

**BY ORDER OF THE COMMANDER  
AIR FORCE SPECIAL OPERATIONS  
COMMAND**

**AIR FORCE SPECIAL OPERATIONS  
COMMAND INSTRUCTION 11-203  
VOLUME 6**



**23 APRIL 2014**

***Flying Operations***

**AC-130U CONFIGURATION/MISSION  
PLANNING**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: HQ AFSOC/A3V

Certified by: HQ AFSOC/A3V  
(Col Timothy D. Sartz)

Supersedes: AFSOCI11-203V6,  
1 October 1998

Pages: 21

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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 the basic configuration for AC-130U aircraft in regards to mission requirements. It applies to all organizations charged with configuring and operating AC-130U aircraft. It does not apply to the Air National Guard (ANG) or the Air Force Reserve (AFRC). Subordinate units may supplement this instruction in accordance with (IAW) **Paragraph 1.9**. The Privacy Act of 1974 applies to certain information gathered pursuant to this instruction. The Privacy Act System Number F011 AF XO A, Aviation Resource Management System (ARMS) covers required information. The authority for maintenance of ARMS is 37 USC 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974) and 93-294 (Aviation Career Incentive Act of 1974), DoDD 7730.57 (Aviation Career Incentive Act of 1974 and Required Annual Report, February 5, 1976, with Changes 1 and 2), and Executive Order 9397 as amended. 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 IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force

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**SUMMARY OF CHANGES**

This document is substantially revised and must be completely reviewed. Major areas updated include: **Table 2.1** and **2.2**, updates standard and additional equipment tables; **Figure 3.1**, updates cargo ramp/door stowage configuration; **Figures 3.2, 3.3, 3.4, and 3.5**, updates standard, cargo, and maximum cargo configurations; **Chapter 4**, updates emergency exit and safety aisle and updates cargo ramp limitation; **Table 4.1**, updates standard weights; **Table 4.2**, deletes munitions packages; **Chapter 5**, standardizes DD Form 365-4, *Weight and Balance Clearance Form F, Transport and Tactical*, instructions; **Figure 5.1**, adds example DD Form 365-4, Tactical Form F. Tier requirements have been annotated.

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## Chapter 1

### GENERAL POLICY

**1.1. General.** This instruction establishes basic cargo compartment configuration, standard equipment, and its location aboard the AC-130U aircraft. Those who use this instruction should bear in mind that an infinite number of variations are available and that the cargo compartment limitations listed here are the most typically encountered on a daily basis.

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.

**1.2. Roles and Responsibilities.** Personnel engaged in planning operations must consider the most appropriate configuration that will satisfy mission requirements and permit the minimum man-hours in configuring the aircraft. Units performing services on the AC -130U aircraft (e.g., maintenance, life support) are responsible for configuring the aircraft IAW this instruction as outlined in the mission directives. (T-2)

**1.3. Standard Configuration Codes.** Use the following codes when referring to AC130U cargo compartment configuration.

1.3.1. A-1 or A-2 – Standard Configurations

1.3.2. A-3 – Cargo Configuration

1.3.3. A-4 – Maximum Cargo Configuration

**1.4. Modifications.** The configuration codes of this instruction may, if necessary, require modifications for a specific mission. Each modification must be carefully evaluated prior to mission operation 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 Ferry/Depot input mission may require additional equipment installed/removed not in the A-3 (cargo) configuration. (T-1)

**1.5. Weight and Balance.** 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 the equipment, items shown in **Table 2.1** (Standard Equipment) will be included in the basic weight of the aircraft and remain on the aircraft except for maintenance and inspection. Equipment listed in **Table 2.2** (Additional Equipment) will be added as necessary and entered on DD Form 365-4. When preparing the DD Form 365-4, the loadmaster or aerial gunner enters the weights contained in the tables for the applicable configuration. Adjust the actual weight of items that vary from the data shown. (T-1) **Note:** When A-2/3/4 configurations

are accomplished at a forward operating location, the loadmaster or aerial gunner will add or subtract the listed weight/moment from the last entry in the Chart C. Annotate the new weight/moment in block 1 of the DD Form 365-4. The Quality Assurance (QA) update to the Chart C is not required. When configurations are changed at home station, QA is required to update the Chart C. (T-1)

**1.6. Distribution.** Commanders are responsible for bringing this publication to the attention of all affected personnel. Maintain at least one copy in the squadron operations section, readily accessible to operations and aircrew personnel. Additional distribution will be, one each, as follows:

- 1.6.1. Staff operations, all levels.
- 1.6.2. Offices of aircrew standardization, all levels.
- 1.6.3. Command posts/operations.
- 1.6.4. Aircraft maintenance squadrons.
- 1.6.5. Dash 21 equipment section.
- 1.6.6. Quality Assurance section.
- 1.6.7. Life Support section.
- 1.6.8. One located in the supplemental weight and balance handbook binder on each aircraft and unit deployment kits.

**1.7. Changes.** Recommendations for improvement to this Instruction are encouraged. Send recommendations/changes to HQ AFSOC/A3V on an AF Form 847.

**1.8. Supplements.** Subordinate unit supplements to this instruction that change the basic policies, procedures, or formats prescribed herein are prohibited. Upon publication, forward a copy of all supplements to HQ AFSOC/A3V.

**1.9. Waivers.** Any deviations from this instruction will comply with all applicable technical orders, publications, and the provisions stated in **Paragraph 1.4**. Configuration modifications beyond the scope of **Paragraph 1.4** require waiver submittal to the OPR listed above for consideration and approval. (T-2)

## Chapter 2

## CONSOLIDATED EQUIPMENT TABLES

**2.1. General.** Configure AC-130U aircraft with the equipment listed in **Table 2.1** IAW T.O. 1C-130A-21. Include this equipment in the aircraft basic weight. Items listed in **Table 2.2** are added, as necessary, to attain a specific configuration and/or comply with mission directives.

**Table 2.1. Standard Equipment.**

EQUIPMENT	QUANTITY	LOCATION
AAR-44 lens cover	1	Flight Station (FS) 900
Air-conditioning/heater plug	2	FS 900
Auxiliary Power Unit exhaust plug	1	FS 900
Avfuels Identiplate and Air Card	1/1	Stowed in single point refueling door
Axe, hand emergency	3	Installed IAW flight manual
Brass bags (40mm)	5	Between aft battle management center (BMC) wall and 40mm ASHS
Chain, tiedown 10,000 pound (lb)	14	Tiedown device container, FS 260
Chain, tiedown 25,000 lb	6	Tiedown device container, FS 260
Containers, liquid (2 gallon)	2	Galley, FS 188
Cup, food warming	2	Galley, FS 188
Device, tiedown 10,000 lb	7	Galley stowage compartment, FS 188
Device, tiedown 25,000 lb	4	Galley stowage compartment, FS 188
Emergency escape breathing device (EEBDs)	3	Cargo door storage bin
Engine intake and exhaust plugs	4/4	FS 900
Extinguisher, fire	7	Installed IAW flight manual
Firefighters smoke mask	7	Attached to each portable oxygen bottle
Fluid, hydraulic	3 cases	Ramp fluids stowage box
Fuel tank drain tube	1	Left wheel well, side-wall
Ground wires	2	FS 188 & FS 682

EQUIPMENT	QUANTITY	LOCATION
Guard assembly, ramp/cargo door actuator	2/1	FS 385
Hand crank, landing gear and flaps	2	1 stowed forward of left wheel well, 1 inside the BMC, FS 433 right side
Harness, restraint	2	1 on flight deck/1 in cargo door storage bin
Interphone cords	41	
a. Pigtail cords	30	1 at each communications (comm) drop
b. 40 ft cords	8	Distributed throughout Gundeck
c. 50 ft/75 ft maintenance cords	3	FS 245/aft of FS 245/FS 737
J-Hook Chain tiedown	1	FS 188
Jack and tow fittings	2	FS 188
Jack pads	1 set	FS 188
Kit, first aid, aeronautical (small)	5	2 stowed on flight deck, 2 in crew rest compartment (CRC), 1 in BMC
Kit, first aid (large)	2	1 stowed on aft wall of CRC, 1 aft of 105 millimeter (mm)
Ladder, maintenance	1	Stowed on top of 105 mm ammunition storage and handling system (ASHS), FS 660
Latrine Curtain	1	Installed over latrine
Life rafts	2	Inboard wing well compartments
Lock assembly, main landing gear	2	Galley stowage compartment, FS 188
Main Landing Gear Tiedown Device	4	FS 836 (2 on right side/2 on left side)
Misc Gun Tools (Cartridge Remover, Ramming Extracting Tool, Open end Wrench, Shell Pusher)	1 set	40 mm gun, gunners station, 105 mm ASHS
Oil, engine	1 case	Spare fluids container FS 790
Oven	1	Galley, FS 188
Oxygen bottle, walk-around w/strap	7	Installed IAW Flight manual
Pitot covers	1 set	Galley stowage compartment, FS 188

<b>EQUIPMENT</b>	<b>QUANTITY</b>	<b>LOCATION</b>
Rings, tiedown 25,000 lb.	2	Installed on left side at FS 477 & 617
Rope, emergency escape	3	Installed aft of each overhead escape hatch
Seals, pressurization (25 mm, 40 mm, 105 mm)	1 set	Aft side FS 245/ Stowed in 105 mm ASHS
Straps, tiedown 5,000 lb	10	Cargo door storage bins
Sun visors	2	Stowed above pilot/copilot side windows
Wheel chocks	4	Cargo Door
Main Landing Gear, emergency extension wrench	1	BMC, aft left exterior wall

**Table 2.2. Additional Equipment.**

<b>EQUIPMENT</b>	<b>QUANTITY</b>	<b>LOCATION</b>
Anti-exposure suit	21	Ramp
Gun box with 9 mm guns	1	CRC
Gun clearing tools (Polyvinyl Chloride (PVC) pipe)	1	Stowed behind 105 mm ASHS
Life preserver, underarm, LPU-10/P	23	Ramp
Mission kit	1	Flight Deck
Parachutes	21	Left wheel well, CRC/BMC exterior wall
Seat kits (MA-4)	21	Distributed throughout aircraft
Survival vest	21	Ramp
Tool kit, Gunners	1	Between 40 mm and 105 mm gun
Water container (Igloo)	1	Stowed as loose equipment, FS 825

## Chapter 3

### CONFIGURATION PLANS

**3.1. General.** This chapter contains basic cargo compartment configurations.

3.1.1. Changes in configuration may affect the overall aircraft center of gravity (CG).

3.1.2. Drawings in this chapter are not drawn precisely to scale with respect to actual aircraft locations.

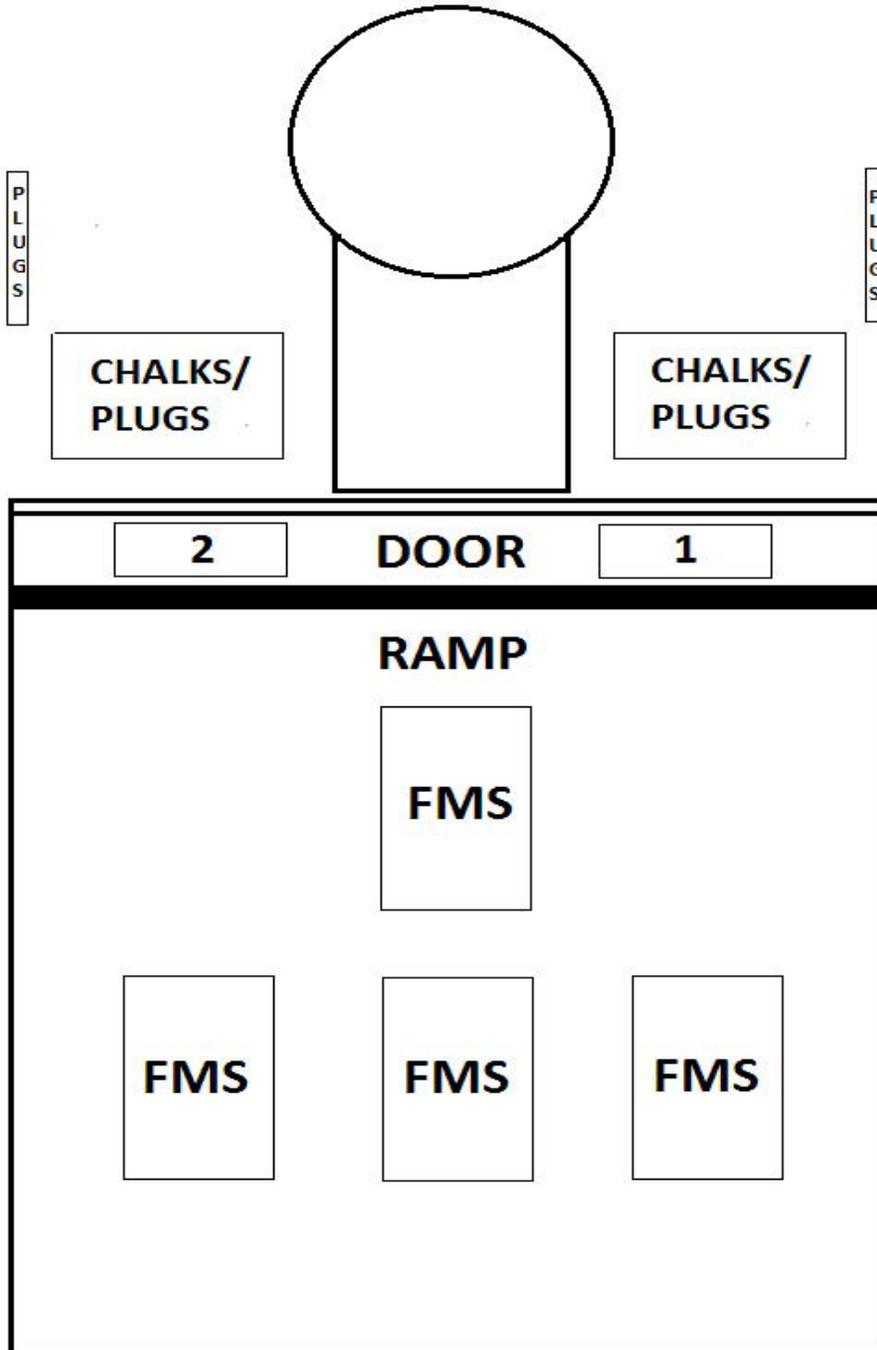
**3.2. Legend of Configurations:**

3.2.1. A-1. Standard configuration; provides 21 total seats, including 4 reclining seats inside CRC for crew rest.

3.2.2. A-2. Standard configuration; provides 19 total seats, including 2 reclining seats inside the CRC for crew rest.

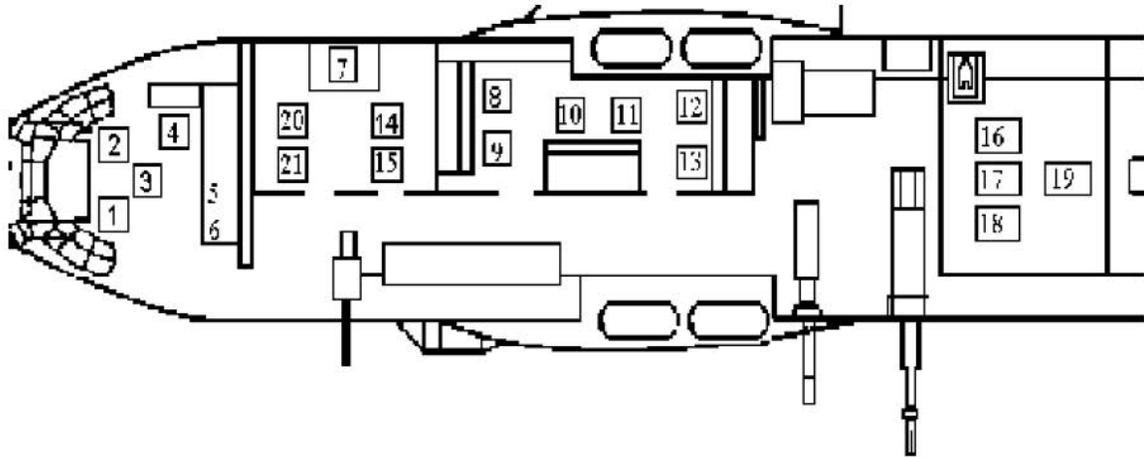
3.2.3. A-3. Cargo configuration; provides 17 total seats and cargo stowage capability.

3.2.4. A-4. Maximum cargo configuration; provides 13 total seats for maximum cargo stowage capability.

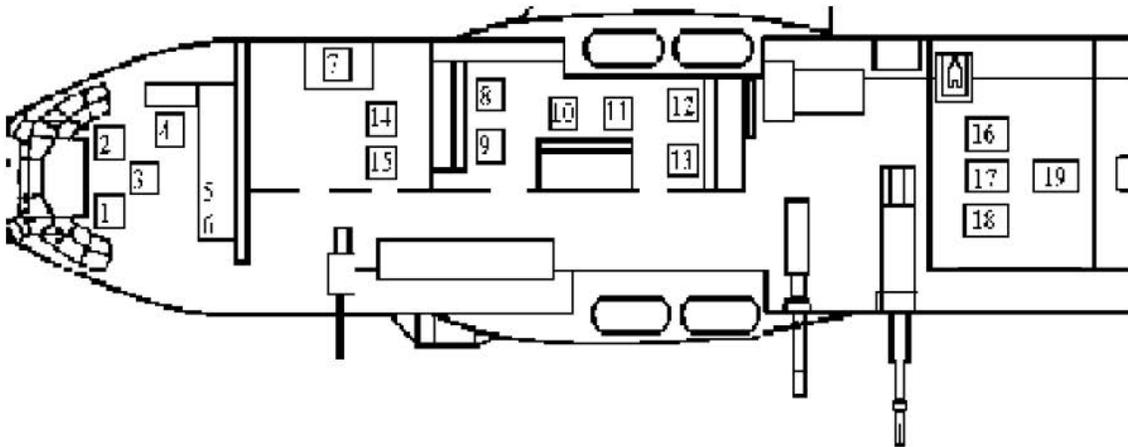
**Figure 3.1. Cargo Ramp/Door Stowage Configuration.****Notes:**

1. Door Storage Bin
2. Door Storage Bin

\* Floor mounted seats (FMS) may be removed as required and stowed behind the 105mm ASHS.

**Figure 3.2. A-1 (Standard) Configuration.**

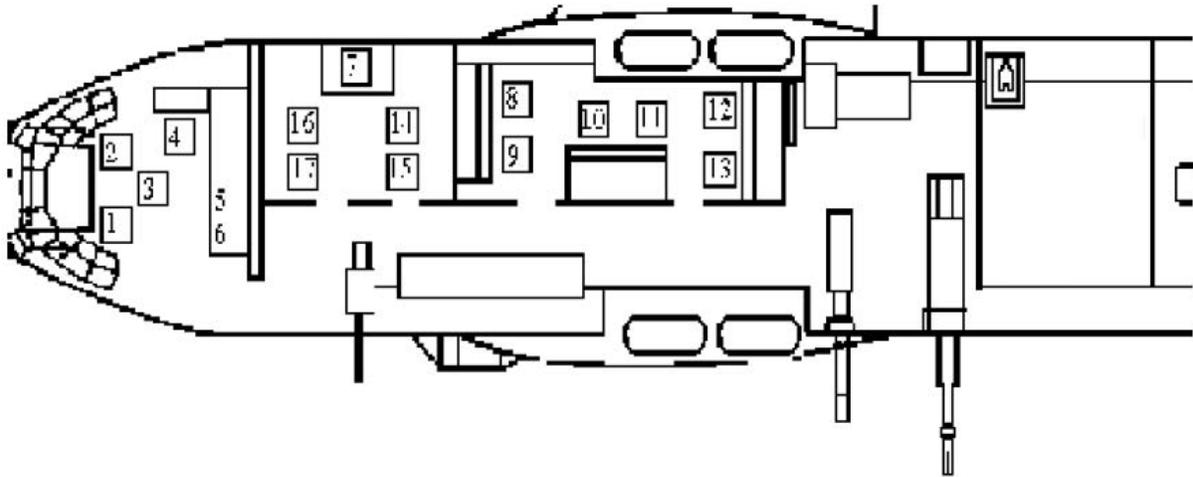
1. Provides 21 total seats. 17 seats and 4 reclining seats inside the CRC for crew rest facilities.

**Figure 3.3. A-2 (Standard) Configuration.**

1. Provides 19 total seats. 17 seats and 2 reclining seats installed in the aft compartment of the CRC.
2. Two forward seats in the CRC removed.

**Note:** Total weight and moment change: Weight: -154, Moment: -42

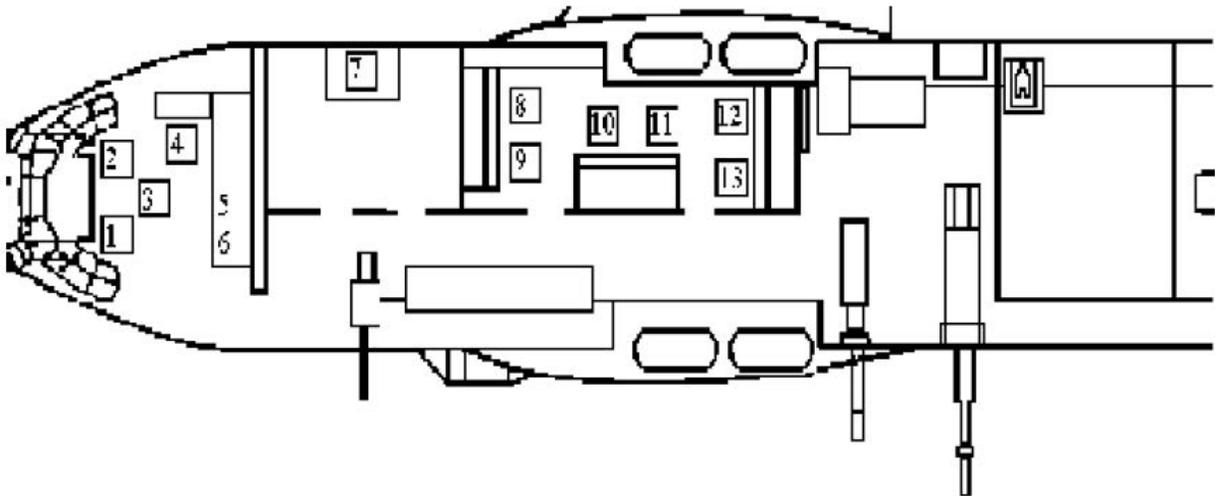
**Figure 3.4. A-3 (Cargo) Configuration.**



1. Provides 17 total seats. 13 seats and 4 reclining seats inside the CRC. Provides cargo stowage capability.
2. Ramp seats are removed.
3. Ramp "D" rings are installed as required.

**Note:** Total weight and moment change: Weight: -132, Moment: -104

**Figure 3.5. A-4 (Maximum Cargo) Configuration.**



1. Provides 13 total seats. The 4 reclining seats inside CRC and the ramp seats are removed. Provides the maximum cargo stowage capability.
2. Ramp "D" rings are installed as required.

**Note:** Total weight and moment change: Weight: -443, Moment: -198

## 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 the aircraft in such a manner that the following emergency exits and safety aisles are available:

4.2.1. At no time will access to the paratroop door be blocked. (T-1)

4.2.2. Access to the latrine facility requires an 18-inch clear area on the forward right side of the cargo loaded on ramp.

4.2.3. 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. (T-1)

**4.3. Special Requirements.** Although deviations to the basic configuration are authorized to meet special requirements, the following factors should be considered: **Note:** Maximum amount of ammunition that can be stowed in the ASHS:

4.3.1. 3,000 rounds - 25mm

4.3.2. 256 rounds - 40mm (additional 40mm may be stored in G - H compartments).

4.3.3. 100 rounds - 105mm

4.3.4. Cargo ramp is limited to 4,868 pounds cargo weight with the four floor-mounted seats installed. At no time will the ramp weight exceed 5,000 pounds to include cargo weight and any installed equipment. (T-1)

**4.4. Miscellaneous Data.** Table 4.1. 1 is provided to aid in configuration planning, weight and balance.

**Table 4.1. Standard Weights.**

Crew	Weight/lbs.
Crew (including professional gear)	200
Tiedown equipment	Weight/lbs.
Strap CGU-1/B (5,000 lb.)	4
MB-1 chain/CGU-4/E	7
MB-1 device/CGU-4/E	3.5
MB-2 chain/CGU-3/E	20
MB-2 device/CGU-3/E	6
Main Landing Gear Tiedown Device	57

<b>Additional equipment</b>	
Anti-exposure suits	6
Auxiliary ground loading ramp	80
Brass bags, (40 mm) 1 set	30
Clearing tool, (PVC)	50
Closeout panel, 25 mm	6
Closeout panel, 40 mm	7
Closeout panel, 105 mm	29
Emergency escape breathing device (EEBD)	3
Emergency radio	2
Gun box with contents	80
Hostile Environment Repair Procedures Kit (HERP Kit)	10
Hot cup	3
Hydraulic fluid (case)	52
Ladder, maintenance	42
Life raft (20 member), (2 each)	294
LPU-10 life vest	4
Marker location marine MK 25, Mod 3	3.75
Marker location ground/land MK 6, Mod 3	16
ML-4 seat kit	21
Oil (case)	52
Oxygen bottle, portable with harness	6
Parachute	27
Quick don mask	2.5
Rails, IR shields, inboard (2)	194
Rails, IR shields, outboard (2)	263
Restraint harness with safety strap	9
Seat, double/belts, CRC	118

Seat, double, floor plate, CRC	36
Seat, crash, ramp	33
Shield, IR engine	373
Smoke mask	3
Survival vest	9
Tool kit, (AG)	9
Water container (large Igloo w/contents)	50
105 mm clearing round (box of 2)	25
M211 Decoy Flare	0.67
MK-206 Flare (1x1)	0.44
RR-170 Chaff (1x1)	0.41
RR-180 Chaff (1x1/2)	0.51
RR-188 Chaff (1x1)	0.41
MJU-64 Flare (1x1)	0.83
MJU-66 Flare (1x1)	0.83

## Chapter 5

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

**5.1. Introduction.** This chapter provides instructions for computation and completion of DD Form 365 -4, *Weight and Balance Clearance Form F*. The DD Form 365-4 will be computed using simplified moments. All entries and signatures must be legible. (T-1)

**5.2. Load Planning.** The ammo and cargo load must be planned so that the center of gravity of the loaded aircraft will be within the specified forward and aft limits for any given operating condition. Consideration must also be given to ammo expended, offload sequence, aircraft limitations, and emergency jettisoning. Math and charts contained in TO 1-1B-50, 1C130(A)U1, TO 1C130(A)U5 and the 4 SOS Loadmaster in-flight guide are tools which may be used for load planning. (T-1)

**5.3. General Instructions.** These instructions apply to DD Form 365-4 using simplified moments. Entries on the form may be either typed, handwritten, or computer entered.

5.3.1. Heading. Enter date, mission call sign, aircraft type, serial number, departure and destination station (name or International Civil Aviation Organization (ICAO) identifier), home station of the aircraft 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 center of gravity limits specified in TO IC -130(A)U-1 will not be exceeded. Gross weight may also be limited by operating conditions; e.g., obstacle clearance, rate of climb, weather conditions, altitude, run way/taxiway bearing capacity, or any other published restrictions. The pilot/flight engineer will inform the loadmaster or aerial gunner of any gross weight restrictions prior to mission planning. (T-1)

5.3.2.1. Gross Weight Takeoff and Landing. Use 155,000 lbs. unless other restrictions/waivers are required.

5.3.3. Permissible CG Takeoff and Landing. Compute the forward and aft center of gravity limitations using the center of gravity table in TO IC -130(A)U-5 or the 4 SOS Loadmaster in-flight guide.

5.3.4. Signature blocks:

5.3.4.1. Computed by: Signature, rank, and organization.

5.3.4.2. Weight and balance authority: Leave blank.

5.3.4.3. Pilot: Signature

**5.4. Instructions for Moment Form F.** Use TO IC-130(A)U-5, 4 SOS Loadmaster in-flight guide Chart E.

5.4.1. Reference 1. Enter basic weight and moment from the last entry of the certified copy of DD Form 365-3 (Chart C), *Aircraft Weight and Balance Handbook*, in the aircraft weight and balance handbook.

5.4.2. Reference 2. Enter Non-Tactical or Tactical weight and moment.

5.4.3. Reference 3. Enter the item description, number, weight and moment of all nonexpendable items not in the basic weight, such as crewmembers, baggage, additional equipment, etc.

5.4.4. Reference 4. Total of references 1 thru 3.

5.4.5. Reference 5. Enter the ammo type and number (25 mm, 40 mm, 105 mm, clearing rounds, chaff, flare).

5.4.6. Reference 6. Reference 6 may be used for continuation of ammo load if additional space is needed.

5.4.7. Reference 7. Enter total fuel on board at takeoff and determine moment using fuel moment chart or the alternate method. **Note:** In remarks section, enter a breakdown by tank of takeoff and landing fuel weight to the nearest 100 pounds, and moments using the fuel moment chart contained in TO 1C130(A)U5. 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. Takeoff is calculated by using the Navigator's fuel load component table in AFI 11-2AC-130, Vol 3. Takeoff fuel is 1,300 pounds less than ramp fuel for pilot proficiency missions or any other mission that does not require engines running onload of ammunition. Takeoff fuel is 2,000 pounds less than ramp fuel on missions that require engines running onload of ammunition.

5.4.8. Reference 8. Leave blank.

5.4.9. Reference 9. Total of references 4 thru 8.

5.4.10. Reference 10. Enter the takeoff CG arm in inches and percent of mean aerodynamic chord (MAC). **Note:** References 11, 12, and 13 are left blank if corrections are not required.

5.4.11. Reference 11. When applicable, enter correction from computations in the corrections block.

5.4.12. Reference 12. Total of reference 9 and 11, as required.

5.4.13. Reference 13. Enter corrected CG in inches and percent of mean aerodynamic chord (MAC), as required.

5.4.14. Reference 14. Enter the takeoff fuel weight and moment from reference 7, and the weight and moment of all expendable items (ammo, MKs, flares, and chaff). Consider all ammo, MKs, flares, and chaff as being expended (except clearing rounds).

5.4.15. Reference 15. Enter estimated landing fuel weight and moment, obtained by determining estimated fuel burn off (FBO) subtracted from total mission fuel. Moment can be determined by using fuel charts in TO 1C-130(A)U-5, or by multiplying the total fuel on board by .552. Minimum estimated landing fuel will not be less than 4,000 pounds plus reserve fuel. (T-1)

5.4.16. Reference 16. Determine the estimated landing condition by subtracting takeoff fuel (reference 14) and the expendables weight and moment from takeoff condition (reference 9 or 12), then adding reference 15.

5.4.17. Reference 17. Enter estimated landing CG arm in inches and percent of MAC.

5.4.18. Remarks Section. In addition to takeoff/landing fuel breakdown, enter all ramp, air-to-air refueling (AAR) and fuel burn off (FBO). Minimum estimated landing fuel will not be less than 4,000 pounds plus reserve fuel. (T-1)

5.4.18.1. AC-130U standard FBO rate is 6,000 pounds per hour.

5.4.18.2. AAR will be the weight of anticipated AAR fuel onload.

5.4.18.3. FBO for the entire mission is computed by multiplying the standard FBO rate by the estimated flying time.

5.4.18.3.1. Air-to-air refueling missions are computed in the following manner: Total AAR fuel weight is added to the takeoff fuel. FBO weight is subtracted from the combined takeoff fuel and AAR total. Estimated landing fuel (ELF) is the sum of takeoff fuel, AAR, and the subtracted FBO.

Figure 5.1. DD FORM 365-4 (TACTICAL) INSTRUCTIONS.

WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL <i>(Use reverse for transport missions)</i>				FOR USE WITH T.O. 1-18-40, NAVAIR 01-18-40, AND TM 55-1500-342-23			
DATE (YYYYMMDD) 20120901		AIRCRAFT TYPE AC-130U		FROM KHRT		HOME STATION KHRT	
MISSION SPOOKY 44		SERIAL NO. 0128		TO KHRT		PILOT MAJ MAJOR	
CORRECTION/MOST FWD/MOST AFT (Ref. 11)		CHANGES (+ or -)		REF	ITEM	WEIGHT	INDEX OR MOM/1000
				1	BASIC AIRCRAFT (From Chart C)	1 0 5 5 0 7	5 5 5 9 4
				2	TAC EQUIP	1 2 7 1	6 5 4
				3	COMPT NO. CREW/WEIGHT CARGO/MISC		
					B-G 18 3600	3 6 0 0	1 2 6 2
					550 BAGGAGE	7 5 0	4 1 3
					680 MX TOOLS	1 2 0	8 2
					800 BAGGAGE	2 5 0	2 0 0
				4	OPERATING WEIGHT	1 1 1 4 9 8	5 8 2 0 5
					1000 X 25MM	1 1 0 0	4 4 6
					256 X 40MM	1 2 4 3	7 8 9
					80 X 105MM	3 4 4 0	2 3 0 1
				6	2 X CLR RNDS	2 7	2 3
TOTAL WEIGHT ADDED		+					
TOTAL WEIGHT REMOVED		-					
NET DIFFERENCE (Ref. 11)							
REMARKS							
RAMP FUEL = 35000							
TOF = 33000 X .552 = 18216							
A/R = 12000							
BOF = 39000							
ELF = 6000 X .552 = 3312							
				7		3 3 0 0 0	1 8 2 1 6
				8	MISC. VARIABLES		
				9	TAKEOFF CONDITION (Uncorrected)	1 5 0 3 0 8	7 9 9 8 0
				10	TAKEOFF C.G. IN % M.A.C. OR IN	532.1	27.2%
LIMITATIONS				11	CORRECTIONS (If required)		
GROSS WEIGHT TAKEOFF (lb.)		GROSS WEIGHT LANDING (lb.)		12	TAKEOFF CONDITION (Corrected)		
155000		155000		13	TAKEOFF C.G. IN % M.A.C. OR IN		
PERMISSIBLE C.G. TAKEOFF (% M.A.C. or in.)		FORWARD AFT		14	TAKEOFF FUEL	3 3 0 0 0	1 8 2 1 6
		23% 30%			1000 X 25MM	6 0 0	2 4 3
PERMISSIBLE C.G. LANDING (% M.A.C. or in.)		FORWARD AFT			256 X 40MM	7 1 9	4 5 5
		19% 30%			80 X 105MM	2 8 8 0	1 9 2 7
COMPUTED BY SIGNATURE							
SSGT LOADMASTER							
WEIGHT AND BALANCE AUTHORITY SIGNATURE							
PILOT SIGNATURE				15	ESTIMATED LANDING FUEL	6 0 0 0	3 3 1 2
MAJ MAJOR				16	ESTIMATED LANDING CONDITION	1 1 9 1 0 9	6 2 4 5 1
				17	ESTIMATED LANDING C.G. IN % M.A.C. OR IN	524.3	22.4%

DD FORM 365-4 (BACK), AUG 96

J. MARCUS HICKS, Brig Gen, USAF  
Director of Operations

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 11-2AC-130, Vol 3, *AC-130 Operations Procedures*, 9 June 2010

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 19 January 2012

AFMAN 33-363, *Management of Records*, 1 March 2008

AFPD 11-2, *Aircrew Operations*, 19 January 2012

T.O. 1-1B-50, *Basic Technical Order for USAF Aircraft Weight and Balance*, 1 April 2008

TO 1C-130(A)U-1, *Flight Manual*, 1 December 2007

TO 1C-130(A)U-5, *Basic Weight Checklist and Loading Data*, 1 May 2004

T.O. 1C-130A-9, *Cargo Loading Manual*, 7 December 2009

T.O. 1C-130A-21, *Equipment Inventory List*, 1 September 1999

***Forms Prescribed***

There are no prescribed forms in this instruction.

***Forms Adopted***

AF Form 847, *Recommendation for Change of Publication*

DD Form 365-3, *Aircraft Weight and Balance Handbook*

DD Form 365-4, *Weight and Balance Clearance Form F, Transport and Tactical*

***Abbreviations and Acronyms***

**AAR**—Air-to-Air Refueling

**AF**—Air Force

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Document

**AFRC**—Air Force Reserve

**AG**—Aerial Gunner

**ALSE**—Aircrew Life Support Equipment

**ANG**—Air National Guard

**APU**—Auxiliary Power Unit

**ASHS**—Ammunition Storage and Handling System

**BMC**—Battle Management Center

**CG**—Center of Gravity

**Comm**—Communications  
**CRC**—Crew Rest Compartment  
**EEBD**—Emergency Escape Breathing Device  
**ELF**—Estimated Landing Fuel  
**FBO**—Fuel Burn Off  
**FMS**—Floor Mounted Seat  
**FS**—Flight Station  
**Ft**—Feet  
**HERP**—Hostile Environment Repair Procedures  
**IAW**—In Accordance With  
**ICAO**—International Civil Aviation Organization  
**lb**—Pound  
**MAC**—Mean Aerodynamic Chord  
**MAF**—Mobility Air Forces  
**mm**—millimeter  
**OPR**—Office of Primary Responsibility  
**PVC**—Polyvinyl Chloride  
**QA**—Quality Assurance