APPENDIX V

AIRCRAFT LOAD PLANNING AND DOCUMENTATION

A. RESPONSIBILITIES

- 1. The mobility force will:
 - a. Assist the deploying unit in developing load plans, including aircraft limitation changes. However, it is the responsibility of the deploying unit to develop load plans.
 - b. Ensure documentation and manifesting of all personnel, cargo, and equipment are accomplished by the deploying unit, In Accordance With (IAW) provisions of this regulation.
 - c. Ensure a cargo and/or passenger manifest diskette accompanies each aircraft load.
- 2. Deployment planners and/or the deploying unit will be responsible for full aircraft utilization.
- 3. Aircraft Load Plans. Load plans are required upon request by Air Mobility Command's (AMC) 618th Tanker Airlift Control Center (TACC). To facilitate mission planning, deploying/redeploying units will be prepared to create load plans. After being tasked, the 618th TACC will match validated movement requirements with the aircraft. If additional information is required to adequately plan the mission, the 618th TACC may request units to generate and submit load plans within 48 hours of notification to ensure adequacy of proposed aircraft and mission plan. Submission of load plans is IAW AMC load planners and unit mission parameters. Current technology limitations require the unit to submit a facsimile or electronic mail of the load plan to AMC for review. Requirement changes may require submission of new load plans. For short notice validations (movements inside 96 hours from the available-to-load date), the supported command will insure deploying units submit notional load plans along with hazardous materials documentation to the 618th TACC as part of the validation process. (Chairman of the Joint Chiefs of Staff Manual 3122.02C, Joint Operation Planning and Execution System [JOPES] Volume III, (Crisis Action Time-Phased Force and Deployment Data Development and Deployment Execution), Appendix C, Enclosure F, Paragraph (Para) 3.)

B. AIRCRAFT LOAD PLANNING

- 1. Load planning guidance by aircraft type is contained in this Para and the following AMC publications. Compliance with these publications is mandatory. These publications are available at https://private.amc.af.mil/pubs/amci/24series.htm.
 - a. C-5 Planning Data, Figure V-1.
 - b. C-130 Planning Data, Figure V-3.
 - c. KC-10A Planning Data, Figure V-7.
 - d. C-17A Planning Data, Figure V-15.
 - e. KC-135 Planning Data, Figure V-17.
 - f. Air Mobility Command Pamphlet (AMCPAM) 24-2 Volume (V) 1, <u>Civil Reserve Air Fleet Load Planning Guide</u>.
 - g. AMCPAM 24-2 V2, Civil Reserve Air Fleet Load Planning Guide Boeing 747.
 - h. AMCPAM 24-2 V3, <u>Civil Reserve Air Fleet Load Planning Guide McDonnell Douglas DC-10</u>.
 - i. AMCPAM 24-2 V4, Civil Reserve Air Fleet Load Planning Guide Lockheed L-1011.

- j. AMCPAM 24-2 V5, <u>Civil Reserve Air Fleet Load Planning Guide McDonnell Douglas</u> DC-8.
- k. AMCPAM 24-2 V6, Civil Reserve Air Fleet Load Planning Guide Boeing 767.
- 1. AMCPAM 24-2 V7, Civil Reserve Air Fleet Load Planning Guide Boeing 777.
- m. AMCPAM 24-2 V8, <u>Civil Reserve Air Fleet Load Planning Guide McDonnell Douglas</u> MD 11.
- n. AMCPAM 24-2 V9, Civil Reserve Air Fleet Load Planning Guide Airbus A310.
- o. AMCPAM 24-2 V10, Civil Reserve Air Fleet Load Planning Guide Boeing 757.

C. AIRCRAFT UTILIZATION

When planning for full aircraft utilization, the planner will apply the following criteria:

- 1. Aircraft will be configured and loaded to maximum capacity using the Allowable Cabin Load (ACL), passenger limits, and aircraft load specifications found in Figures V-1 through V-19. For further assistance, contact an affiliated Air Mobility Control Unit (AMCU) or deployed Tanker Airlift Control Element.
- 2. Accurate ACL information is subject to variables such as type of mission, destination, distance, weather, operational priorities, airfield conditions, and individual aircraft characteristics.
- 3. The configuration of vehicles and equipment to be air transported or air dropped must allow for emergency access from the front to the rear of the aircraft and safe loading and off-loading.
- 4. In aircraft loading, axle loads, wheel loads, tire footprint loads, and general floor loads, as determined from the plan view of the equipment, must conform to aircraft fuselage zone and compartment limitations. Detailed allowable load limits can be found in the aircraft Technical Order Dash 9. Units having extremely heavy or outsize equipment will emphasize this during joint planning conferences and seek technical assistance prior to load planning. Palletized and platform limitations, along with aircraft roller load limits, must not be exceeded.
- 5. Use spread loading as a technique, whereby like capabilities of a given unit are distributed throughout the entire air flow versus on a single aircraft. For example, if a deploying unit's entire petroleum, oils, and lubricants capability is on one aircraft and the aircraft is lost due to weather or combat, the capability of the deploying unit would be severely limited.
- 6. Each item will be planned for placement aboard the aircraft so it can be rapidly loaded or off-loaded. In such cases, the most efficient use of aircraft will be planned with the following exceptions:
 - a. Minimize floor-loaded cargo for aircraft carrying rolling stock.
 - b. Vehicles will normally be loaded on the aircraft facing the ramp. Also, trailers and towed equipment will be moved on the same aircraft as their prime mover.
 - c. Palletized cargo will be planned for placement aft of all rolling stock and passengers (aircraft weight and balance permitting).

D. PARACHUTE ELEMENT

Units assigned to parachute elements will:

- 1. Prepare aircraft load plans that reflect the tactical plan and comply with references of the United States Army's Field Manual 10-500-1 <u>Airdrop Support Operations</u> in a <u>Theater of Operations</u>, or other Service regulations.
- 2. Use the provisions of load planning shown herein and in Appendix O for the preparation of equipment and supplies for airdrop, except when those instructions conflict with requirements of the tactical plan.
- 3. Provide the necessary auxiliary equipment for airdrop of vehicles and equipment, such as platforms, parachutes, webbing straps, and energy-dissipating material to absorb impact shock and vibration.
- 4. Rig loads according to the technical orders and Service regulations.

E. AIR-LANDED ELEMENT

Units assigned to air-landed elements will:

- 1. Prepare aircraft load plans.
- 2. Plan for use of C-130, or Civil Reserve Air Fleet as basic aircraft for movement of all equipment and general cargo that can be transported by those aircraft.
- 3. Plan for use of C-5 and C-17 aircraft for outsize equipment, plus other equipment and general cargo, to make full use of floor space and ACL.
- 4. Assign a minimum of two passengers to function as cargo/equipment custodian in case a portion of the load is downloaded en route to the final destination.
- 5. Ensure each self-propelled vehicle has at least one qualified operator (not required on civil aircraft cargo missions).
- 6. Use the passenger, baggage weights, and aircraft planning factors found in Figures V-1 through V-19. (Normally, duffel bags will be palletized or loaded aboard the aircraft as secondary loads in vehicles.) Load planners will allocate cargo compartment floor space to load rucksacks aboard the aircraft.
- 7. Determine planning weight and dimensions for all vehicles and equipment to be loaded.
- 8. Normally, plan to load trailers and semi-trailers in the same aircraft as their prime movers. The Naval Construction Force has trailers whose overall length is 470 inches or greater, making the match to prime movers on the same aircraft impossible. A prime mover will need to be available at the embarkation/debarkation field to on/off-load the trailer. A prime mover will also need to be available at the onload airfield when re-deploying to load the trailer.
- 9. Ensure equipment items are complete in type, quantity, and configuration; and the weight, dimensions, and number of packages of supplies are correct.
- 10. Ensure the number of personnel indicated in the planned loads accurately describes the unit's readiness for movement and is the same as the movement data reported to the force commander or major command.
- 11. After submission of movement data and planning of aircraft loads, ensure any replacement of equipment items is reflected in a corrected movement data report.

F. SUBSTITUTE AIRCRAFT LOADING PROCESS

This loading situation requires unit equipment to be aligned by type item and positioned according to priority in the line. Passengers are separated from the equipment and processed as required on a seat-available basis (except drivers, assistant drivers, and cargo custodians). This procedure is used when there is an unexpected change in aircraft or aircraft type, and time constraints dictate a rapid, efficient completion of the move. For example, an operation is progressing on schedule with C-17s when an unexpected event (such as earthquake relief) takes place and the C-17s are used immediately in support of that event. A change of aircraft (on an as-available basis) is needed to complete the assigned mission. For that loading, the following procedures will apply:

- 1. All cargo is arranged according to M-series (Military Design) or type items.
- 2. Passengers will be held in a holding area with a predetermined number on hand at all times. Passengers will have ready access of baggage and personal equipment and be prepared to depart.
- 3. Loads will be determined and selected upon notification of estimated time of arrival, type, and number of aircraft arriving.
- 4. Load plans will be prepared listing serial number, bumper number, or Transportation Control Number (TCN) of the items to be airlifted (according to a transported force directed priority) on the cargo and passenger manifests (load plan). A transported unit representative must assist the load planner.
- 5. After the load plan is complete and all cargo and equipment for the chalk is present, cargo will be aligned in loading sequence by serial number. The Joint Inspection (JI) will then be conducted using a DD Form 2133, <u>Joint Airlift Inspection Record</u> (See Figure O-1).
- 6. Once the cargo is load planned, the number of seats available is determined. The passenger holding area will be notified and passengers will be manifested and segregated by load.
- 7. Cargo goes to the aircraft with cargo and passenger manifests, JI Form, and DD Form 1387-2, Special Handling Data/Certification, Figure V-22, DD Form 1387-2, Special Handling Data/Certification for Rifles, 5.56MM (M-16A2) 16 or Less, Figure V-25, DD Form 1387-2, Special Handling Data/Certification for Rifles, 5.56MM (M-16A2) 16 or More, Figure V-27, and DD Form 1387-2, Special Handling Data/Certification for Pistols 9MM, Figure V-29, and/or Shipper's Declaration for Dangerous Goods, (See Figure J-1), under the supervision of the mobility force representative. The DD Form 1387-2 will be used to identify cargo requiring special handling only; it cannot be used as a certification document of hazardous materials. (Reference Air Force Manual (AFMAN) 24-204_IP (Interservice), Technical Manual (TM) 38-250, Marine Corps Order (MCO) P4030.19I, Naval Supply (NAVSUP) Pub 505, Defense Logistics Agency Instruction (DLAI) 4145.3, and Defense Contract Management Agency Directive (DCMAD) 1, CH 3.4 (HM24) Preparing Hazardous Materials for Military Air Shipments (http://www.e-publishing.af.mil, then select Departmental, 24-Transportation, and AFMAN 24-204 IP).
- 8. The passenger holding area is notified when to escort passengers to the aircraft. This is an efficient method of processing both cargo and passengers when there is uncertainty as to the type of aircraft to be used.

G. TYPE LOADING

Identical type loads simplify the planning process and make the tasks of load planning easier. The type load method is the most common and widely accepted method of air movement planning. This method is often used in planning unit moves. Consider the following when type loading:

- 1. Load configuration.
- 2. Load condition upon arrival.
- 3. Rapid unloading.
- 4. Aircraft unloading.
- 5. Security requirement en route.
- 6. Operational requirements.

H. PREPARATION AND USE OF DD FORM 2130 SERIES

- 1. These forms are designed for use in load planning. Except for the aircraft diagram, the forms are the same. The front of the form serves as a load-planning sheet. Sidewall seats are shown on the C-130, C-17, and KC-135 aircraft diagrams and will be marked through with an "X" when seats are to be filled with passengers.
- 2. The DD Form 2130 series includes:
 - a. DD Form 2130-1, C-5A/B Load Plan, Figure V-2.
 - b. DD Form 2130-2, C-130 Load Plan, Figure V-4.
 - c. DD Form 2130-4, C-160 Transall Load Plan, Figure V-5.
 - d. DD Form 2130-5, DC 10-10/30CF Load Plan, Figure V-6.
 - e. DD Form 2130-6, KC-10A Load Plan, 17 Pallet Configuration, Figure V-8.
 - f. DD Form 2130-7, KC-10A Load Plan, 23 Pallet Configuration, Figure V-9.
 - g. DD Form 2130-8, DC 8-50 Series F/CF Load Plan, Figure V-10.
 - h. DD Form 2130-9, DC 8-61/71-63/73F/CF Load Plan, Figure V-11.
 - i. DD Form 2130-10, DC 8-62CF Load Plan, Figure V-12.
 - j. DD Form 2130-11, B707-300C Load Plan, Figure V-13.
 - k. DD Form 2130-12, B747-100F/200C/200F Load Plan, Figure V-14.
 - 1. DD Form 2130-13, C-17 Load Plan, Figure V-16.
 - m. DD Form 2130-14, KC-135 Load Plan, Figure V-18.
 - n. DD Form 2130C, Aircraft Load Plan Continuation, Figure V-19.
- 3. Preparation instructions for the completion of DD Form 2130 Series are as follows:
 - a. Block 1: UNIT BEING AIRLIFTED. Name or number of unit being airlifted.
 - b. Block 2: UNIT IDENTIFICATION CODE. Six-character, alpha numeric-unique code assigned to unit being airlifted. Deploying units may also use Unit Line Number (ULN) in this block.
 - c. Block 3: TYPE MOVEMENT PLAN. Enter the operation or exercise name. If Special Assignment Airlift Mission (SAAM), enter the SAAM number. If contingency, enter plan

number and whether inter-theater or intra-theater airlift. Enter "CLASSIFIED" if there is any doubt about associating the type of movement with detailed load information on the unit (i.e., if Plan Identification Number is listed).

Caution: The association of an exercise name, SAAM sequence number, contingency name, or operation plan number with the other information on this form may cause this form to become classified up to TOP SECRET.

- d. Block 4: MOVEMENT DATE. Enter the date of airlift (DDMMMYY).
 - NOTE: All airlift times are specified in Greenwich Mean Time (Zulu time zone).
- e. Block 5: UNIT AIRCRAFT LOAD NUMBER. The number identifying the specific load and the total loads to be airlifted for a particular unit (e.g., 5 of 47).
- f. Block 6: MISSION NUMBER. Assigned mission number. (Normally completed by mobility force personnel.)
- g. Block 7: AIRCRAFT SERIAL NUMBER. Last five digits of the aircraft tail number. (Normally completed by mobility force personnel.)
- h. Block 8: CONFIGURATION. The proper aircraft configuration that satisfies mission requirements. Basic aircraft configuration tables are found in Air Force Instruction (AFI) 11-2C-130, Volume 3, C-130 Operations Procedures, AFI 11-2C-17 Volume 3, C-17 Operations Procedures, AFI 11-2C-5 Volume 3, C-5 Operations Procedures, AFI 11-2KC-135 Volume 3, C/KC-135 Operations Procedures, AFI 11-2KC-10V3, and Chapter 25, KC-10 Operations Procedures. (Normally completed by mobility force personnel.)
- i. Block 9: DEPARTURE AIRFIELD. Actual geographical name of departure airfield. If departure is classified, enter "CLASSIFIED".
- j. Block 10: DESTINATION AIRFIELD. Actual geographical name of the arrival airfield. If destination is classified, enter "CLASSIFIED".
- k. Block 11: ACTUAL LOADOUT. The aircraft diagram schematic scale is 1/4 inch = three feet or scale 1:144 cm. Actual position of cargo being airlifted will be shown on the diagram using Department of Defense (DOD) approved cargo load planning templates. Contact any of the AMCUs listed in Chapter 303, Para C. 2. b(1)(g) for further guidance. Vehicles will be backed into C-130/C-17 for ease of offload. If it is necessary to drive a vehicle into the aircraft, explain in the Remarks Section, Block 11d, of the load plan.
 - (1) Column 11(a): LOAD SEQUENCE. The order items will be loaded aboard aircraft (completed by deploying unit load planners). This order may be changed when circumstances dictate. General sequencing rule is from front to rear of aircraft. Passengers do not receive a sequence number.
 - (2) Column 11(b): ITEM MODEL AND NOMENCLATURE/ DESCRIPTION. A text description of the item (e.g., M818 5-ton tractor or CH-53E helicopter). A common or generic description may be used when shipping classified items.
 - (3) Column 11(c): TRANSPORTATION CONTROL NUMBER (TCN) or VEHICLE PACKAGE NUMBER/SERIAL NUMBER/INCREMENT NUMBER. Enter 17 digit TCN (e.g., MSEABACR200110XXX), bumper number, license number, or serial number (e.g., HQ 16 or 76B2050).
 - (4) Column 11(d): REMARKS (Special Handling, Shoring).
 - (5) REMARKS CODES (from Column 11(h). Enter any pertinent information about shoring requirements, reduction in height requirements, or hazardous cargo.

- (6) OTHER. Enter information not covered in remarks code pertaining to item (e.g., some helicopters may require special approach shoring or use of code 4 in Column 11(d) which would require an "arrow" in the "other remarks" column showing position and orientation of item inside the aircraft).
- (7) Column 11(e): DIMENSIONAL DATA. Enter the length, width, and height of all rolling stock and equipment to be transported on the aircraft. Do not use data plate dimensions. Physically measure the item to ensure it fits in the desired aircraft envelope.
- (8) Column 11(f): PLANNED LOAD DATA. Enter planned length, width, height (in inches), and gross weight (in pounds [lbs]) based on the most current available Unit Movement Data. Also record fuselage station (position in aircraft) and simplified moment. Simplified moment permits the load planner to reduce the amount of numerical digits accumulated during the mathematical process associated with airlift planning. As airlift cargo capability increase, moments accrued during calculation of aircraft load Center of Balance (CB) also increase. To simplify a given moment, the load planner moves the decimal point a given number of spaces to the left depending upon which type aircraft is being used. Use following simplifications for aircraft listed below:

C-130E/H, KC-135, C-160	1,000 (3 digits left)
KC-10A, DC-10-10/30CF	10,000 (4 digits left)
C-17, B707-300C, DC8-62CF	10,000 (4 digits left)
DC8-50F/CF, DC8-61/71-63/73FCC	10,000 (4 digits left)
C-5A/B, B747100F/200C/200F/400F	100,000 (5 digits left)

Example: A moment of 7305560 on a C-130 aircraft would be simplified to 7306. As the example depicts, the simplified moment method can be related to standard rounding-off rules.

- (9) Column 11(g): ACTUAL LOAD DATA. Enter weight obtained by physically weighing item on scales in current calibration. Also record fuselage station (position in aircraft), simplified moment, and recompute load CB. If actual CB changes more than 10 inches from the planned CB position, ensure aircraft limitations are not exceeded.
- (10) Column 11(h): REMARKS CODES. Choose codes and enter in Column 11(d).
- 1. Block 12: PASSENGERS SEATS PLANNING DATA. Enter number of total seats used in number seats section (In this example, 12 is entered).

12. PASSENGER SEATS PLANNING DATA							
NUMBER SEATS	AVG. WEIGHT (Pounds Each)	TOTAL PLANNED WT.					
12	210	2,520					

Also enter average weight used per individual for planning purposes and the total weight of the planned passenger load. This is for use during the planning phase of the movement. To estimate passenger weights, see <u>Figure V-20</u>. The load planner or unit movement officer will furnish the actual number of passengers and the total passenger weight.

m. Block 13: TOTAL WEIGHT/MOMENT FROM BACK. Enter total planned load weight and moments from reverse side in Block 11(f), "Gross Weight and Moment" columns. Enter total actual load weight and moments from reverse side in Block 11(g), "Gross Weight and Moment" columns. Record total weight and moment from reverse to Blocks 11(f) and 11(g).

- n. Block 14: TOTALS. Compute the sum of figures in Gross Weight and Moment columns for both Blocks 11(f) and 11(g), and Block 13. To obtain load CB station, divide total moment by total gross weight. Example: 6107 ÷ 68190 = 896.
- o. Block 15(a): LOAD PLANNER. Enter date load plan certified, name, grade, organization, and signature of individual responsible for planning or initiating the cargo load plan. Planning officials must be qualified load planners or graduates of the AMC Affiliation Airlift Planners Course, the United States Army Air Deployment Planning Course; Ft Eustis, VA, United States Marine Corps Expeditionary Warfare Training Group, Pacific, Air Movement Planning Course (K-8A-3558) Naval Air Base, Coronado, CA; 101st Airborne Division Strategic Deployment School Ft Campbell, KY or 82d Airborne Division Air Movement Operation School, Ft Bragg, NC.
- p. Block 15(b): ACTUAL LOAD PLAN VALIDATOR. Enter date load plan validated, name, grade, organization, and signature of individual validating plan in actual load plan block. Actual plan certification will not be accomplished until the actual load plan is completely filled out and verified. The load plan validator must be an authorized representative of the mobility force or the aircrew loadmaster. For airdrop loads, graduates of the Fort Lee Parachute Riggers Course may certify the load plan.
- 4. Distribution. A minimum of seven copies is required for movement, one copy to each of the following:
 - a. Departure airfield mobility force.
 - b. Departure Airfield Operations.
 - c. Loading team chief.
 - d. Aircraft loadmaster or Boom Operator.
 - e. Arrival airfield mobility force.
 - f. Planeload/troop commander.
 - g. Arrival Airfield Operations.

NOTE: Additional copies may be required for customs and foreign clearances on missions operating outside the United States.

I. PREPARATION AND USE OF DD FORM 2130-5

- DD Form 2130-5, <u>DC 10-10/30CF Load Plan</u> is for use in load planning cargo to be airlifted by DC 10-10/30CF aircraft during unit moves other than AMC channel missions. Side 1 is for the DC 10-30CF, and Side 2 is for the DC 10-10CF. Use DD Form 2130C, <u>Aircraft Load Plan Continuation</u>, (<u>Figure V-19</u>) for cargo manifesting. Complete in seven copies and distribute as indicated in Para H.4, above.
 - a. Block 1: UNIT BEING AIRLIFTED. Name or number of unit being airlifted.
 - b. Block 2: UNIT IDENTIFICATION CODE. Six-character, alphanumeric-unique code assigned to unit being airlifted. Deploying unit may also use ULN in this block.
 - c. Block 3: TYPE MOVEMENT PLAN. Enter operation or exercise name. Enter the SAAM number for SAAMs. If a contingency, enter plan number and whether inter-theater or intratheater airlift. Enter "CLASSIFIED" if any doubt exists when associating type of movement with detailed unit load information (i.e., if Plan Identification Number is listed).

Caution: Association of an exercise name, SAAM sequence number, contingency name, or Operation Plan number with other information on this form may cause this form to become classified up to TOP SECRET.

- d. Block 4: MOVEMENT DATE. Enter the date of airlift (DDMMMYY).
 - **NOTE**: All airlift times are specified in Greenwich Mean Time (Zulu time zone).
- e. Block 5: UNIT AIRCRAFT LOAD NUMBER. The number identifying the specific load and the total number of loads to be airlifted for a particular unit (e.g., 5 of 47).
- f. Block 6: MISSION NUMBER. Assign mission number. (Normally completed by air carrier or mobility force personnel.)
- g. Block 7: AIRCRAFT SERIAL NUMBER. Last five digits of the aircraft tail number. (Normally completed by air carrier or mobility force personnel.)
- h. Block 8: CONFIGURATION. (Optional entry.) This aircraft has no predetermined configurations. Plain remarks such as "20 seats/10 pallets" may be used.
- i. Block 9: DEPARTURE AIRFIELD. Actual geographical name of the departure airfield. If departure is classified, enter "CLASSIFIED".
- j. Block 10: DESTINATION AIRFIELD. Actual geographical name of the scheduled arrival airfield. If destination is classified, enter "CLASSIFIED".
- k. Block 11: ACTUAL LOADOUT. The aircraft diagram schematic scale is 1/4 inch = 3 feet. Actual position of cargo being airlifted will be shown on the diagram using DOD-approved cargo load planning templates. Use the DD Form 2130C, <u>Aircraft Load Plan Continuation</u>, for documenting load sequence, nomenclature, TCN, and remarks. Contact any of the AMCUs or AMCFs listed in Chapter 303, Para C. 2. b(1)(g) for further guidance.
- 1. Block 12: PASSENGERS SEATS PLANNING DATA. Enter number of total seats used in number seats section (In this example, 12 is entered).

12. PASSENGER SEATS PLANNING DATA						
NUMBER SEATS	AVG. WEIGHT (Pounds Each)	TOTAL PLANNED WT.				
12	210	2,520				

Also enter average weight used per individual for planning purposes and the total weight of the planned passenger load. This is for use during the planning phase of the movement. To estimate passenger weights, see <u>Figure V-20</u>. The load planner or unit movement officer will furnish the actual number of passengers and the total passenger weight.

- m. Block 13: TOTAL WEIGHT/MOMENT. Enter total planned load weight and moments from reverse side in Block 11(f), "Gross Weight and Moment" columns. Enter total actual load weight and moments from reverse side in Block 11(g), "Gross Weight and Moment" columns.
- n. Block 14: TOTALS. Compute the sum of figures in "Sub Totals Gross Weight and Moment" columns both Blocks 11(f) and 11(g) on the DD Form 2130C and enter it in Block 14. To obtain load CB station, divide total moment by total gross weight. Example: 6107 ÷ 68190 = 896.
- o. Block 15(a): LOAD PLANNER. Enter date load plan certified, name, grade, organization, and signature of individual responsible for planning or initiating the cargo load plan.
 Planning officials must be qualified load planners or graduates of the AMC Affiliation Airlift Planners Course, the United States Army Air Deployment Planning Course; Ft Eustis, VA,

United States Marine Corps Expeditionary Warfare Training Group, Pacific, Air Movement Planning Course (K-8A-3558) Naval Air Base, Coronado, CA; 101st Airborne Division Strategic Deployment School Ft Campbell, KY or 82d Airborne Division Air Movement Operation School, Ft Bragg, NC.

p. Block 15(b): ACTUAL LOAD PLAN VALIDATOR. Enter date load plan validated, name, grade, organization, and signature of individual validating load plan in actual load plan block. Actual load plan certification will not be accomplished until actual load plan is completely filled out and verified. Load plan validator must be an authorized representative of the mobility force or the air crew loadmaster.

NOTE: For air-drop loads, graduates of the Ft. Lee Parachute Riggers Course may certify the load plan.

J. PREPARATION AND USE OF DD FORM 2131, PASSENGER MANIFEST

1. Use the DD Form 2131, <u>Passenger Manifest</u>, <u>Figure V-21</u>, to list the names of the deploying personnel. Units may use a typed list in place of the DD Form 2131 if the form is not available. However, the typed list must include all the information required on the DD Form 2131. The troop commander signs the anti-hijacking statement (shown below) on the passenger manifest, regardless of the form used.

"I certify that no unauthorized weapons/ammunition/explosive devices, or other prohibited items are in the possession of those personnel for whom I am the designated manifesting representative or troop commander, and that their authorized weapons have been cleared."

- 2. Prepare DD Form 2131 as follows:
 - a. Block 1: MISSION NUMBER/CALL SIGN. Enter the Air Force mission number, Joint Airborne/Air Transportability Training (JA/ATT) mission number, SAAM mission number, exercise mission number, or other identifying mission number.
 - b. Block 2: AIRCRAFT TYPE (Tail Number)/VEHICLE/VESSEL. Enter the 5-digit tail number of the aircraft flying the mission or identifying number and name of the vehicle/vessel transporting troops.
 - c. Block 3: POE. Use actual name of airfield or point of departure, unless classified. If classified, write "Classified".
 - d. Block 4: POD. Use actual name of airfield or point of destination, unless destination is classified. If classified, write "Classified".
 - e. Block 5: DEPARTURE DATE. Enter Departure Date in YYYYMMDD format.
 - f. Block 6: TIME. Enter Time in ZULU format.
 - g. Block 7: PASSENGER INFORMATION
 - (1) Block 7a: NAME. Last, First, Middle name of passenger.
 - (2) Block 7b: RANK. Military/DOD civilian passenger grade (e.g., 0-3, E-4, W-2, GS-11).
 - (3) Block 7c: SSN. Enter Social Security Number of passenger.
 - (4) Block 7d: STATUS. Enter status of each passenger (e.g., Active, Civilian, Guard/Reserve).
 - (5) Block 7e: ULN. Enter ULN.
 - (6) Block 7f: LINE NO. Enter Line Number.

- (7) Block 7g: SVC. Enter Service.
- (8) Block 7h: CHECKED BAGGAGE. Enter number of pieces of checked baggage and total weight.
- (9) Block 7i: CARRY-ON WEIGHT. Enter weight of carry-on baggage.
- (10) Block 7j: PAX WEIGHT. Enter actual weight of passenger.
- (11) Block 7k: EMERGENCY CONTACT INFORMATION. Enter Name (Last, First, Middle).
- (12) Block 71: EMERGENCY CONTACT INFORMATION. Enter telephone number (Include area code).

h. Block 8: MANIFEST TOTAL

- (1) Block 8a: Enter total number of active duty passengers.
- (2) Block 8d: Enter total number of civilian passengers.
- (3) Block 8e: Enter total number of Guard/Reserve passengers.
- (4) Block 8f: Enter total pieces of baggage.
- (5) Block 8g: Enter total weight of checked baggage.
- (6) Block 8h: Enter total weight of carry-on baggage.
- (7) Block 8i: Enter total weight of passengers.
- i. Block 9: TOTAL WEIGHT PAX AND ALL BAGGAGE: Enter combined weight of all passengers and baggage.
- j. Block 10: Manifest Certification
 - (1) Block 10a: DATE. Actual date form is completed in YYYYMMDD format.
 - (2) Block 10b: PRINTED NAME. Enter the name (Last, First, Middle Initial) of the individual that signs this Form certifying that an anti-hijacking inspection has been conducted. The troop commander normally does this.
 - (3) Block 10c: GRADE. Enter grade of the individual listed in Block 10b.
 - (4) Block 10d: SIGNATURE. Signature of person indicated in Block 10b.

C-5 PLANNING DATA							
Maximum Takeoff Weight:	769,000 lbs						
Normal Operating Weight:	374,000 lbs						
Peacetime Planning ACL*:	150,000 lbs						
Wartime Planning ACL*:	175,000 lbs						
CARGO COMPARTMENT:							
Length - 1736 inches Width - 228 inches*	* Height - 162 inches **						
CARGO AREA:							
From Fuselage Station 511-1976 (main cargo floor), from St. 1976-2131 (aircraft aft ramp). NOTE : 463L pallets loaded in will have a 14-inch access aisle which will extend from the ou cargo.	pallet positions 1, 2, 35, and 36 (forward and aft ramps)						
VEHICLE LOADING MAXIMUM WEIGHTS:							
Aircraft Ramps							
Station 395-517 and Station 1971-2131:	3,600 lbs in any 20-inch length.						
Station 511-724 and 1884-1971:	20,000 lbs in any 40-inch length.						
Station 724-1884****:	36,000 lbs in any 40-inch area.						
PASSENGER CARGO LOADING:							
Maximum allowable using HCU-7/E and HCU-15/C nets.							
Pallet positions 3 thru 34	10,355 lbs ***						
Pallet positions 1, 2, 35, and 36 (ramps	7,500 lbs each ***						
Height of pallet positions 1 thru 34	96 inches ****						
Height of pallet positions 35 and 36	70 inches **/***						
PASSENGER LOADING:							
Airline seats (permanently installed):	73 passengers/troops						
Airline seats (additional seat kit):	267 passengers/troops						
Web passenger seats:	Not Available						
Paratroops:	73 paratroops						
Litter patients (plus medical crew):	Not Available						
Full sidewall seats only:	Not Available						

1. * Maximum payload is computed without regard to cargo density. It is limited only by aircraft structural limitations or critical leg fuel (3500 Nautical Miles (NM)) and is shown primarily for information. It includes the weight of any passengers carried. Do not use unless cargo density is known to be high and physical characteristics of cargo would permit full use of compartment space. Flight route segments less than critical leg distances may allow for more or less ACL depending on wind factors. If tankers can be provided with aerial refueling qualified aircrews, the C-5 can airlift maximum payload (145.5 Short Tons) over any critical leg.

329 passengers

2. ** Cargo must be six inches from sides and top of aircraft. Aft Ramp cargo height is restricted to 70 inches.

NOTE: When 20 or more troops are transported aboard the C-5, a baggage pallet(s) will be used.

3. *** Includes weight of cargo, pallet and nets.

MAXIMUM ON OVER-WATER FLIGHTS:

- 4. **** Maximum height allowed.
- 5. ***** Side-by-side or multiple wheeled vehicles axles loaded between F.S. 1458 and F.S. 1518 are limited to a combined maximum weight of 25,000 pounds. Tracked type vehicles are excluded from this restriction.

Figure V-1. C-5 Planning Data

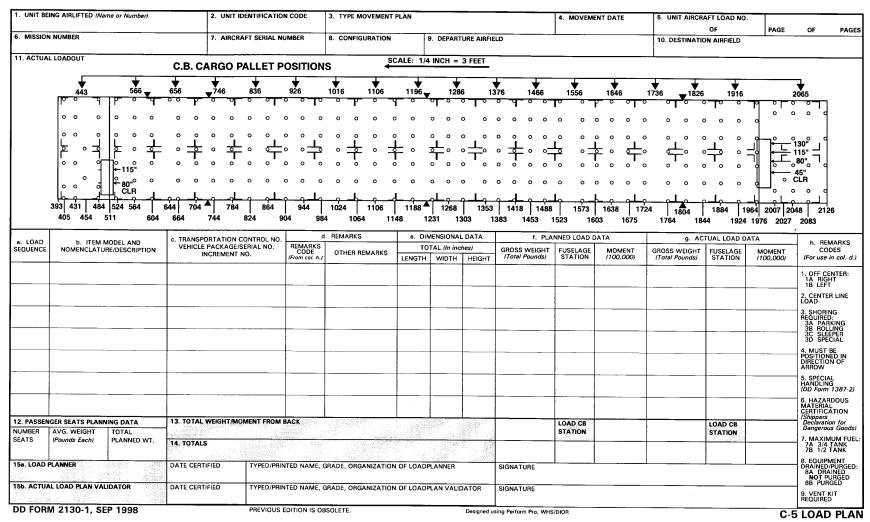


Figure V-2. DD Form 2130-1, C-5 A/B Load Plan (w/Cargo Pallet Positions)

C-130 PLANNING DATA							
Maximum Takeoff Weight:	155,000 lbs						
Normal Operating Weight:	88,000 lbs						
Peacetime Planning ACL*:	25,000 lbs						
Wartime Planning ACL*:	38,800 lbs						
CARGO COMPARTMENT:							
Length - 624 inches (612" usable) Width - 123 inches**	Height - 108 inches**						
CARGO AREA:							
From Fuselage Station 257-742 (main cargo floor) and from Sta	ation 742-869 (aircraft ramp).						
VEHICLE LOADING:							
35-inch tread ways extend entire length of cargo compartment (FS 257 to 867)						
MAXIMUM AXLE WEIGHTS:							
Station 257-337 and Station 682-737:	6,000 lbs per individual axle.						
Station 337-682:	13,000 lbs per individual axle.						
Aircraft Ramp (Station 737-869):	3,500/2,500 lbs (see note)						
NOTE : Single axle of 3,500 lbs (provided it is the only item on the ramp case, maximum allowable weight on the ramp is 4,664 lbs when aircraf							
PALLETIZED CARGO LOADING: Maximum allowable using 463L	pallets and nets.						
Pallet positions 1-4:	10,355 lbs ***						
Pallet positions 5:	8,500 lbs ***						
Pallet positions 6 (ramp):	4664 lbs ***						
Height of pallet positions 1-5:	96 inches ****						
Height of pallet position 6:	76 inches ****						
PASSENGER LOADING (-):							
Airline seats plus one comfort pallet:	40 passengers						
Web passenger seats:	90 passengers						
Paratroops:	64 paratroops						
Litter patients (plus medical crew):	72 litters						
Full sidewall seats only:	41 passengers						
MAXIMUM ON OVER-WATER FLIGHTS:	74 passengers						

Figure V-3. C-130 Planning Data

- 1. * Maximum payload is computed without regard to cargo density. It is limited only by structural limitations or critical leg fuel and is shown primarily for information. It includes weight of any passengers carried. It should not be used unless cargo density is known to be high and physical characteristics of cargo would permit full use of the compartment space. Flight route segments less than critical leg distances may allow for more or less ACL depending on wind factors.
- 2. ** Maximum heights are as follows. 102 inches for large, single items of cargo placed on pallets. 100 inches for palletized, netted cargo connected. 100 inches for single, palletized, netted cargo weighing no more than 8,000 lbs. 96 inches for single, palletized, netted cargo weighing no more than 10,000 lbs. All heights are measured from the surface of the pallet. Maximum height for cargo located forward of fuselage station 381 or positioned on the airplane ramp is restricted to 76 inches. In terms of width, cargo must be 14 inches from the sides of the airplane, without passengers. Without dual rails installed, the cargo compartment floor is limited to 105 5/8 inches wide. Maximum height for other-than-palletized cargo located on the aircraft is restricted to 80 inches.

NOTE: Standard 20-foot ocean containers are 102 inches high and may be moved with pre-planning and coordination.

- 3. *** Includes weight of cargo, pallet, and nets.
- 4. **** Maximum height allowed. An 18-inch aisle must be provided on the left-hand side of pallets positioned in pallet position six. A minimum of 6-inch aisle must be provided on the left-hand side of pallets positioned in the wheel well area (pallet positions three and four).
- 5. (+) Maximum weight on aircraft ramp is 5,000 lbs, including weight of aircraft dual rails and rollers.
- 6. (-) Any passenger load requires a minimum of one loadmaster in cargo compartment; two if more than 40 passengers are carried.
- 7. (-) Width of cargo affects use of sidewall seats. If vehicle exceeds 76 inches wide, seats will be available only on one side of aircraft if wide cargo can be loaded off-center to right side of aircraft. Cargo widths over 96-inches, no passenger seats are available beside the cargo.
- 8. (-) Passengers will NOT occupy seats less than 30 inches from strapped/netted cargo.
- 9. (-) Aisleways: Pallet Positions three and four (Wheel Well). A minimum 6-inch safety aisle must be provided on the left-hand side of pallets positioned in the wheel well area. Pallet Position six (Ramp). To allow for the use of the toilet facility, an 18 X 18-inch cut-out must be provided on the forward, left corner of pallets loaded on the ramp. Also, a 6-inch safety aisle must be provided aft of the toilet facility.

NOTE: Certain aircraft models have the toilet facility located on the right side of aircraft. If possible, coordinate with mobility force personnel to determine which model will be used. When this information cannot be obtained, recommend an 18-inch aisle along entire length of ramp pallet. This will enable pallet to be rotated to meet the requirement for the toilet facility and safety aisle.

RESTRAINT

- 1. Pallets are restrained to aircraft by detent locks. If pallet is properly built and nets installed correctly, no additional restraint is required.
- 2. Tie-down rings which have a 10,000 lb. rated capacity are installed in 20-inch grid pattern on the cargo floor.
- 3. 25,000 lb. tie-down rings are not available when dual rail system is installed. (Exception: Two, 25,000 lb. tie-down rings are located just forward of the ramp hinge.)
- 4. Tie-down rings located on aircraft ramp and cargo compartment walls have a rated strength of 5,000 lb.
- 5. Tie-down rings mounted on the aircraft dual rails at 10,000 lb.
- 6. Aircraft carry a specified complement of tie-down equipment, adequate for most loads.

Figure V-3. C-130 Planning Data (Cont'd)

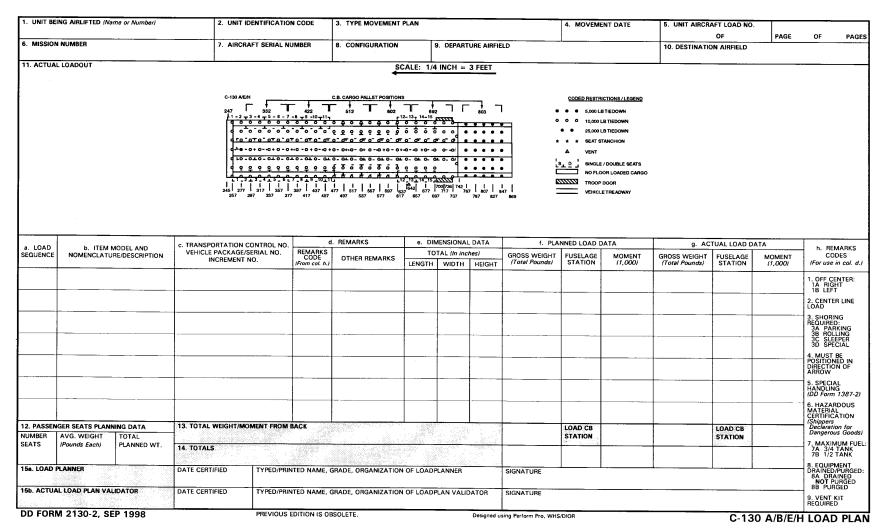


Figure V-4. DD Form 2130-2, C-130 A/B/E/H Load Plan (w/Cargo Pallet Positions)

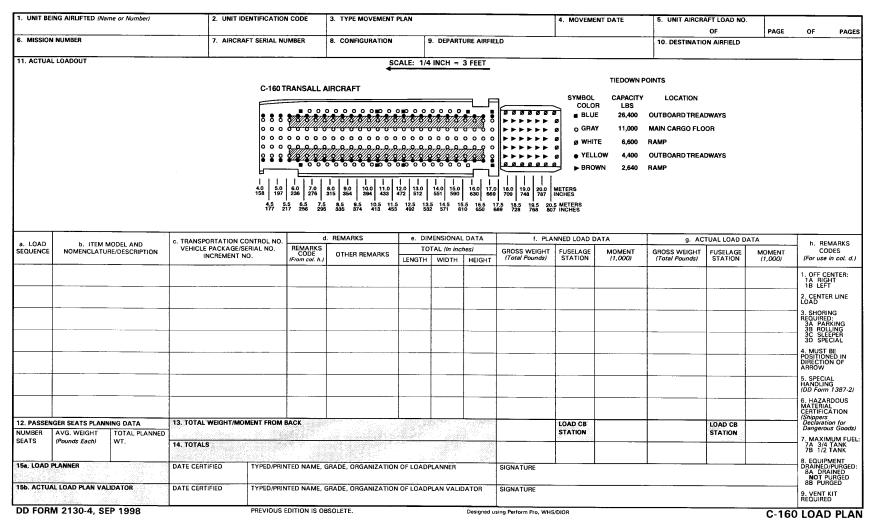


Figure V-5. DD Form 2130-4, C-160 Transall Load Plan (w/Cargo Pallet Positions)

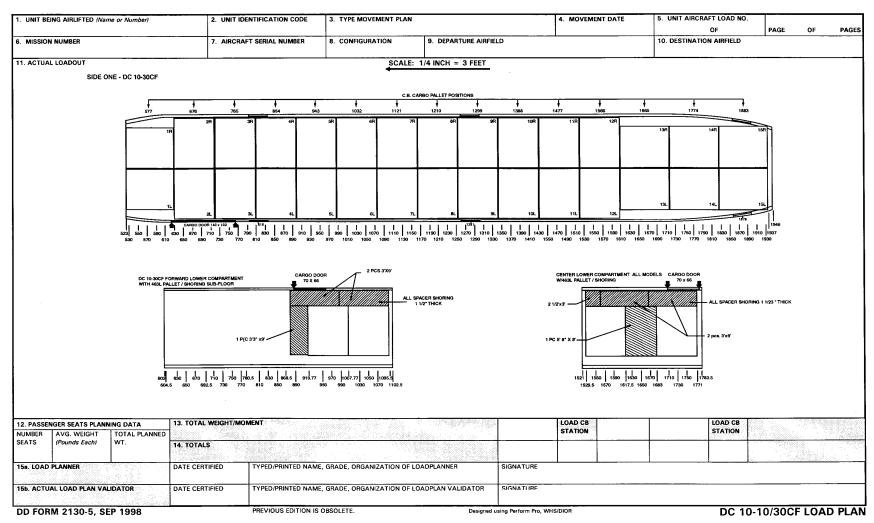


Figure V-6. DD Form 2130-5, DC 10-10/30CF Load Plan (Side 1 w/Cargo Pallet Positions)

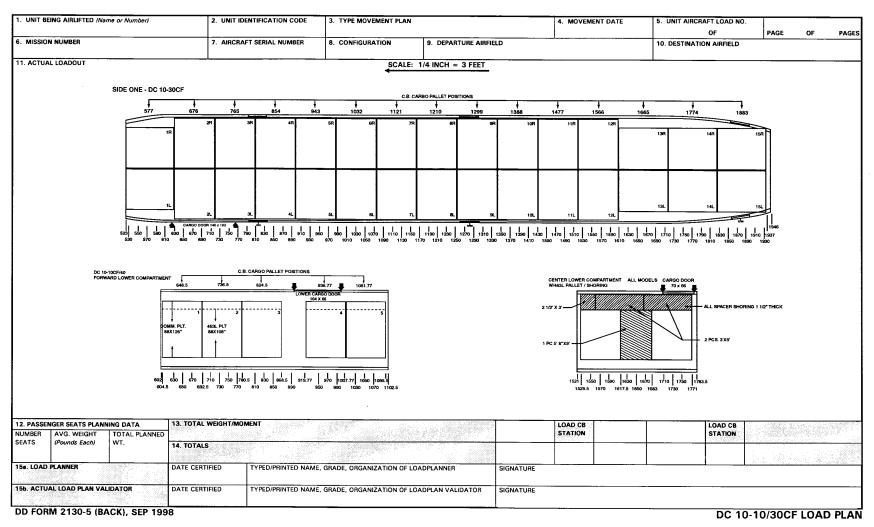


Figure V-6. DD Form 2130-5 (Reverse), DC 10-10/30CF Load Plan (Side 2 w/Cargo Pallet Positions).(Cont'd)

KC-	KC-10A PLANNING DATA							
Maximum Takeo	off Weight:	590,000 lbs						
Normal Operatin	252,000 lbs							
Peacetime Plann	ing ACL:	80,000 lbs						
Wartime Plannin	g ACL*:	148,600 lbs						
NOTE: Maximum payload can only be carried of 585,000 lbs. Maximum ACL is 137,600 lbs.	at flight weight of 549,0	000 lbs or less. At maximum 1.8G flight weight						
CARGO COMPARTMENT								
Length - 1508 inches Width	- 218 inches	**** Height - 108 inches **						
CARGO AREA:								
From Fuselage Station 496-2004 (main	cargo floor). No lower	lobe cargo capability.						
VEHICLE LOADING: MAXIMUM WEIGHT	ΓS: ****							
Station 630-1066:	4,500 lbs per individual axle							
Station 1066-1175:	4,800 lbs per individual axle							
Station 1175-1502:	3,200 lbs per individual axle							
Station 1502-1937:	4,000 lbs per individual axle							
PALLETIZED CARGO LOADING: Maximus	m allowable using HCU	J-7/E & HCU-15/c Nets						
Pallet positions 1 th	ru 6 (left and right):	6,500 lbs ***						
Pallet positions 7 th	ru 11 (left and right):	10,000 lbs ***						
Pallet positions 12 t	thru 13 (left and right):	6,500 lbs ***						
Height of pallet pos	itions 2 thru 10:	96 inches **						
Height of pallet pos	ition 11 and 12:	96 inches **						
PASSENGER LOADING:								
Airline seats (Code A):	8 passengers						
Airline seats (Code B):	10 passengers						
Airline seats (JA/ATT	missions) (Code D):	65 passengers						
Airline seats:								
(Increased Accommod	dation Kit):	69 passengers						
Web passenger seats:		Not Available						
Paratroops:		Not Available						
Litter patients (plus m	nedical crew):	Not Available						
Full sidewall seats on	ly:	Not Available						
MAXIMUM ON OVER-WATER FLIGHTS:		69 passengers						

Figure V-7. KC-10A Planning Data

- 1. * Maximum payload is computed without regard to cargo density, is limited only by aircraft structural limitations or critical leg fuel (4000 NM), and is shown primarily for information. It includes weight of any passengers carried and should not be used unless cargo density is known to be high and physical characteristics of the cargo would permit full use of compartment space. Flight route segments less than critical leg distances may allow for more or less ACL depending on wind factors. Fuel offload requirements for aerial refueling missions may reduce cargo ACL allowable.
- 2. ** Cargo door height limits all cargo to 96 inches above surface of pallet. Cargo compartment curvature restricts normal pallet building techniques.
- 3. *** Includes weight of cargo, pallet, and nets or other tie-down equipment.
- 4. **** Maximum axle weights are predicated on a minimum separation of 48 inches.
- 5. ***** At 100 inches above the floor level, the compartment width is approximately 144 inches. Due to the curvature of the fuselage, the cargo compartment area forward and aft of the constant section diminishes in height and width.
- 6. The KC-10 does NOT have a floor loading capability. All cargo/baggage must be palletized or placed on a pallet subfloor.
- a. Baggage must be palletized and considered as cargo. Hand-carried item must be fit under the seats. Troops will be allowed to hand carry their weapons and helmets. Other items that will not fit under the seats must be palletized (i.e., rucksacks, web belts, crew served weapons).
- b. Until further notice, pallet position 13 will not be offered for user cargo space. Space is required for aircraft ground servicing (crew chief) equipment.
- c. External high reach stairs are required for all passenger loading/downloading. Upon user request, wide-body stair extenders may be brought in with the aircraft to be used with stands that reach 12 feet in height or higher.
- d. Due to limited galley facilities, hot meal service should be limited to not more than 20 passengers. Box meals are recommended for all troop/passenger missions where meals are required.
- e. When submitting an airlift request under Material Handling Support, the request must include a wide-body loader, stair case extended, or wide-body staircase when needed.
 - f. All KC-10s will have 125 straps, 150 chains, and 10 sets of pallet couplers.
 - g. Aircraft tow bar is required when aircraft will operate into/out of airfields where like tow bars are not available.

Figure V-7. KC-10A Planning Data (Cont'd)

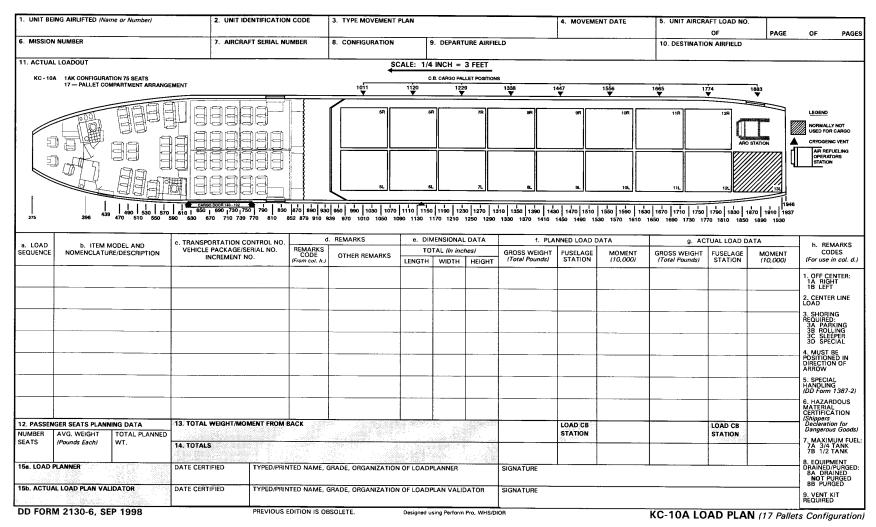


Figure V-8. DD Form 2130-6, KC-10A Load Plan (w/17 Cargo Pallet Positions)

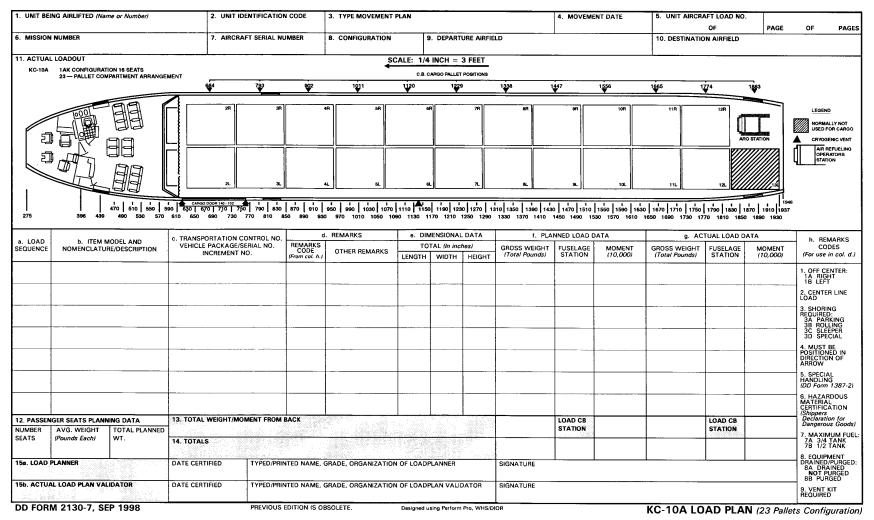


Figure V-9. DD Form 2130-7, KC10A Load Plan (w/23 Cargo Pallet Positions)

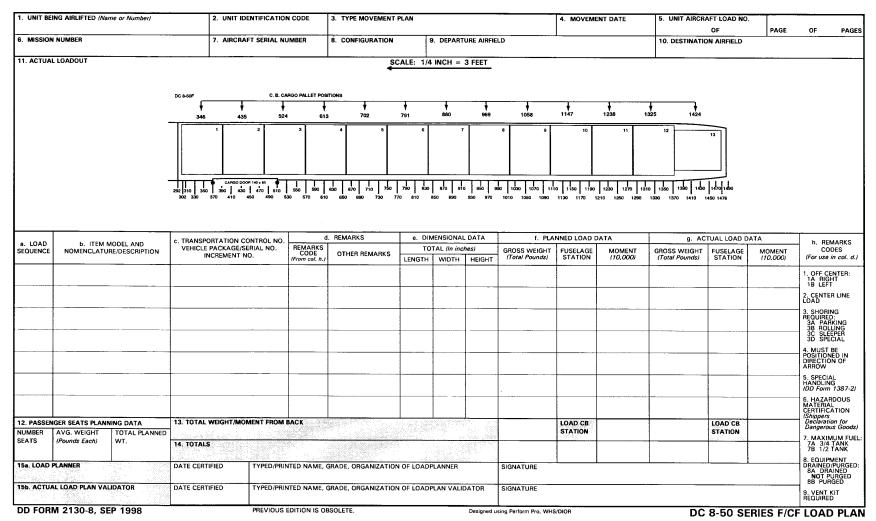


Figure V-10. DD Form 2130-8, DC8-50 Series F/CF Load Plan (w/Cargo Pallet Positions)

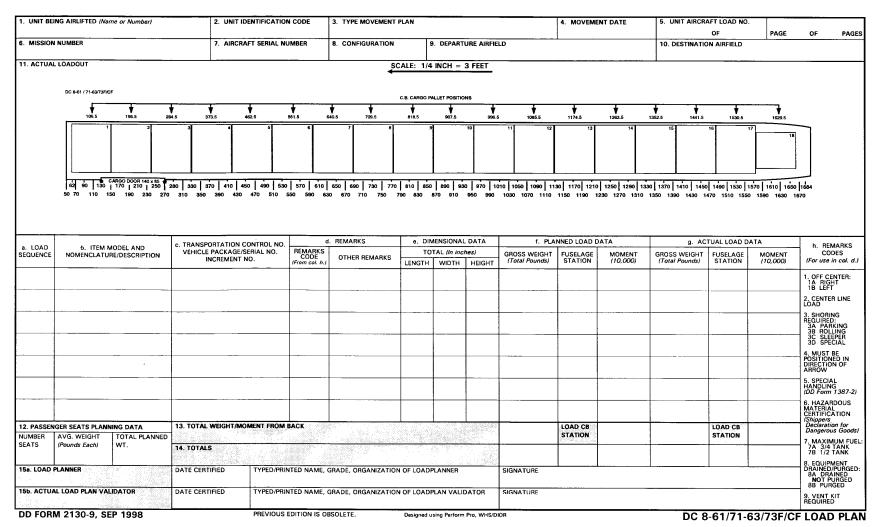


Figure V-11. DD Form 2130-9, DC-8-61/71-63/73F/CF Load Plan (w/Cargo Pallet Positions)

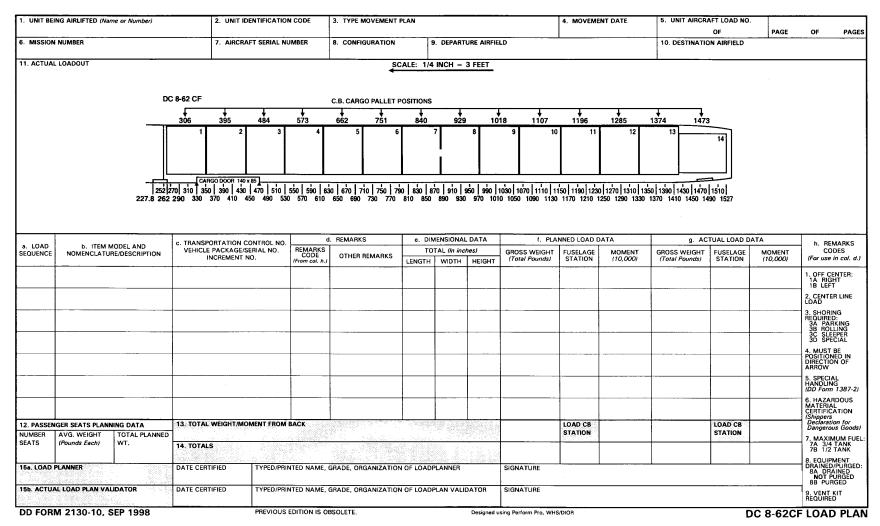


Figure V-12. DD Form 2130-10, DC8-62CF Load Plan (w/Cargo Pallet Positions)

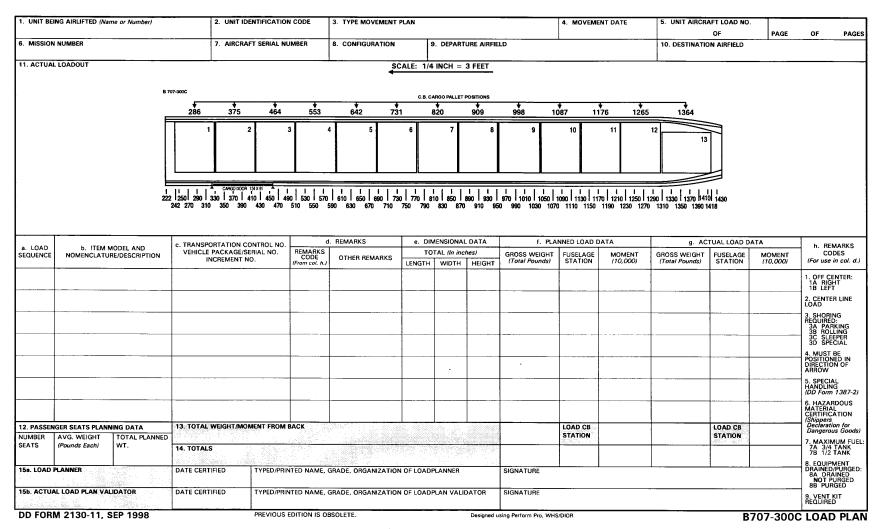


Figure V-13. DD Form 2130-11, B707-300C Load Plan (w/Cargo Pallet Positions)

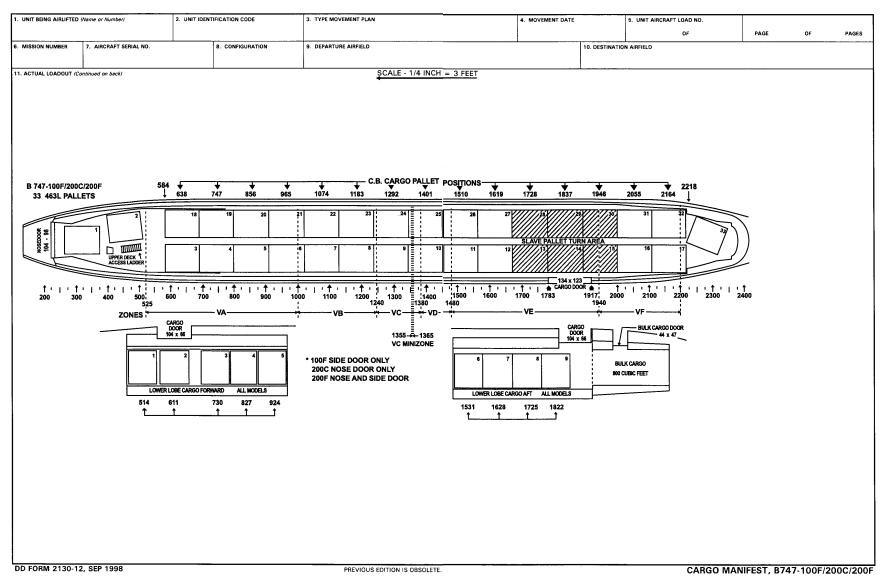


Figure V-14. DD Form 2130-12, Load Plan B747-100F/200C/200F

	C-17A PLANNING DATA							
-	Maximum Takeoff Weight:	585,000 lbs						
	Normal Operating Weight:	276,000 lbs						
	Peacetime Planning ACL:	90,000 lbs						
CARGO COMPARTMENT:	-							
Length - 1056 inches	Width - 216 inches	Height - 148 inches**						
CARGO AREA:								
From Fuselage Station 347-116	5 (main cargo floor) and from Stati	on 1165-1403 (aircraft ramp).						
VEHICLE LOADING: Maximu	ım weights.	-						
Station 3	47-578 and Station 1073-1165	27,000 lbs per individual axle						
Station 5'	78-1073	36,000 lbs per individual axle						
Aircraft I	Ramp (Station 1165-1403	27,000 lbs per individual axle						
PALLETIZED CARGO LOADING: Maximum allowables using HCU-7/E & HCU-15/C nets.								
Logistics	rail system:							
(Pallet po	ositions 1L-9L and 1R-9R):	10,355 ***						
Aerial de	livery system:							
(Pallet po	ositions 1-11):	10,355 ***						
Height of	all pallet positions:	96 inches						
PASSENGER LOADING:								
Permaner	ntly installed seats:	54 passengers						
Onboard	centerline seat kit:	48 passengers						
Paratroop	os (maximum):	102 paratroops						
	litter capacity:	12 litters						
Additiona	al litter capacity:	36 passengers						
MAXIMUM ON OVER-WATI	ER FLIGHTS:	102 passengers						

- 1. * The maximum payload is computed without regard to cargo density. It is limited only by aircraft structural limitations or critical leg fuel (2500NM) and is shown primarily for information. It includes weight on any passengers carried. It should not be used unless cargo density is known to be high and physical characteristics of cargo would permit full use of compartment space. Flight route segments less than critical leg distances may allow for more or less ACL, depending on wind factors. If tanker support can be provided with aerial refueling qualified aircrews, the C-17 can airlift maximum payload over any critical leg.
- 2. ** Aft of fuselage Station 937 cargo compartment height is 162 inches. Cargo must be six inches from sides and top of aircraft.
- 3. *** Includes weight of cargo, pallet, nets.
- 4. Any passenger load requires a minimum of one loadmaster in the cargo compartment; two if more than 40 passengers are carried.
- 5. Passengers will NOT occupy a seat closer than 30 inches from strapped or netted cargo.
- 6. Width of cargo affects use of sidewall seats. Cargo/vehicle widths less than 157 inches, seats will be available on both sides on the cargo; cargo/vehicle widths of 157 to 192 inches, seats will be available on one side of the aircraft only. Cargo/vehicle widths 193 inches and greater, no seats will be available beside the cargo.

Figure V-15. C-17 Planning Data

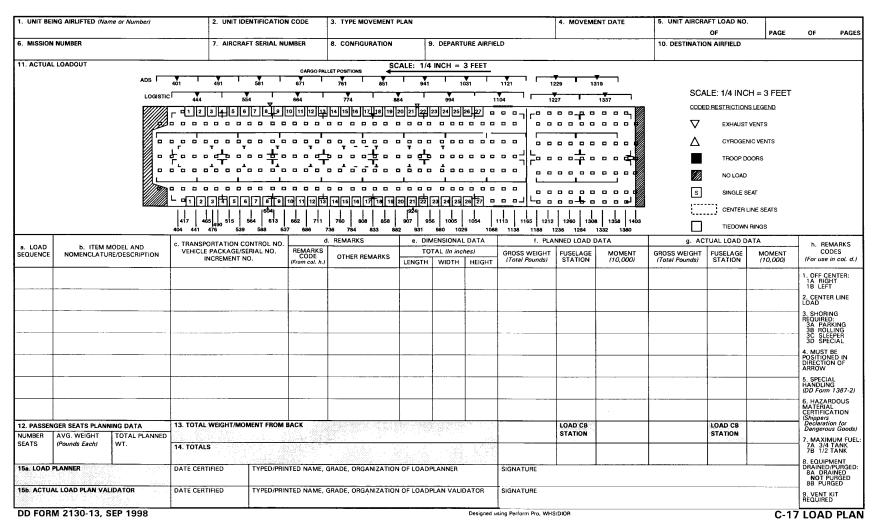


Figure V-16. DD Form 2130-13, C-17 Load Plan (w/Cargo Pallet Positions)

KC-135 PLANNING DATA								
Maximum Takeoff Weight:	322,500 lbs							
Normal Operating Weight:	122,500 lbs							
Peacetime Planning ACL:	30,000lbs							
CARGO COMPARTMENT:								
Length - 840 inches Width - 129 inch	es Height - 84 inches							
CARGO AREA:								
From Fuselage Station 440-1120 (main cargo floor	r). No lower lobe cargo capability.							
PALLETIZED CARGO LOADING:	Maximum allowable using HCU-7/E & HCU-15/C nets.							
Pallet positions 1-6:	6,000 lbs							
Height of pallet positions 1-6:	65 inches							
PASSENGER LOADING:								
Airline seats:	56 passengers (when equipped)							
Web passenger seats:	57 passengers (4 available with 6 pallets)							
Litter patients (plus medical crew):	8 litters, 1 floor loaded							
MAXIMUM ON OVER-WATER FLIGHTS:	57 passengers							

Figure V-17. KC-135 Planning Data

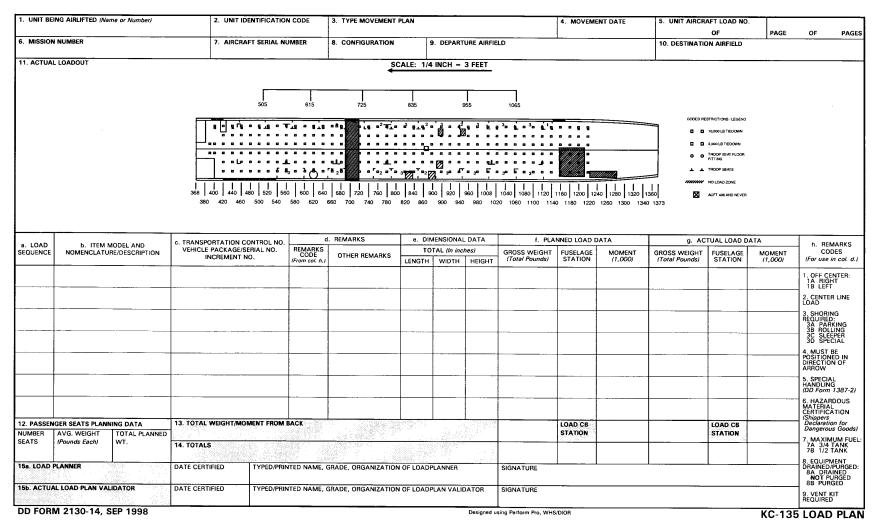


Figure V-18. Form 2130-14, KC-135 Load Plan (w/Cargo Pallet Positions)

. UNIT BEIN	G AIRLIFTED (Name or Number)		2. UNIT IDENTIFICATION	CODE	3. TYPE MOVEMENT F	PLAN				4. MOVEME	NT DATE	5. UNIT AIRCRA	AFT LOAD NO.	PAGE	OF	PAGE	
. MISSION I	SSION NUMBER 7. ÄIRCRAFT SERIAL NUMBER		IMBER	8. CONFIGURATION 9. DEPARTURE AIRFIELD						10. DESTINATIO		TAGE	OF PAG				
. ACTUAL	LOADOUT					I											
c. TRANSPORTATION CONTROL NO.			I. REMARKS	e. DIN	MENSIONAL	DATA	f. PLA	ANNED LOAD D	ATA	g. AC	TUAL LOAD D	ATA	h. RE	MARKS			
EQUENCE	b. ITEM MODEL AND NOMENCLATURE/DESCRIPTION		PACKAGE/SERIAL NO. NCREMENT NO.	REMARKS CODE (From col. h.)	OTHER REMARKS	TO LENGTH	TAL (In incl WIDTH		GROSS WEIGHT (Total Pounds)	FUSELAGE STATION	MOMENT (Simplified)	GROSS WEIGHT (Total Pounds)	FUSELAGE STATION	MOMENT (Simplified)] co	h. REMARKS CODES (For use in col. d.)	
															1. OFF CI 1A RIG 1B LEF 2. CENTE LOAD 3. SHORIIR 3A PAF 3B ROL 3C SLE 3D SPE 4. MUST POSITION DIRECTIO ARROW 5. SPECIA HANDLINI (ID Form 6. HAZAF MATERIA CERTIFIC (Shippers Declarati Dangero 7. MAXIN 7A 314 7B 1/2 8. EQUIPP DRAINED BA DRA NOT P 8B PUF 9. VENT REQUIREC OTHER C IDENTIFY D(2)	HT T T R LINE NG D: RKING LING EFFR R BE EFFR R G 1 387-: RL ATION On for r AL ATION On for r PURGE R URGED URG	
	TALS (To be included with Page 1, Item	14, Totals)	PREVIOUS F	DITION IS OB	SOLETE	Thought the second				0	(AIRCRAF			0	A T !	

Figure V-19. DD Form 2130C, Aircraft Load Plan Continuation Sheet

STANDARD PLANNING WEIGHTS

- General. Actual weights will always be used when manifesting passengers on commercial aircraft. Actual weights should be
 used for DOD organic aircraft. Use of standard planning weights is authorized on DOD organic aircraft for contingencies or
 wartime situations only where time does not allow for obtaining actual weights.
- 2. Standard Planning Weights. The following will be used as planning weights for combat equipped troops being deployed on DOD organic aircraft:
 - a. Passengers with web gear and weapon or with carry-on baggage:
 - (1) Combat: 210 lbs(2) Training: 210 lbs
 - b. Passengers with web gear, weapon, and rucksack or combat equipment/tools:
 - (1) Combat: 300 lbs
 - (2) Rucksacks: Training 40 lbs; combat 80 lbs
 - c. Passengers with duffel bag, web gear, weapon, and rucksack or with duffel bag and combat equipment or tools:
 - (1) Training: 350 lbs.(2) Combat: 400 lbs
 - d. Parachutist with web gear, weapon, and rucksack:
 - (1) Training: 300 lbs(2) Combat: 350 lbs
 - e. Parachutists with no weapon or equipment: 220 lbs.

Only under contingency or wartime situations when time does not permit obtaining actual weights will standard planning weights be used in lieu of actual weights for manifesting passengers or cargo on military aircraft.

If scales are not available, interrogated weights of individuals can be used.

- 3. The following weights will be used for planning the deployment of non-combat equipped troops on DOD aircraft:
 - a. Passenger with no bag: 175 lbs.
 - b. Passenger with hand-carried bag: 195 lbs.
 - c. Additional planning weights:
 - (1) Hand-carried weapon: 10 lbs.
 - (2) Mobility bags: 25 lbs.
 - (3) Mobility pack (mask, web gear, and helmet): 20 lbs.
 - (4) Tool Box: 55 lbs.
 - (5) Checked baggage: 70 lbs.
 - (6) Parachute: 45 lbs.
- 4. The following planning weights and procedures apply to individuals transported on AMC-chartered commercial aircraft:
 - a. Non-combatant equipped troops: 175 lbs.
 - b. Combat-equipped troops with carry-on bag only: 210 lbs.
 - c. Combat-equipped troops with web gear and weapon: 210 lbs.
 - d. Combat-equipped troops with web gear, weapon, and carry-on baggage: 230 lbs.
 - (1) These weights are for planning purposes only. NO standard body weights will be used for troops transported on commercial aircraft. Use actual scaled weights of individuals with uniform, boots, helmet, weapon, web gear, and hand-carried bag.
 - (2) If scales are not available, interrogated weights of individuals can be used. After asking each individual their weight, use the following additive item weights as necessary to determine total weight of the traveler:
 - (a) Boots: 5 lbs.
 (b) Helmet: 5 lbs.
 (c) Uniform: 5 lbs.
 (d) Web gear: 12 lbs.
 (e) Weapon: 10 lbs.
 (f) Hand-carried bag: 20 lbs.

All items transported in the cargo compartment of a commercial aircraft must be weighed.

Figure V-20. Standard Planning Weights

					F	PASSENGE	R MANIFE:	ST						
MISSION NO/CALL SIGN	Z. AIRCRAF	T TYPE (Tail Number)	VEHICLENESS	WESSEL 3. POE 4. POD 5. DEPARTURE DATE (YYYM						5. DEPARTURE DATE (YYYYMMDO)	6. TIME (ZULU)			
	PASS	SENGER INFORMA	TION		BAGGAGE : EMERGENC				BAGGAGE			CONTACT INFORMATION		
7.A. NAME	b.		d.	0.	t.	9	h. CHECKED		I. CARRY-ON	PAX	k. NAME	L TELEPHONE		
(Last, First, Missio)	RANK	SSN	STATUS	ULN	LINE NO.	svc	PIECES	WEIGHT	WEIGHT W	WEIGHT	(Last, First, Mickele)	(Include area cod		
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. MANIFEST TOTAL	TAL 0 WT 0 GAGWT		(nactal VEC									
. I certify that no unauthorized authorized weapons have be	l weapons/ammur en cleared.	nition/explosive devi	ces, or other p	chibited ite	ms are in th	ne possession		sonnel from whon			ing representative or troop commande	r, and that their		
DATE (YYYYMMOO)	b. PRINTED	NAME (Last, First, Middle	inta)				c. GRADE		d. SK	MATURE				
						EVIOUS EDIT						FormFlow(Adoba Profession		

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Figure V-21. DD Form 2131, Passenger Manifest

1. ITEM NOMENCLATURE	2. NET QUANTITY PER PACKAGE	3. TRANSPORTATION CONTROL NO.
	4. CONSIGNMENT GROSS WEIGHT	5. DESTINATION
6. SUPPLEMENTAL INFORMATION		
This is to certify that the above named materials are properly classif to the applicable regulations of the Dept of Transportation. THIS IS		
7. DTR REFERENCE		
8. HANDLING INSTRUCTIONS		
9. ADDRESS OF SHIPPER	10. TYPED NAME,	SIGNATURE AND DATE
DD FORM 1387-2, NOV 2004 PRE	VIOUS EDITION IS OBSOLETE.	Form Approved/OMB No. 0704-0188

Figure V-22. DD Form 1387-2, Special Handling Data/Certification

Instructions for Completing the DD Form 1387-2 Unclassified Shipments If the material shipped is unclassified, the following procedures apply: **Block** 1. Item Nomenclature: Enter item nomenclature. 2. Net Quantity per Package: Enter the gross weight of the package. Transportation Control Number: 3. TCN this package. 4. Consignment Gross Weight: Total gross weight of each pallet/package shipped under the same TCN. 5. Destination: Address of consignee, in-the-clear. 6. Supplemental Information: For sensitive and other cargo requiring transportation protective service or other special services while in-transit, enter appropriate requirements. 7. DTR Reference: Cite DTR Chapter 205, Para I.2. 8. Handling Instructions: Enter any special handling instructions. Address of Shipper: Complete in-the-clear address of shipping activity. 10. Typed Name, Signature, and Date: Self-explanatory.

Figure V-23. Instructions for Completing DD Form 1387-2, Unclassified Shipments

Instructions for Completing the DD Form 1387-2 Classified Shipments

If the material shipped is classified, the following procedures apply:

- 1. If none of the information entered in the Blocks on the form is classified, four copies of the form will be completed.
- 2. If the information to be entered on the form is classified, then prepare and distribute the form as follows. One copy is completed in detail, including essential classified data. This copy will be signed. The completed and signed form will be forwarded to the air terminal IAW security regulations and instructions and will be attached to the air manifest. Three additional copies of the form must be prepared reflecting "See Aircraft Commander's copy" and "Protective Service Required" in Block 6. Blocks 3, 4, and 5 will also be completed. The remainder of the form will be left blank. The form will be placed in a waterproof envelope and attached to the number one container of the shipment unit.
- 3. If any of the data entered on the DD Form 1387-2 is classified when the form is attached to the air manifest, then the air manifest takes the same degree of classification. The air manifest remains classified until the classified form is detached and handled IAW security regulations and instructions.
- 4. If the material shipped is classified, the following procedure applies. All four copies of the form will reflect the degree of TPS protection. (Notes 1 and 2.)

Note 1. Shipments of classified will include one or more types of sensitive cargo. Block 6 of the DD Form 1387-2 will include one or more of the required transportation protective service categories as required by the DTR, for example:

Greater Security Service (GSS)

Military Traffic Expediting Service (MTX)

Rail Armed Guard Surveillance Service (ARG)

Rail Inspection Service (RIS)

Constant Surveillance and Custody Service (CIS)

Dual Driver Protective Service (DDP)

Motor Surveillance Service (MVS)

Protective Security Service (PSS)

Security Escort Vehicle Service (SEV)

Signature and Tally Record Service (675)

Satellite Motor Surveillance Service (SNS)

Military Guard Personnel (MGP)

Exclusive Use of Vehicle or Dromedary (EXC)

Note 2. For shipments requiring other special services while in transit, enter the instructions in Block 6, for example:

Protect From Freezing

Protect From Heat

Air Ride Equipment Required

Figure V-24. Instructions for Completing DD Form 1387-2, Classified Shipments

1. ITEM NOMENCLATURE	NET QUANTITY PE Weight of individ		3. TRANSPORTATION CONTROL NO. Enter the TCN				
	4. CONSIGNMENT OF Wt of all Pallets/Pac		5. DESTINATION Destination or World Wide Mobility				
6. SUPPLEMENTAL INFORMATION							
"Constant Surveillance and Custody Service (CIS)" "S	ignature and Tally Re	cord Service (67	75)"				
	-	-					
This is to certify that the above named materials are properly classified to the applicable regulations of the Dept of Transportation. THIS IS A	U.S. DEPARTMENT OF DE						
 DTR REFERENCE DOD 4500.9R Part II, Chapter 205, 1 	Paragraph I. 2.						
8. HANDLING INSTRUCTIONS Couriers will be E-4 or higher and/or civilian grade equivalent.							
9. ADDRESS OF SHIPPER 10. TYPED NAME, SIGNATURE AND DATE							
162FW 6620 S. Air Guard Way, Tucson, AZ 85706	Sì	MSgt Charles C.	Kilmer 14 Jul 2005				
		_					

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Figure V-25. DD Form 1387-2, Special Handling Data/Certification for Rifles, 5.56MM (M-16A2) 15 or Less

Instructions for Completing the DD Form 1387-2 Unclassified Shipments for Rifles, 5.56MM (M-16A2) 15 or Less

If the material shipped is unclassified, the following procedures apply:

Block

1. Item Nomenclature: Leave blank.

2. Net Quantity per Package: Enter the gross weight of the package. (This is the weight of

the package the form is being placed on.)

(The copies for the troop commander, A/C commander, station file, and the four sides of the pallet will be blank if

more than one M-16 Weapons container is listed).

3. Transportation Control Number: Enter the TCN for this package.

4. Consignment Gross Weight: Total Gross Weight of each Pallet/Package shipped under the

same TCN (This is the total weight of all M-16 Weapons

Packages on the Pallet under the same TCN).

5. Destination: Address of Consignee in-the clear. (If unknown or classified World

Wide Mobility may be used.)

6. Supplemental Information: Enter "Constant Surveillance and Custody Service (CIS)"

"Signature and Tally Record Service (675)"

7. DTR Reference: Cite DTR Chapter 205, Para I.2.

8. Handling Instructions: Enter any special handling instructions. In this case enter

(Couriers will be E-4 or higher and/or civilian grade

equivalent.)

9. Address of Shipper: Complete in-the-clear address of shipping activity. (For this

unit it is 162FW 6620 S. Air Guard Way, Tucson, AZ 85706)

10. Typed Name, Signature, and Date: Self-explanatory.

NOTE: One copy will have the serial numbers listed on the back of the DD Form 1387-2 or below the form where it is printed on a full sheet of paper. This copy will be placed in the increment folder to be pulled for the Aircraft Commander's Packet. (The other copies will not have the serial numbers)

NOTE: A total of 8 copies will be prepared plus 1 additional copy for each additional piece.

Figure V-26. Instructions for Completing DD Form 1387-2, Unclassified Shipments for Rifles, 5.56MM (M-16A2) 15 or Less

1. ITEM NOMENCLATURE	2. NET QUANTITY Weight of ind	r PER PACKAGE ividual Package	3. TRANSPORTATION CONTROL NO. Enter the TCN	
	4. CONSIGNMENT Wt of all Pallets	r gross weight Packages on TCN	DESTINATION Destination or World Wide Mobility	
6. SUPPLEMENTAL INFORMATION "Military Guard Personnel (MGP)" "Signature and Tally Record Service (675)"				
This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and in proper condition for transportation according to the applicable regulations of the Dept of Transportation. THIS IS A U.S. DEPARTMENT OF DEFENSE SHIPMENT! (Complete applicable blocks below)				
7. DTR REFERENCE DOD 4500.9R Part II, Chapter 205, Paragraph I. 2.				
8. HANDLING INSTRUCTIONS Military Guard Personnel must be E-4 or higher and armed with a minimum of a 9mm pistol with two 15 round magazines, one of which is in the weapon with a round chambered.				
9. ADDRESS OF SHIPPER 162FW 6620 S. Air Guard Way, Tucson, AZ 85706			SIGNATURE AND DATE Kilmer 14 Jul 2005	

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Figure V-27. DD Form 1387-2, Special Handling Data/Certification for Rifles, 5.56MM (M-16A2) 16 or More

Instructions for Completing the DD Form 1387-2 Unclassified Shipments for Rifles, 5.56MM (M-16A2) 16 or More

If the material shipped is unclassified, the following procedures apply:

Block

1. Item Nomenclature: Leave blank.

2. Net Quantity per Package: Enter the gross weight of the package. (This is the weight of

the package the form is being placed on.)

(The copies for the troop commander, A/C commander, station file, and the four sides of the pallet will be blank if

more than one M-16 Weapons container is listed).

3. Transportation Control Number: Enter the TCN for this package.

4. Consignment Gross Weight: Total Gross Weight of each Pallet/Package shipped under the

same TCN (This is the total weight of all M-16 Weapons

Packages on the Pallet under the same TCN).

5. Destination: Address of Consignee in-the clear. (If unknown or classified World

Wide Mobility may be used)

6. Supplemental Information: Enter "Military Guard Personnel (MGP)" and "Signature and

Tally Record Service (675)"

7. DTR Reference: Cite DTR Chapter 205, Para I.2.

8. Handling Instructions: Enter any special handling instructions. In this case enter

(Military Guard Personnel must be an E-4 or higher and armed with a minimum of a 9mm pistol with two 15 round magazines, one of which is in the weapon with a round

chambered.)

9. Address of Shipper: Complete in-the-clear address of shipping activity. (For this

unit it is 162FW 6620 S. Air Guard Way, Tucson, AZ 85706)

10. Typed Name, Signature, and Date: Self-explanatory.

NOTE: One copy will have the serial numbers listed on the back of the DD Form 1387-2 or below the form where it is printed on a full sheet of paper. This copy will be placed in the increment folder to be pulled for the Aircraft Commander's Packet. (The other copies will not have the serial numbers)

NOTE: A total of 8 copies will be prepared plus 1 additional copy for each additional piece.

Figure V-28. Instructions for Completing DD Form 1387-2, Unclassified Shipments for Rifles, 5.56MM (M-16A2) 16 or More

1. ITEM NOMENCLATURE	NET QUANTITY PER PACKAGE Weight of individual Package	3. TRANSPORTATION CONTROL NO. Enter the TCN		
	4. CONSIGNMENT GROSS WEIGHT	5. DESTINATION		
	Wt of all Pallets/Packages on TCN	Destination or World Wide Mobility		
6. SUPPLEMENTAL INFORMATION				
"Constant Surveillance and Custody Service (CIS)" "Signature and Tally Record Service (675)"				
This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and in proper condition for transportation according to the applicable regulations of the Dept of Transportation. THIS IS A U.S. DEPARTMENT OF DEFENSE SHIPMENT! (Complete applicable blocks below)				
7. DTR REFERENCE DOD 4500.9R Part II, Chapter 205, 2	Paragraph I. 2.			
8. HANDLING INSTRUCTIONS Couriers will be E-4 or higher and/or civilian grade equivalent.				
9. ADDRESS OF SHIPPER	10. TYPED NAME.	SIGNATURE AND DATE		
162FW 6620 S. Air Guard Way, Tucson, AZ 85706		SMSgt Charles C. Kilmer 14 Jul 2005		
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DD FORM 1387-2, NOV 2004 PREVIOUS EDITION IS OBSOLETE. Form Associated OMS No.
Figure V-29. DD Form 1387-2, Special Handling Data/Certification for Pistols 9MM

Instructions for Completing the DD Form 1387-2 Unclassified Shipments for Pistols, 9MM

If the material shipped is unclassified, the following procedures apply:

Block

1. Item Nomenclature: Leave blank.

2. Net Quantity per Package: Enter the gross weight of the package. (This is the weight of

the package the form is being placed on.)

(The copies for the troop commander, A/C commander, station file, and the four sides of the pallet will be blank if

more than one 9 MM Weapons container is listed).

3. Transportation Control Number: Enter the TCN for this package.

4. Consignment Gross Weight: Total Gross Weight of each Pallet/Package shipped under the

same TCN (This is the total weight of all 9MM Weapons

Packages on the Pallet under the same TCN).

5. Destination: Address of Consignee in-the clear. (If unknown or classified World

Wide Mobility may be used)

6. Supplemental Information: Enter "Constant Surveillance and Custody Service (CIS)"

"Signature and Tally Record Service (675)"

7. DTR Reference: Cite DTR Chapter 205, Para I.2.

8. Handling Instructions: Enter any special handling instructions. In this case enter

(Couriers will be E-4 or higher and/or civilian grade

equivalent.)

9. Address of Shipper: Complete in-the-clear address of shipping activity. (For this

unit it is 162FW 6620 S. Air Guard Way, Tucson, AZ 85706)

10. Typed Name, Signature, and Date: Self-explanatory.

NOTE: One copy will have the serial numbers listed on the back of the DD Form 1387-2 or below the form where it is printed on a full sheet of paper. This copy will be placed in the increment folder to be pulled for the Aircraft Commander's Packet. (The other copies will not have the serial numbers)

NOTE: A total of 8 copies will be prepared plus 1 additional copy for each additional piece.

Figure V-30. Instructions for Completing DD Form 1387-2, Unclassified Shipments for Pistols 9MM