



# Internal Air Transport Certification

AFLCMC/EZFC (ATTLA)  
2145 Monahan Way  
WPAFB, OH 45433-7017  
<https://intelshare.intelink.gov/sites/attla/>



**Date:** 8 November 2018

**Item Nomenclature:** FMTV LSAC A0P1 and A1P1 Series Vehicles

**File Number:** 2012.07.12 Rev 5

**Requestor:** On File

**Superseded Certification Date:** 7 July 2017

**New Information Summary:** Corrected height of M1087.

### Reference Documents:

- (a) Low Signature Armored Cab Briefing, May 2012
- (b) E-mail from SDDCTEA (Allan Thornton), RE: FMTV LSAC Air Transport, 30 Oct 2012
- (c). 330 ACSG/GFEA 12 August 2009 e-mail, subject: FMTV

**Item Description:** The subject items are Family of Medium Tactical Vehicles (FMTV) A0P1 and A1P1 series vehicles with the Low Signature Armor Cab (LSAC) enhancement upgrade kit. The approximate size and weight ratings are shown in Table 1.

**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. Adjustments to shoring and/or loading methods shall be reported to ATTLA.



**Figure 1: Example of LSAC Vehicles (M1079, M1084, M1085, M1086, M1090, not shown)**

**Certified Aircraft:** USAF C-17 and C-5

**Conditions of Certification:**

**1. Maximum Weight for Air Transport:** See Table 1

Model # (AOP1 and A1P1)	Approximate			Front Axle Rating /Wt Witho ut Shorin g (lb)	Max Front Axle Wt with Shoring (lb)	Rear Axle			GVWR (lbs)
	L (in)	W (in)	H (in)			Intermediate Axle Rating (lb)	Rear Axle Rating (lb)	Rear Bogie Rating (lbs)	
M1078	263	99	119	14,700	19,500	n/a	15,000	n/a	29,400
M1079	262	99	139	14,700	19,500	n/a	15,000	n/a	30,640
M1083	278	99	119	14,700	19,500	15,000	15,000	30,000	35,800
M1084	307	99	119	14,700	19,500	15,000	15,000	30,000	40,985
M1085	353	99	119	14,700	19,500	15,000	15,000	30,000	38,045
M1086	382	99	119	14,700	19,500	15,000	15,000	30,000	44,700
M1087	392	99	148.5	14,700	19,500	15,000	15,000	30,000	48,265
M1088	286	99	119	14,700	19,500	19,000	19,000	38,000	37,960
M1089	379	99	119	14,700	19,500	19,000	19,000	38,000	51,800
M1090	290	99	119	14,700	19,500	15,000	15,000	30,000	40,725
M1157	294	99	119	14,700	19,500	19,000	19,000	38,000	52,720

**NOTE:** Weight Limit for Secondary/Accompanying load on vehicle bed is 10,000 lbs

**Table 1: LSAC Characteristics**

**2. Item Preparation:**

- a. Remove weapons from roof-mounted gun rings.
- b. Shipper is responsible for providing all shoring materials. See paragraph 5 for specifications.
- c. Remove and palletize payloads with heights exceeding aircraft capability.
- d. Do not use "Air Transport" or other lower tire inflation pressure settings. Tires must be inflated at highway/operational inflation pressure.
- e. 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.

**CAUTION:** When loading the M1087 series vehicles; on C-5 aircraft; with the shelter on the back of the vehicle it is recommended to load them driven in through the forward loading complex only. If the vehicle must be backed in or loaded through the aft loading complex the loadmaster must use the projection charts in the 1C-5A-9 to determine if shoring is required.

b. Vehicles with height greater than 113" (e.g., GPK equipped trucks MTV LHS) :

- 1) C-5: Side-by-side loading may not be possible.
- 2) C-17: Maximum height under or forward of aircraft wingbox is 150" centerline loaded.

**4. Restraint Requirements:** The LSAC and all accompanying cargo must be restrained to meet air transport 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 tiedown provision ratings are in Table 2. Restraint may be applied to axles up to their axle ratings in longitudinal and lateral directions as listed in the Item Description paragraph. Do not apply more than 50% of required restraint to vehicle axles for longitudinal and lateral directions. Spring mounted axles provide zero vertical restraint. Utilize frame points for the remainder of restraint. Cargo bed tiedown provisions are rated at 5,000 lbs each for use with secondary cargo.

**Table 2: Restraint Capacity**

Provision Location	Longitudinal	Lateral	Vertical
Forward	92,967 lbs	36,829 lbs	24,860 lbs
Aft	92,967 lbs	33,279 lbs	24,129 lbs

**CAUTION:** The LSAC A1P1 tiedown front tiedown locations may have a shackle mounted in the small holes forward of the tiedown provision. Only use the large opening shown in Figure 2.



**Figure 2: Correct Tiedown Opening**

**5. Minimum Required Shoring Dimensions:**

a. Sleeper Shoring: 14" L x 18" W (2 stacks). The sleeper shoring must be built up so that it is snug against the underside of the chassis/frame and secured.

**Required Distribution:**

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

**Point of Contact:** Tom 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 2012.07.12 Rev 5 to reference this item.



Reviewed by: BRIAN L. HERRIOTT  
Aerial Delivery Specialist  
Crew Systems Branch



Approved by: MARK A. KUNTAVANISH  
Aerial Delivery Technical Expert  
Crew Systems Branch