



Internal Air Transport Certification

AFLCMC/EZFC
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<https://cs3.eis.af.mil/sites/AFLCMCEZF/AirCerts>



Date: 28 January 2016

Item Nomenclature: HEMTT A4 series

File Number: 2008.07.22 Rev 3

Requestor: On File

Superseded Certification Date: 11 February 2014

New Information Summary: Added M1120A4 with Enhanced Container Handling Unit (E-CHU)

Item Description: The Heavy Expanded Mobility Tactical Truck (HEMTT) A4 vehicle series are identified to be 8 x 8 two tandem axle trucks with a low profile integrated armored cab (B-kit). An additional armor package (C-kit) is also authorized. The vehicles without armor have a front tandem axle rated capacity of 34,000 lbs. The vehicles with armor have a front tandem axle rated capacity of 40,500 lbs.

NOTE: The listed dimensions are approximations. Actual dimensions can vary as long as aircraft limitations published in applicable cargo loading manuals and the conditions of certification listed below are not violated.

Table 1: Dimensions, Gross Vehicle Weight Ratings and Figure Numbers in Attachment 1

Designation	Length (in)	C-130 Only		C-5 & C-17		GVWR /w armor (lbs)	Rear Tandem Rating (lbs)	Figure Number
		Width (in)	Height (in)	Width (in)	Height (in)			
M1977A4 CBT	401	102	101	141	129	69,000	35,000	9
M1120A4	401	102	101	141	129	71,000	37,000	1
M1120A4 with E-CHU	422	102	101	141	129	71,000	37,000	1
M985A4	410	102	101	141	119	71,000	37,000	7
M985A4 GMT	410	102	101	141	146	71,000	37,000	8
M984A4	405	102	101	141	119	99,000	65,000	2
M983A4	360	102	101	141	119	66,000	32,000	5
M983A4 LET	360	102	101	141	119	86,000	52,000	6
M978A4	417	102	101	141	119	66,000	32,000	4
M977A4	410	102	101	141	119	69,000	35,000	3

Certified Aircraft: USAF C-130, C-17 and C-5. The M984A4 is only transportable on the C-17 and C-5 aircraft due to its air transport weight.

Conditions of Certification:

1. Maximum Weight for Air Transport:

a. Gross Vehicle Weight:

(1) C-130: 43,000 lbs

(2) C-5 and C-17: In accordance with Table 1 GVWR

b. Axle Weight:

- (1) C-130: 13,000 lbs (Floor Loading Limit).
- (2) C-5 and C-17:

Front Tandem - Unarmored 34,000 lbs; Armored 40,500 lbs
 Rear Tandem – In accordance with Table 1

2. Item Preparation:

- a. Shipper is responsible for providing all shoring materials. See paragraph 5 for specifications.
- b. Remove C-kit plates surrounding the front tiedown provisions as illustrated in Figure 1.

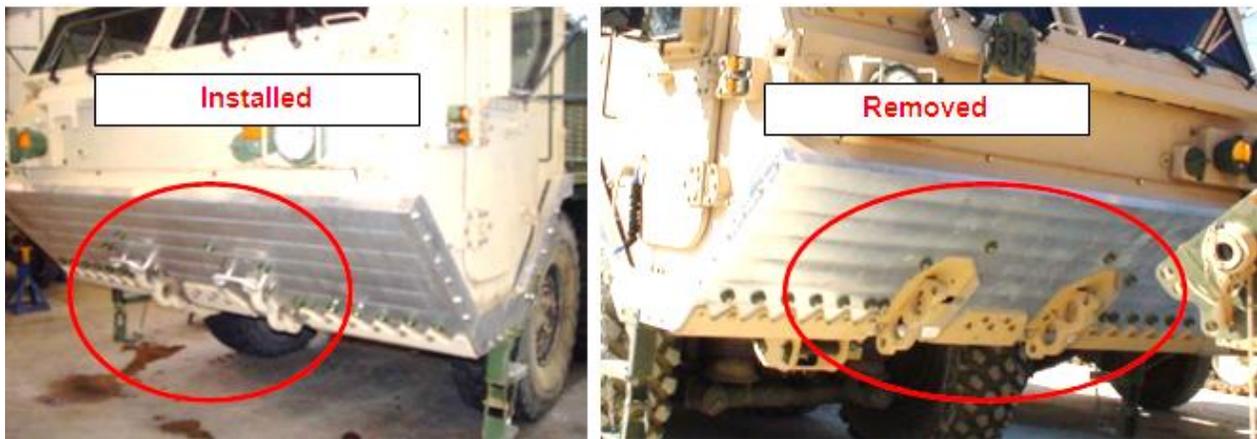


Figure 1: C-kit plates surrounding front tiedown provisions

- c. C-130: Maximum Height – 102”, Maximum Width – 102” and in accordance with Table 2.

NOTE: Width is at widest point at the grab handles and lights on front and rear. The remainder of the vehicle is 96” wide. C-130 air transport height is after reconfigured in accordance with Table 2.

Table 2: Necessary Reconfiguration for C-130E/J and J-30 Air Transport

Variant for Air Transport	All models with BII, 1/8 tank of fuel, highway tire pressures with axle #2 tires reduced to 35 psi, new tow eye design, no kits and as noted
M1120A4	Spare Tire, top STC(Spare Tire Carrier) Arm and RAD/CAC (Radiator and Charge Air Cooler) grilles moved to 239" rear of centerline of front tandem, LHS hook arm folded down, do not ship with CHU installed, E-CHU may be installed.
M983A4 LET	Spare Tire and top STC Arm removed, SRW (Self Recovery Winch)
M983A4	Spare Tire and top STC Arm removed, SRW
M977A4	Spare Tire and top STC Arm moved to 200" rear of centerline of front tandem,SRW
M978A4	Spare Tire and top STC Arm removed, SRW
M985A4	Spare Tire and top STC Arm moved to 200" rear of centerline of front tandem, SRW
M1977A4 CBT	Spare Tire, top STC Arm and RAD/CAC grilles moved to 239" rear of centerline of front tandem, LHS hook arm folded down, SRW

- d. All hazardous materials (to include fuel level, batteries, etc.) must be prepared and certified for airlift in accordance with TM 38-250/AFMAN 24-204(I). Do not consider this air transport

certification as approval for hazardous materials. Authorization for airlifting hazardous material is the responsibility of AFMC/A4RT (DSN 787-4503 or COM (937) 257-4503).

3. Loading Instructions:

- a. The vehicle can be loaded using general loading procedures as listed in the respective aircraft cargo loading manual.
- b. C-5: Parking shoring is required under tires that exceed 18,280 lbs.
- c. C-130: position vehicle inside the restricted area, FS 337-682 on C-130 E-H and LS 562-832 C-130J, J-30.

4. Restraint requirements: The HEMTT A4 and all accompanying cargo must be restrained to meet MIL-STD-1791 requirements of 3G forward, 1.5G aft and lateral, and 2G up. In addition, stored or installed equipment must meet these requirements and be capable of withstanding a 4.5G down load. The three tiedowns on either side are each rated at 25,000 lbs. The MIL-STD 209 test data of the front and rear provisions is listed below. Additional restraint can also be obtained from the vehicle axles up to their rated capacity (Item Description and Table 1), not to exceed 50% of the required restraint in any given direction.

Table 3: Provision Location & Rated Capacities

Provision Location	Longitudinal	Lateral	Vertical
Front Provisions	166,625 lbs	52,000 lbs	35,450 lbs
Rear Provisions	166,625 lbs	26,700 lbs	24,700 lbs

5. Shoring Dimensions:

- a. C-5 Parking Shoring: 16" L x 17" W x ½" H.

Required Distribution:

- 1. Shipper shall give a copy of this certification to the ATOC representative when the item is presented for airlift. This memo shall be part of the official cargo manifest documentation package and shall be briefed to the aircraft loadmaster prior to loading these items.
- 2. AMC/A3V & AMC/A4T.
- 3. SDDCTEA.

Point of Contact: Thomas McPeak, at thomas.mcpeak.1@us.af.mil or ATTLA@us.af.mil, DSN 986-9903 or Commercial (937) 656-9903. Refer to file number 2008.07.22 Rev 3 to reference this item.



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- 1 Attachment:
- 1. Figures of variants within A4 series

Attachment 1

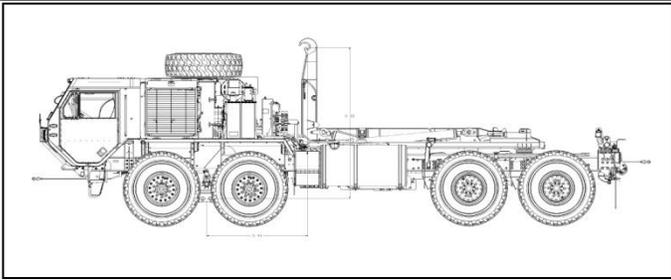


Figure 1: M1120A4

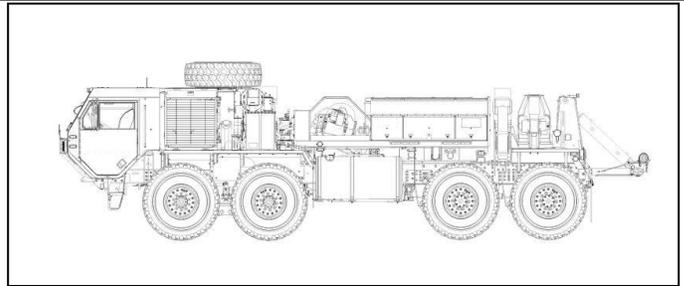


Figure 2: M984A4

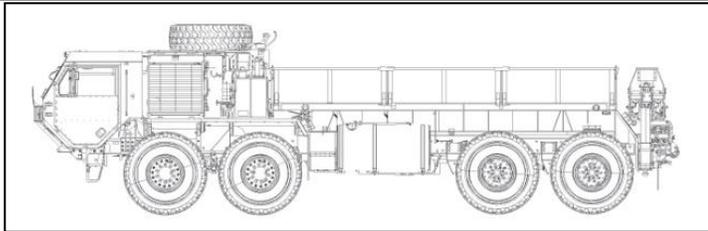


Figure 3: M977A4

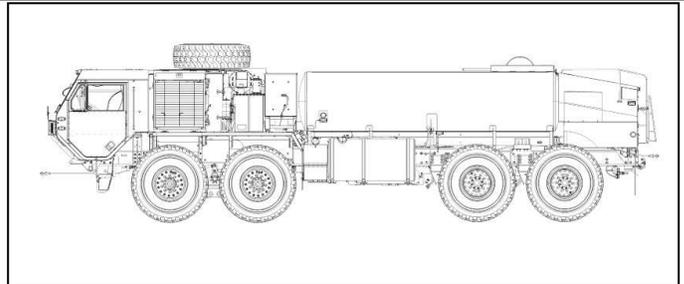


Figure 4: M978A4

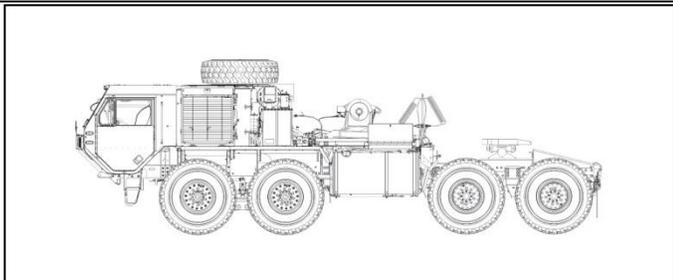


Figure 5: M983A4 LET

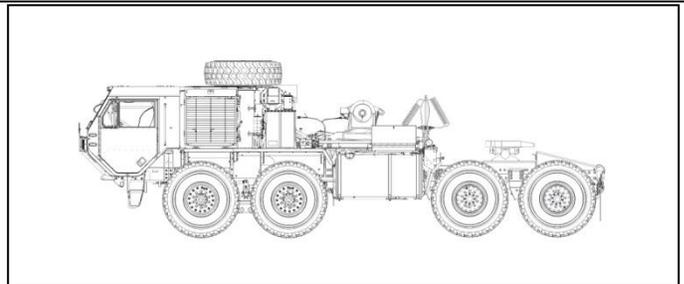


Figure 6: M983A4

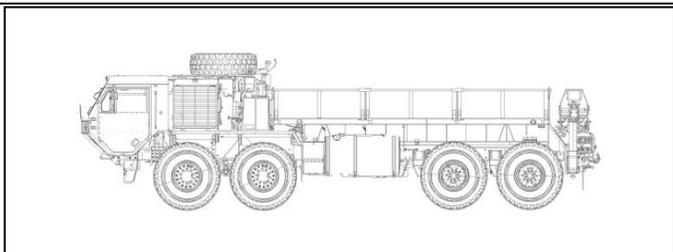


Figure 7: M985A4

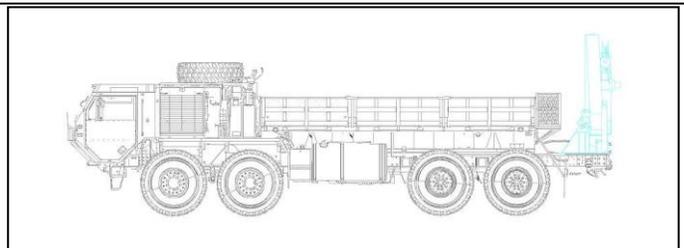


Figure 8: M985A4 GMT

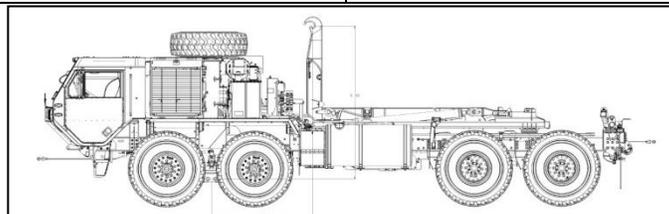


Figure 9: M1977A4 CBT