1C-130A-9 for installation procedures. (T-2)
5. Seating availability is dependent on number of containers loaded.

**Table 3.14. TAC-2 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. CDS BSA.
4. CVR Rail.
5. CDS Rigging Kit.
6. Crew Bunks.
7. Blackout Kit.
8. As required by mission directives.

**Figure 3.15. TAC-3 (HSSLADS/CRS).**



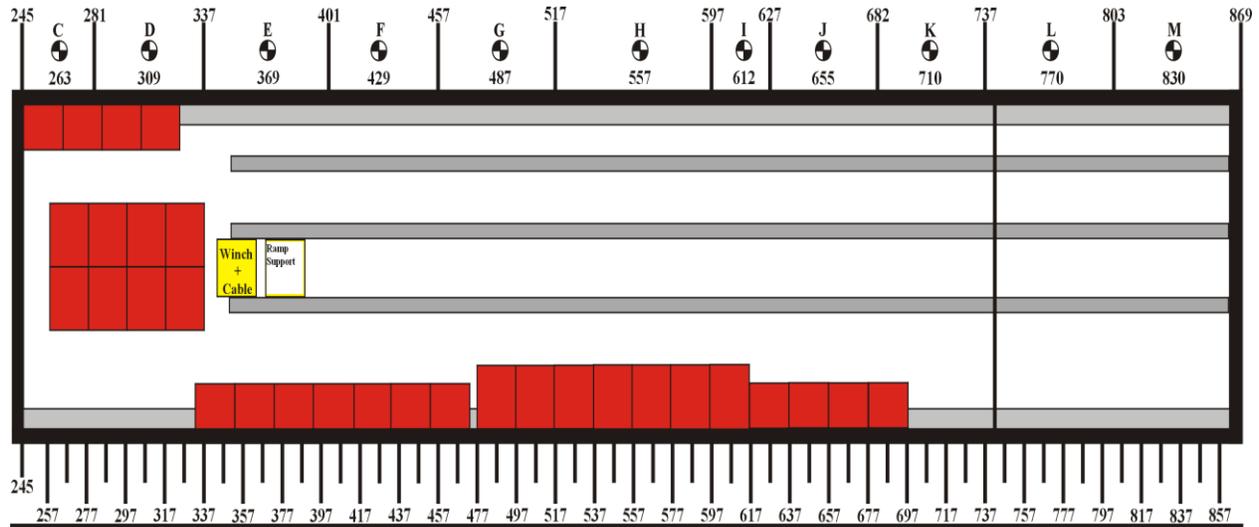
**Notes:**

1. Roller conveyors installed.
2. Secondary release system cable and arming box installed.
3. Seating availability is dependent on number of containers loaded.
4. Position anchor cable stops IAW TO 1C-130A-9.

**Table 3.15. TAC-3 Extra Equipment.**

1. Ramp Support.
2. HSSLADS, CRS Rigging Kit.
3. Crew Bunks.
4. Blackout Kit.
5. As required by mission directives.

**Figure 3.16. TAC-4 (Two SINGLE/STACKED CRRC Airdrop).**



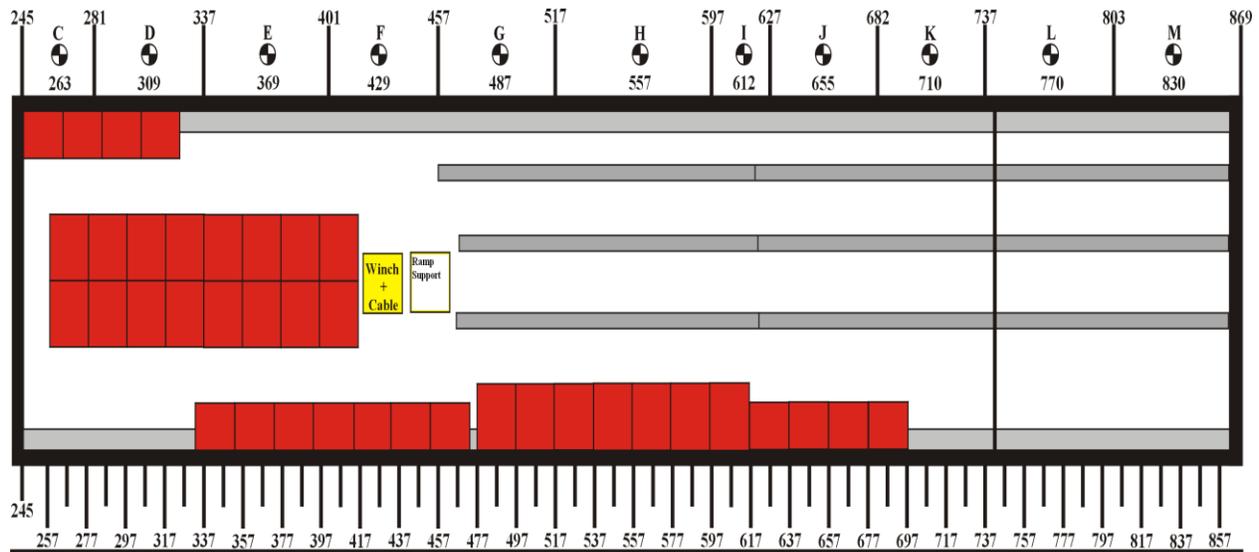
**Notes:**

1. 30 troop seats, seat belts on 20 inch centers, 28 troop seats offered.
2. Roller conveyors not used will be stowed on top of dual rail covers. (T-2)
3. 11 seats are lost when roller conveyor configuration is reversed.

**Table 3.16. TAC-4 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. HSSLADS/CRS Rigging Kit.
4. Crew Bunks.
5. Blackout Kit.
6. As required by mission directives.

**Figure 3.17. TAC-5 (One SINGLE/STACKED CRRC Airdrop).**



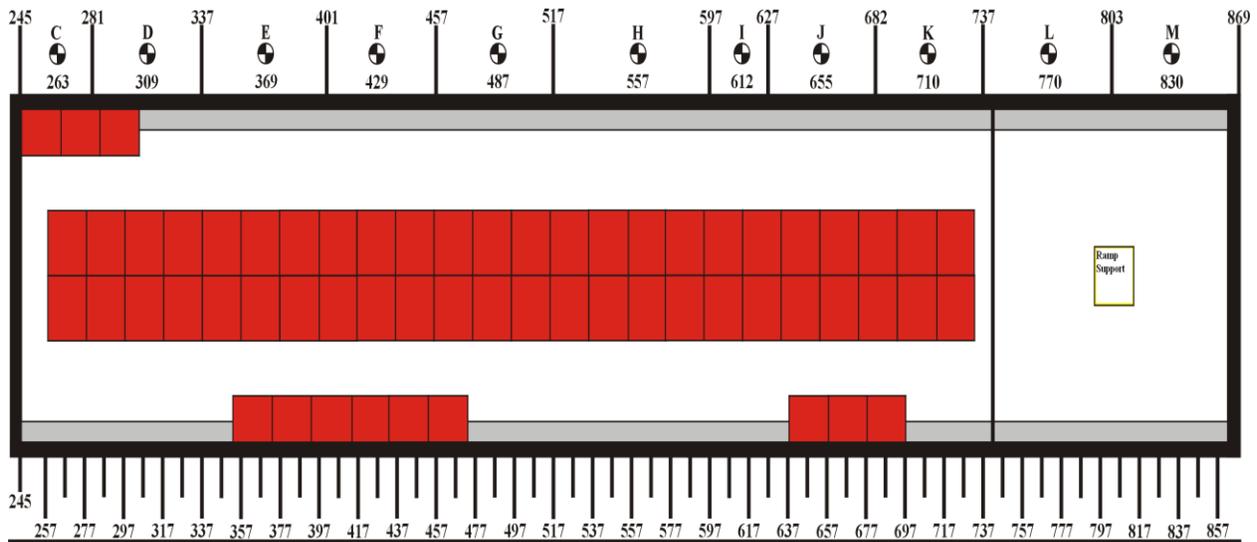
**Notes:**

1. 38 troop seats, seat belts on 20 inch centers, 36 seats offered.
2. Roller conveyors not used will be stowed on top of dual rail covers. (T-2)
3. 7 seats are lost when roller configuration is reversed.

**Table 3.17. TAC-5 Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. HSSLADS/CRS Rigging Kit.
4. Crew Bunks.
5. Blackout Kit.
6. As required by mission directives.

**Figure 3.18. TAP-1/1A (Personnel Airdrop).**



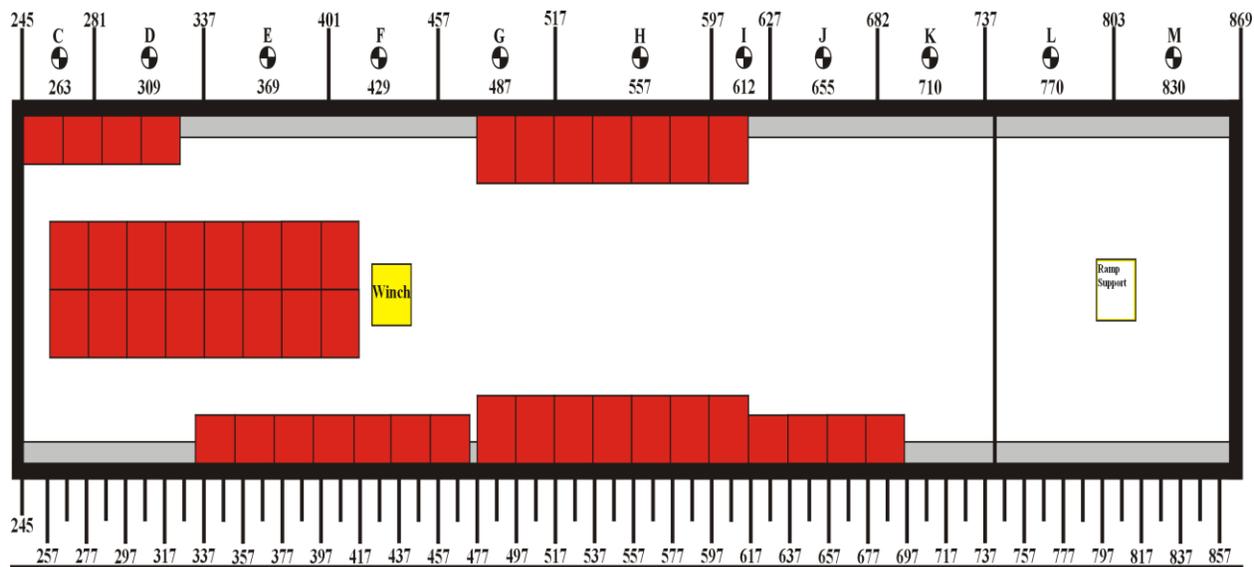
**Notes:**

1. 52 troop seats, seat belts on 24 inch centers, 50 seats offered. This configuration is for maximum airdrop of personnel.
2. Prior to seat installation, remove intermediate roller conveyors and secure on top of dual rail covers.
3. Notes 1 & 2 apply to TAP-1 only. Notes 1, 2, and 4 apply to TAP-1A only.
4. Remove paratroop dual rail sections 5 & 6 and stow on the ramp or IAW mission requirements. Install center anchor cable supports, jump platforms, and 2 anchor cables on each side IAW TO 1C-130A-9, Section III.
5. Ensure that the aft section of the simul control rod from section 3 and the aft section of the right hand control rod from rail section 4 are removed. On the aft end of rail sections 3 & 4, swing the splice-tie outboard and secure in the forward position with one turn of 80-pound cotton webbing. Move protruding portion of sequential drawbar forward by ratcheting all left hand detents to the unlocked position.

**Table 3.18. TAP-1/1A Extra Equipment.**

1. Ramp Support.
2. Crew Bunks.
3. Blackout Kit.
4. As required by mission directives.

**Figure 3.19. TAP-2/2A (Personnel Airdrop).**



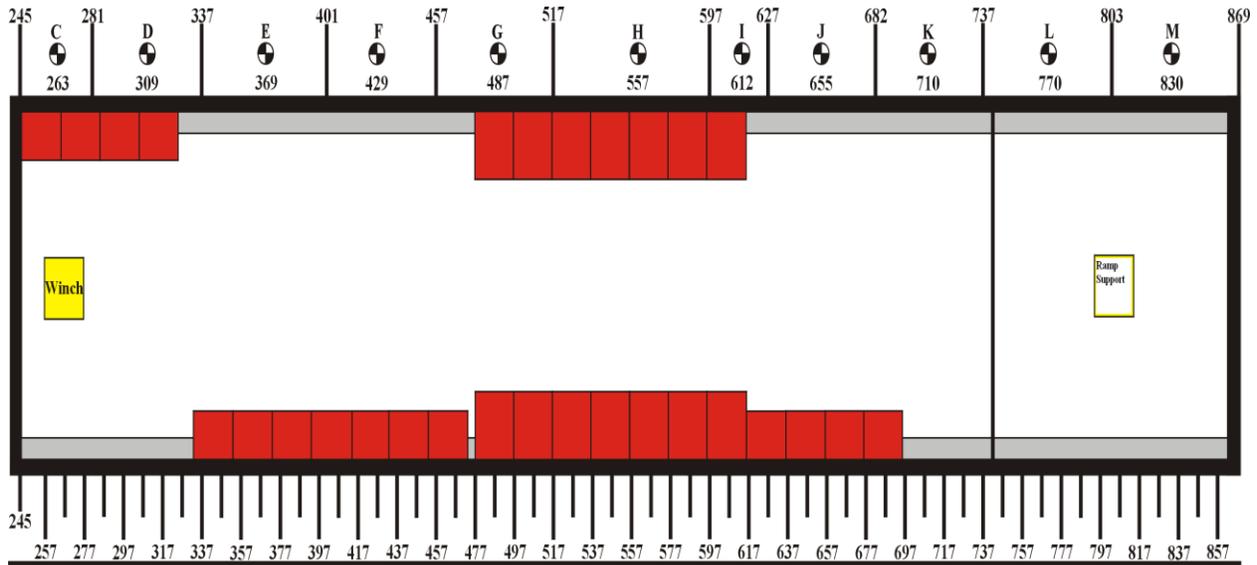
**Notes:**

1. 41 troop seats, seat belts on 20 inch centers, 39 troop seats offered. This configuration is for in-flight rigging of parachutes (long range missions).
2. Prior to seat installation, remove all intermediate roller conveyors and secure on top of dual rail covers.
3. Notes 1 & 2 apply to TAP-2 only. Notes 1, 2, and 4 applies to TAP-2A only.
4. Remove paratroop dual rail sections 5 & 6 and stow on the ramp or IAW mission requirements. Install center anchor cable supports, jump platforms, and one anchor cable on each side IAW TO 1C-130A-9, Section III.
5. Ensure that the aft section of the simul control rod from section 3 and the aft section of the right hand control rod from rail section 4 are removed. On the aft end of rail section 3 & 4, swing the splice-tie outboard and secure in the forward position with one turn of 80-pound cotton webbing. Move protruding portion of sequential drawbar forward by ratcheting all left hand detents to the unlocked position.

**Table 3.19. TAP-2/2A Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. Blackout Kits.
5. As required by mission directives.

**Figure 3.20. TAP-3/3A (Personnel Airdrop).**



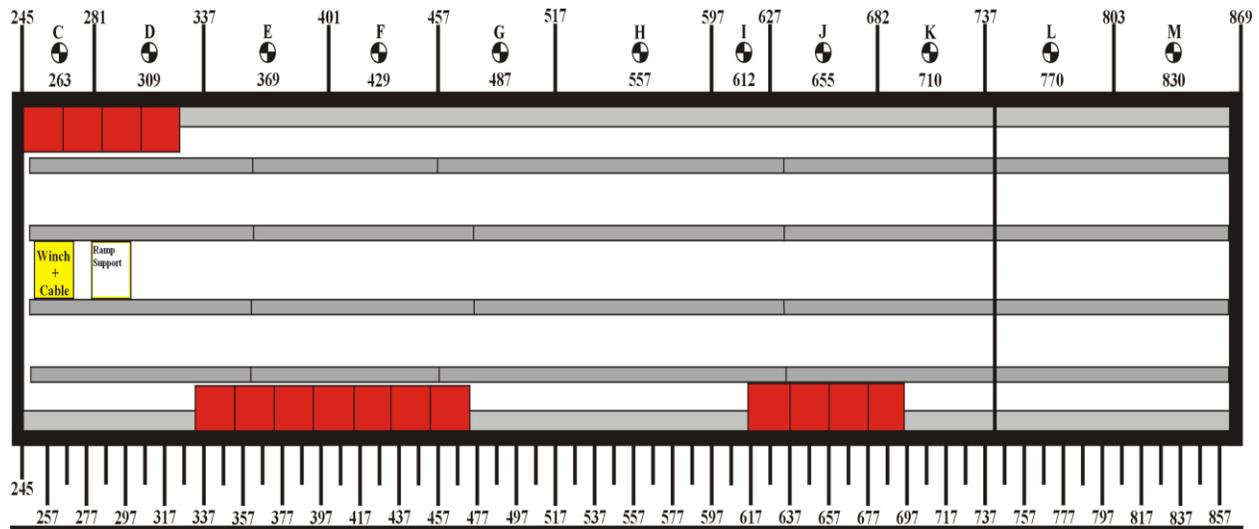
**Notes:**

1. 29 troop seats, seat belts on 20 inch centers, 27 troop seats offered. This configuration is for in-flight rigging of parachutes (long range missions).
2. Prior to seat installation, remove all intermediate roller conveyors and secure on top of dual rail covers.
3. Notes 1 & 2 apply to TAP-3 only. Notes 1, 2, and 4 apply to TAP-3A only.
4. Remove paratroop dual rail sections 5 & 6 and stow on the ramp or IAW mission requirements. Install center anchor cable supports, jump platforms, and one anchor cable on each side IAW TO 1C-130A-9, Section III.
5. Ensure that the aft section of the simul control rod from section 3 and the aft section of the right hand control rod from rail section 4 are removed. On the aft end of rail sections 3 & 4, swing the splice-tie outboard and secure in the forward position with one turn of 80- pound cotton webbing. Move protruding portion of sequential drawbar forward by ratcheting all left hand detents to the unlocked position.

**Table 3.20. TAP-3/3A Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Crew Bunks.
4. Blackout Kit.
5. As required by mission directives.

**Figure 3.21. LP-1.**



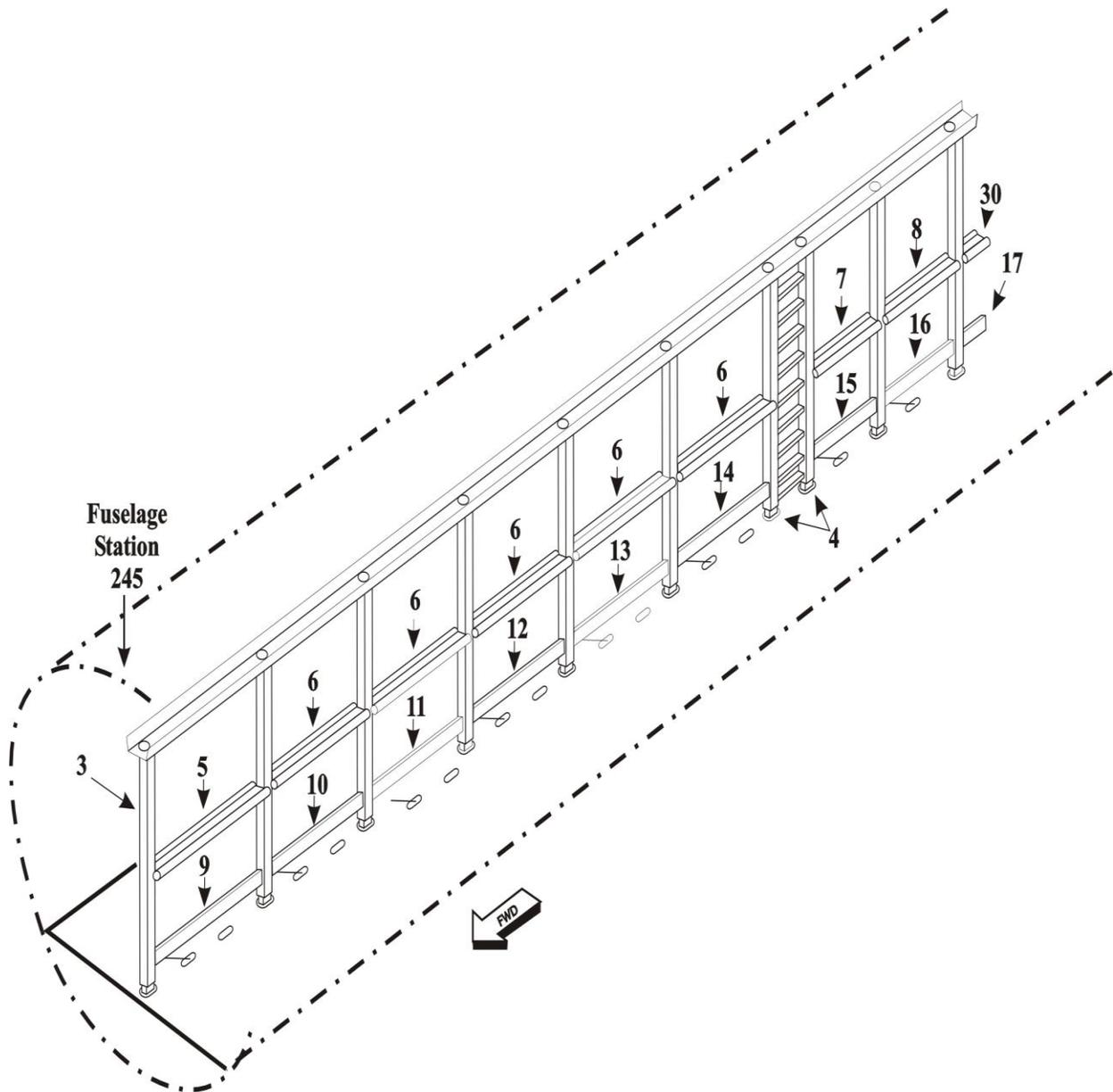
**Notes:**

1. 15 troop seats, seat belts on 20 inch centers, 13 seats offered.
2. Roller conveyors not used will be stowed on top of dual rail covers. (T-2)
3. Center anchor cable supports rigged.
4. Seating availability dependent on number of boxes and number of personnel required.
5. A portable oxygen console with a minimum of six regulators may be required. Each regulator will have a 24 foot oxygen hose with clip. (T-2)

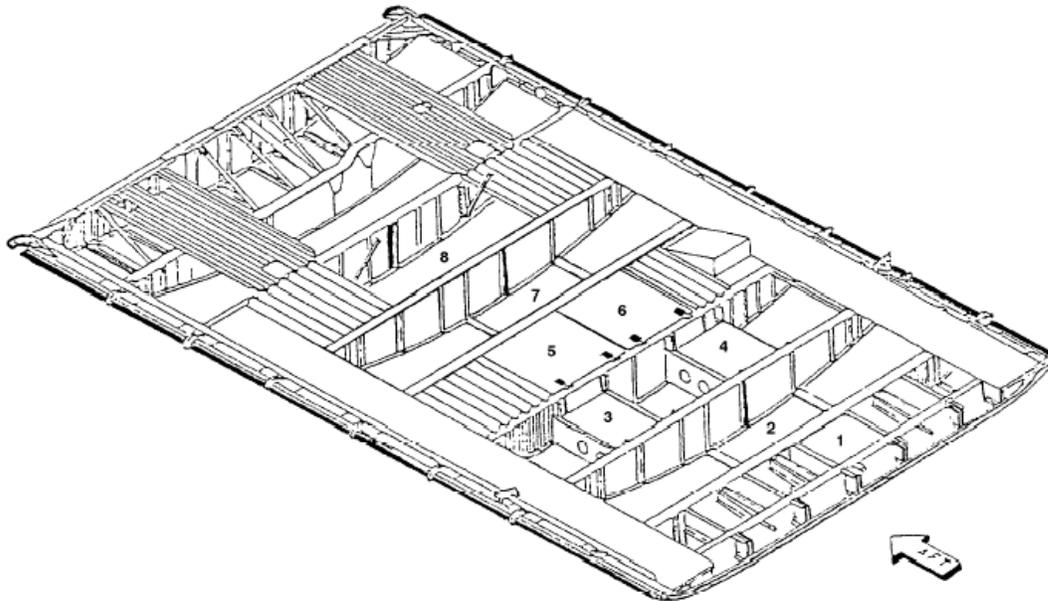
**Table 3.21. LP-1Extra Equipment.**

1. Ramp Support.
2. Cargo Winch and Power Cable.
3. Additional HALO hoses as required.
4. Crew Bunks.
5. Blackout Kit.
6. As required by mission directives.

**Figure 3.22. Center-Aisle Seat Configuration.**



- 3. Seat and litter stanchion (8).
- 4. Seat and litter stanchion ladder.
- 5 through 8. Upper seat back support beam (8).
- 9 through 16. Lower seat support beam (8).
- 17. Seat support beam extension.
- 30. Seat back support assembly.

**Figure 3.23. Cargo Door Storage.**

1. Storage Bin - Static Line Retriever "Y" Cable and Extensions, Jack and Tow Fittings, and Main Landing Gear Locking Assembly.
2. Storage Location - Aux Ground Loading Ramps (Generation IV)
3. Storage Bin - Seat Belts
4. Storage Bin - Protective Clothing Kit (PCK)
5. Storage Bin - 5,000 pound straps
6. Storage Bin - Airdrop and Misc. Equipment
7. Storage Location - Maintenance Crane Assembly, Monorail Assembly, Lower Support Beam #9, Left Paratroop Door Litter Stanchion.
8. Storage Location - Nose Gear Door Slide Assembly, Monorail Fork Assembly

## Chapter 4

### REFERENCE DATA

**4.1. General.** This chapter contains reference data to assist personnel in load planning.

**4.2. Emergency Exits and Safety Aisles.** Load aircraft in such a manner that the following emergency exits and safety aisles are available.

4.2.1. At least one cabin emergency exit is unobstructed.

4.2.2. At least one unobstructed emergency exit is available for each 20 passengers/troops. This does not restrict overwater flights if the three overhead escape hatches are available for egress. Litters and seats erected across an emergency exit are not considered as an obstruction.

4.2.3. When passengers are being airlifted, an unobstructed aisle way will be maintained in the wheel-well (pallet positions 3 & 4) and ramp area (pallet position 6) to provide access to emergency exits. In the wheel-well area the aisle way will be a minimum of 14 inches wide between the outer edge of the cargo and the aircraft and will begin at the cargo floor (**Figure 4.1 A**). Tie-down equipment (463L nets, straps, chains, and devices) shall not normally be considered an obstruction. The aisle way should normally be on the left side of the aircraft. If the aisle way is placed on the right side of the aircraft, then clearance to the right side of the aircraft must be maintained. The dual rail outboard frame provides 8 inches of the 14 inch requirement on the main cargo floor. In the ramp area the aisle way will be a minimum of 8 inches beginning at the outboard edge of the dual rail frame. Access to aft latrine facilities requires an 18-inch clear area on the forward right side of the cargo loaded on the ramp. (T-2)

4.2.4. If safety aisle requirements in **Paragraph 4.2.3** cannot be achieved on missions carrying crew only or mission essential personnel authorized by operations order/plan or Commander Air Force Special Operations Forces (COMAFSOF), then a safety aisle will be maintained in the wheel-well area to provide the following minimum clearance: (T-2)

4.2.4.1. At least 14 inches between the outer edge of the cargo and the aircraft beginning no higher than 36 inches above the floor/pallet/platform.

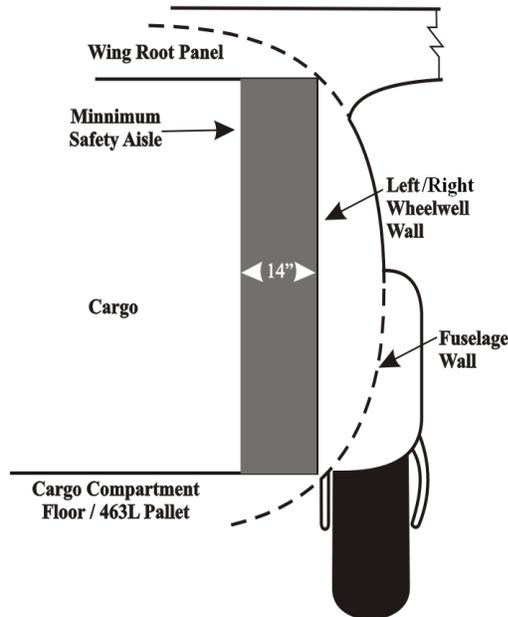
4.2.4.2. Or a minimum of 30 inches between the outer edge of the cargo and the aircraft beginning no higher than 60 inches above the floor/pallet/platform.

4.2.5. During airdrop missions, loadmasters shall have access to the rear of the aircraft to accomplish tactical checklists. (T-2)

4.2.6. On all missions, cargo will be loaded in such a way that the crew will have access to the rear of the aircraft. The aircraft commander will be the final authority for determining if safety aisles and/or access aft of cargo is adequate. Cargo loads in Section VI of TO 1C-130A-9 are specific and do not require a waiver. (T-2)

Figure 4.1. Wheel-Well Safety Aisle.

A. With Passengers:



B. With Crew and Mission Essential Ground Personnel (MEGP) Only

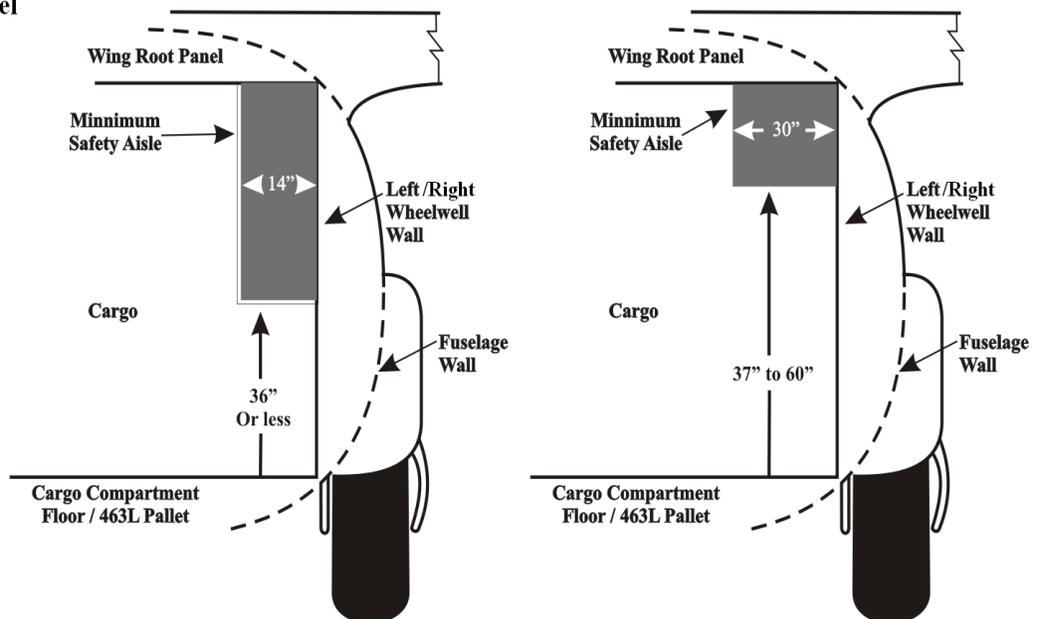


Table 4.1. Aircraft and Miscellaneous Equipment Standard Weights in Pounds.

Item	Weight
Aircraft chocks (4)	52

<b>Item</b>	<b>Weight</b>
Aux ground loading ramp (2)	84
Buffer Stop Assembly with channels/without channels	645/585
Canary slide ramps (set)	465
Crew Bunk w/mattress	64
CDS rigging kit	20
Hot cup	3
Hydraulic fluid (case)	52
HSSLADS Kit	50
Intermediate Roller Conveyer Total Weight	621
Section 9 (2)	70
Section 10 (2)	70
Section 11 (1)	34
Section 12 (1)	34
Section 13 (4)	112
Section 14 (6)	141
Section 15 (2)	80
Section 16 (2)	80
Ladder, maintenance	42
Liquid container w/o contents (2 gal)	9
Liquid container w/contents (2 gal)	25
Litter, wooden/canvas	14
Loadmaster Crashworthy Seat	22
Oil (case)	52
Oxygen bottle, portable with harness	6
Oxygen console, HALO	100
Pry bar	49
Ramp air deflectors (set) MC-130H	137
Ramp support (wooden)	85
Seat, side facing (1 person)	3.5
Seat, side facing (2 person)	7

<b>Item</b>	<b>Weight</b>
Seat support beam lower	21
Seat support beam upper	11
Snatch block (PN 7320110-3)	8
Stanchion, seat/litter	30
Water, container (2 gal small Igloo w/contents)	25
Water, container (5 gal large Igloo w/contents)	50
Winch, cargo, HCU-9A	290
Winch, cargo, Hoover	249
Winch, cargo, Bulldog 41B	196
Winch, cargo, Bulldog 41BG	175
Winch, power cable	48

**Table 4.2. Crew/Passengers/Baggage Standard Weights in Pounds.**

<b>Item</b>	<b>Weight</b>
Crew	200
Pax (without bags)	175
Litter (includes everything except baggage)	195
Ambulatory (without bags)	160
Pax baggage	66

**Table 4.3. Emergency Equipment Standard Weights in Pounds.**

<b>Item</b>	<b>Weight</b>
Adult/child life vest	1.5
Anti-exposure suits	6
Body armor without plates	5.2
Body armor with plates	15.6
Emergency escape breathing device (EEBD)	5
Emergency radio	2
Life raft (20 member)	180
LPU-10/P life vest	4
LPU-5/P life vest	4

Item	Weight
LPU-6/P life vest (infant cot)	4
MB-1 life vest (casualty)	4
MD-1 life vest (child)	3
ML-4 seat kit	21
Parachute (back)	32
Parachute (chest)	16
Parachute (chest harness)	13
Passenger oxygen kit (15 per box)	30
Protective clothing kit	40
Quick don mask	2.5
Smoke mask	3
Survival vest	9
Restraint harness w/safety strap	9

**Table 4.4. FARP Equipment Standard Weights in Pounds.**

Item	Weight
Hose, 100 ft (3")	100
Hose, 100 ft (2")	70
Hose, 10 ft	20
X or T fitting	12
All nozzles	10
Halon fire extinguisher	37
50 GPM Pump	70
Fam Cart	3,220
<b>Note:</b> Fam Cart weight includes: hoses, fittings, nozzles, extinguishers, squeegees, 5 gallon water cans, and 220 ft interphone cord.	
Spill kit	20
Squeegee, Powered/Manual	30/10
5 gallon water can (full)	40
3 gallon water can sprayer	25
220 ft interphone cord	20

Item	Weight
1 point deployment basket	500

**Table 4.5. Ground Troops and Parachutists Standard Weights in Pounds.**

Ground Troops	Training Weight	Combat Weight
Ground troop with web gear and weapon	210	240
Ground troop with web gear, weapon, and ruck sack	250	300
Ground troop with combat equipment tools	250	300
Ground troop with duffel bag, web gear and ruck sack	350	400
Ground troop with duffel bag and combat equipment/tools	350	400
Ruck Sack	40	80
Parachutists	Training Weight	Combat Weight
Parachutist with web gear, weapon, and ruck sack	300	350
Parachutist - Hollywood	220	N/A
Ruck Sack	40	80

**Table 4.6. Tie-Down Equipment Standard Weights in Pounds.**

Item	Weight
Strap CGU-1/B (5000 lb)	4
Strap (10,000 lb)	4
MB-1 chain/CGU-4/E	7
MB-1 devices/CGU-4/E	3.5
MB-2 chain/CGU-3/E	20
MB-2 devices/CGU-3/E	6
Pallet (HCU-6/E)	290
Pallet nets (1 set)	65

**Table 4.7. Center Vertical Restraint Standard Weights in Pounds.**

Item	Weight
Section 1, Aft ramp assembly, 60 inches	37
Section 2, Forward ramp assembly, 60 inches	36
Section 3, Aft cargo compartment assembly, 63 inches	43

<b>Item</b>	<b>Weight</b>
Section 4, Interchangeable main assembly, 80 inches	56
Section 5, Interchangeable main assembly, 40 inches	28.5

## Chapter 5

### DD FORM 365-4 (FORM F) INSTRUCTIONS

**5.1. Introduction.** This chapter provides instructions for computation and completion of the DD Form 365-4. The Form F will be computed using simplified moments. All entries and signatures must be legible. (T-2)

**5.2. Load Planning.** The cargo load must be planned so that the center of gravity (CG) of the loaded aircraft will be within the specified forward and aft limits for any given operating condition. Consideration must be given to offload sequence, aircraft limitations, and emergency jettisoning. (T-2)

**5.3. General Instructions.** These instructions apply to forms using simplified moments.

5.3.1. DD Form 365-4 Heading. Enter date, mission number, aircraft type, serial number, departure and destination station (name or international civil aviation organization (ICAO) identifier), aircraft's home station and pilot's rank and last name.

5.3.2. Limitations Column. Enter appropriate weight and CG limits for the planned mission using the following criteria: The maximum gross weight and CG limits specified in TO 1C130(M)H-1, *Flight Manual MC-130H*, will not be exceeded. Gross weight may also be limited by operating conditions; i.e., obstacle clearance, rate-of-climb, weather conditions, altitude, runway/taxiway bearing capacity, or any other published restrictions. The pilot/flight engineer will inform the loadmaster of any gross weight restrictions prior to the mission so an accurate allowable cabin load (ACL) may be obtained. (T-2)

5.3.2.1. Takeoff ACL. Unless other restrictions are imposed, use 155,000 allowable gross weight for MC-130 aircraft, and subtract the total aircraft weight (Reference 12). (T-2)

5.3.2.2. Landing ACL. Unless other landing restrictions are imposed, use 155,000 for MC130 aircraft, and subtract operating weight plus estimated landing fuel (References 9 and 23). (T-2)

5.3.2.3. Limiting Wing Fuel. Compute IAW limiting wing fuel charts in **Table 5.1** of this instruction or the charts in Section V of TO 1C-130(M)H-1 for takeoff and landing. The most restrictive weight will be used. **Note:** The limiting wing fuel chart in this instruction is based on a 2.5 G maneuver load factor with indicated airspeed restrictions outlined in area "C" of the flight manual limiting wing fuel charts. When specific mission requirements exceed the limitations outlined in area "C" of the limiting wing fuel charts, the loadmaster must compute limitations using the appropriate flight manual limiting wing fuel chart in Section V of TO 1C130(M)H1. (T-2) **Note:** Enter the allowable gross weight for limiting wing fuel and subtract the operating weight (Reference 9) to determine limiting wing fuel ACL.

5.3.2.4. Permissible CG Takeoff and Landing. Compute the forward and aft center of gravity limitations using the center of gravity table in TO 1C-130(M)H-5, *Handbook, Basic Weight Checklist and Loading Data*. The permissible CG and zero fuel weight blocks will be left blank. (T-2)

## 5.3.3. Signature Block:

- 5.3.3.1. Computed by: signature, rank, and organization.
- 5.3.3.2. Weight and Balance authority: Leave blank
- 5.3.3.3. Pilot: Signature on original and duplicate.

**5.4. Instructions for Moment Form F.** Use TO 1C130(M)H5 and Chart E.

## 5.4.1. Remarks section.

5.4.1.1. Enter a breakdown of ramp fuel weight for each tank to the nearest 100 pounds and moments using the fuel moment tables contained in TO 1C-130(M)H-5. An alternate method of computing fuel moments is accomplished by multiplying the total fuel by .552. In this instance show only the total fuel weight and moment for takeoff and landing.

5.4.1.2. Enter estimated fuel burn off (FBO) below the total takeoff fuel. Subtract anticipated fuel burn off from total takeoff fuel. If no helicopter air refueling (HAR) or air refueling (AR) is anticipated, this is your estimated landing fuel (ELF). Enter the breakdown of ELF and total ELF in the remarks block. **Note:** Use the following criteria to compute in-flight fuel consumption. Add 500 pound per hour (PPH) when in-flight air refueling system (IARS) pods are installed:

<b>Note:</b> First hour of flight (climb-out)	7,500 PPH
<b>Note:</b> Normal flight at altitude	5,500 PPH
<b>Note:</b> Low-altitude flight (low-level)	6,500 PPH

5.4.1.3. Enter anticipated fuel onload for AR (label it as AR) and anticipated fuel offload HAR (label it as HAR) below the anticipated FBO. Add and subtract as appropriate AR, HAR and FBO to arrive at ELF. Enter the breakdown of ELF and total ELF in the remarks block.

5.4.2. Reference 1. Enter basic weight and moment from the last entry of the certified copy of the DD Form 365-3 in the aircraft weight and balance handbook.

5.4.3. Reference 2. Leave blank.

5.4.4. Reference 3. Enter the number of crew members, locations, weight, and moment from crew/cargo compartment tables.

5.4.5. Reference 4. Enter crew baggage by location. Determine weight and moment.

5.4.6. Reference 5, 6, and 7. Determine amount of equipment on board and location. Compute weight and moment.

5.4.7. Reference 8. Countermeasure expendables: Enter Chaff and Flare weight and moment as required.

5.4.8. Reference 9. Total of references 1 thru 8.

5.4.9. Reference 10. Enter total fuel weight and determine moments using the primary or approved alternate method of calculation as outlined in **Paragraph 5.4.1.1.**

5.4.10. Reference 11. Leave blank.

5.4.11. Reference 12. Total of reference 9 and 10.

5.4.12. Reference 13. Distribution of allowable load (payload).

5.4.12.1. Enter weight of cargo, pallets, vehicles, rolling stock, floor loaded cargo, etc., by determining the fuselage station of the cargo's center of balance. Large items will be listed separately. Items loaded side by side may be combined. General cargo may be compartment loaded. (T-2)

5.4.12.2. Enter number and weight of passengers, troops, and/or litters using either a compartment centroid or individual's weight by location (fuselage station). Determine moment.

5.4.12.3. Enter weight of airdrop equipment by compartment or fuselage station and determine moment. **Note:** During engine running onloads (ERO) or when planned ground times preclude use of procedures in **Paragraphs 5.4.11.1**, thru **5.4.11.3**, a combined load CG may be used if a validated load plan is presented. **Note:** During ERO, a DD Form 365-4 is not required for the subsequent sortie if the aircraft departs empty. **Note:** The total load weight of reference 13 shall not exceed the smallest allowable cabin load determined by the limitations block allowable cabin load (see **Paragraph 5.3.2.3** and Notes). (T-2)

5.4.13. Reference 14. Compute Zero Fuel Weight and Zero Fuel Moment by combining reference 9 with reference 15. Zero Fuel percent of mean aerodynamic chord (MAC) enter N/A.

5.4.14. Reference 15. Total load weight and moment of reference 13 will be entered as "subtotal". (T-2)

5.4.15. Reference 16. Total of references 12 and 15.

5.4.16. Reference 17. Enter takeoff CG in percent of MAC.

5.4.17. Reference 18. When applicable, enter corrections from computations in corrections block.

5.4.18. Reference 19. Adjustments after weight and/or moment from references 18 are either added or subtracted to/from reference 16 as required.

5.4.19. Reference 20. Enter corrected CG in percent of MAC, as required.

5.4.20. Reference 21. Enter Zero Fuel Weight (ZFW) and Moment from reference 14.

5.4.21. Reference 22. If required, subtract airdrop load weight and moment from reference 21 and enter as corrected Zero Fuel Weight and Moment on a blank line in reference 22. Title as "Corrected ZFW/Moment".

5.4.22. Reference 23. Enter landing fuel weight and moment obtained by determining estimated fuel in all tanks for landing. Refer to **Paragraph 5.4.1.2** or **5.4.1.3**. Calculate fuel moments using fuel charts in TO 1C-130(M)H-5 or by multiplying total estimated wing fuel on board by .552.

5.4.23. Reference 24. Total of references 21 and 23 or 22 and 23.

5.4.24. Reference 25. Enter landing CG in percent of MAC.

5.4.25. Remarks Block. In addition to takeoff and landing fuel breakdowns, enter weights for AR, HAR, and FBO fuel.

5.4.26. Load adjuster number block. Leave blank.

Figure 5.1. Weight and Balance Clearance Form F, Example.

WEIGHT AND BALANCE FORM F - TRANSPORT										FOR USE WITH T.O. 1-1B-40 NAVAIR																																																																																																																																																																																																				
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(Ref. 9) + (Ref. 23)				110,281								19 TAKEOFF CONDITION (Corrected)																																																																																																																																																																																																		
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**5.5. Limiting Wing Fuel.** **Table 5.1** may be used to determine maximum limiting wing fuel ACL for a given fuel load when in primary fuel management. Comply with the requirements outlined in **Paragraph 5.5.1** when using **Table 5.1**. Fuel weights are expressed in thousands. For fuel weights between chart weights, go to nearest fuel weight to determine base weight. Both takeoff and landing conditions must be calculated. The most restrictive will be placed on the DD-365-4. (T-2)

5.5.1. Instructions for primary fuel management. **Table 5.1** is based on the recommended areas (Areas A, B, and C) of the Weight Limitations Chart (Primary Fuel Management) (Non-Air Refueling Mission, Non MCARS aircraft) With Foam In Fuel Tanks. For Operations that do not meet these criteria, use the appropriate chart in TO 1C-130(M)H-1, Section V, to determine ACL. (T-2)

**Table 5.1. Limiting Wing Fuel Primary Fuel.**

<b>TOTAL FUEL</b>	<b>BASE WEIGHT</b>	<b>TOTAL FUEL</b>	<b>BASE WEIGHT</b>
8	125,000	34	121,000
9	125,500	35	120,000
10	126,000	36	119,000
11	126,500	37	118,000
12	127,000	38	117,000
13	127,250	39	116,000
14	127,750	40	115,000
15	128,000	41	114,000
16	128,250	42	113,000
17	128,750	43	112,000
18	129,000	44	111,000
19	129,500	45	110,000
20	130,000	46	109,000
21	130,000	47	108,000
22	130,000	48	107,000
23	130,000	49	106,000
24	130,000	50	105,000
25	130,000	51	104,000
26	129,000	52	103,000
27	128,000	53	102,000

<b>TOTAL FUEL</b>	<b>BASE WEIGHT</b>	<b>TOTAL FUEL</b>	<b>BASE WEIGHT</b>
28	127,000	54	101,000
29	126,000	55	100,000
30	125,000	56	99,000
31	124,000	57	98,000
32	123,000	58	97,000
33	122,000		

5.5.1.1. Determine total takeoff and landing wing fuel and find base weight. Do not include fuselage tank fuel. (T-2)

5.5.1.2. Annotate the lowest base weight on DD Form 365-4 limitations column under fuel. (T-2)

5.5.1.3. Subtract the operating weight to find ACL. (T-2)

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## Attachment 1

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

#### *References*

- AFI 11-200 *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 19 January 2012
- AFI 11-202, Vol 2, *Aircrew Standardization/Evaluation Program*, 13 September 2010
- AFI 11-215, *USAF Flight Manuals Program (FMP)*, 22 December 2008
- AFI 11-2MC-130, Vol 3, *MC-130 Operations Procedures*, 22 December 2011
- AFI 11-301, Vol 1, *Aircrew Flight Equipment (AFE) Program*, 25 February 2009
- AFI 11-301, Vol 2, *Maintenance and Configuration Requirements for Mobility Air Forces (MAF) Aircrew and Aircraft-Installed Aircrew Life Support Equipment (ALSE)*, 1 May 2006
- AFMAN 33-363, *Management of Records*, 1 March 2008
- AFPD 11-2, *Aircrew Operations*, 19 January 2012
- TO 1C-130A-9, *Cargo Loading Data*, 31 January 2005
- TO 1C-130(M)H-1, *Flight Manual MC-130H*, 16 November 2011
- TO 1C-130(M)H-5, *Handbook, Basic Weight Checklist and Loading Data*, 1 March 2000

#### *Forms Adopted.*

- AF Form 847, *Recommendation for Change of Publication*
- AFTO Form 781A, *Maintenance Discrepancy and Work Document*
- AFTO Form 781K, *Aerospace Vehicle Inspection, Engine Data, Calendar Inspection and Delayed Discrepancy Document*
- DD Form 365-3, *Chart C - Basic Weight and Balance Record*
- DD Form 365-4, *Weight and Balance Clearance Form F - Transport/Tactical*

#### *Abbreviations and Acronyms*

- ACL**—Allowable Cabin Load
- ADS**—Aerial Delivery System
- ADSB**—Aerial Delivery Support Branch
- ADF**—Aerial Delivery Flight
- AE**—Aeromedical Evacuation
- AETC**—Air Education and Training Command
- AF**—Air Force
- AFE**—Aircrew Flight Equipment
- AFI**—Air Force Instruction

**AFMAN**—Air Force Manual  
**AFPD**—Air Force Policy Document  
**AFRIMS**—Air Force Records Information Management System  
**AFRC**—Air Force Reserve Command  
**AFSOC**—Air Force Special Operations Command  
**ALSE**—Aircrew and Aircraft-Installed Aircrew Life Support Equipment  
**ANG**—Air National Guard  
**AR**—Air Refueling  
**ARMS**—Aviation Resource Management System  
**ATOC**—Air terminal Operations Centers  
**BSA**—Buffer Stop Assembly  
**C**—Cargo  
**CDS**—Container Delivery System  
**CG**—Center of Gravity  
**COMAFSOF**—Commander Air Force Special Operations Forces  
**CRRC**—Combat Rubber Raiding Craft  
**CRS**—Container Release System  
**CP**—Cargo and Passengers  
**CVR**—Centerline Vertical Restraint  
**DC**—Direct Current  
**ea**—Each  
**EEBD**—Emergency Escape Breathing Device  
**ELF**—Estimated Landing Fuel  
**EPOS**—Emergency Passenger Oxygen System  
**ERO**—Engine Running Onloads  
**F**—Fahrenheit  
**FARP**—Forward Area Refueling Point  
**FBO**—Fuel Burn Off  
**FMP**—Flight Manual Program  
**FOL**—Forward Operating Location  
**FS**—Flight Station  
**HALO**—High-Altitude Low-Opening

**HAR**—Helicopter Air Refueling  
**HERP**—Hostile Environment Repair Procedures  
**HSLADS**—High-Speed Low-Level Aerial Delivery System  
**IARS**—In-Flight Air Refueling System  
**IAW**—In Accordance With  
**IC**—Interim Change  
**ICAO**—International Civil Aviation Organization  
**ICS**—Inter-Communications System  
**infil/exfil**—Infiltration/Exfiltration  
**LP**—(PSYOPS)  
**MAC**—Mean Aerodynamic Chord  
**MAF**—Mobility Air Forces  
**MOD**—Modifications  
**MOM**—Moment  
**OPR**—Office of Primary Responsibility  
**P**—Passenger  
**POK**—Passenger Oxygen Kit  
**PPH**—Pounds Per Hour  
**PSYOPS**—Psychological Operations  
**QA**—Quality Assurance  
**RAMZ**—Rigging Alternate Method Zodiac  
**RAPID**—Infil/Exfil Equipment or Personnel  
**RDS**—Records Disposition Schedule  
**TAC**—Tactical Airdrop Equipment  
**TAP**—Tactical Airdrop Personnel  
**TO**—Technical Order  
**WT**—Weight  
**ZFW**—Zero Fuel Weight