## Shop, Aircraft Maintenance, Organizational. (Aircraft/Helicopter Maintenance Unit [A/HMU]) FAC: 2112

CATCODE: 211154 OPR: AF/A4L OCR: AF/A4O-A

1.1. **Description.** This building is a main control point for all A/HMU maintenance activities, administration, task training, equipment storage, and tool storage. A/HMUs are responsible for servicing, inspecting, maintaining, and launching/recovering assigned aircraft; maintaining/storing required aircraft maintenance equipment/tools; and ensuring all mobility requirements are met. There is normally one A/HMU for each assigned Operations Squadron (OS). A/HMUs may include the following sections: Production, Aircraft, Specialist, Scheduling, Weapons, Debrief and Support. Additional space could be required for aircraft field service representatives.

1.2. **Requirements Determination.** Each A/HMU needs an operational building for administration, scheduling, training, briefing, and aircraft equipment/tool storage. Equipment/tool storage may be in a separate building.

1.2.1. Submit projects for unlisted missions, A/HMU types, or additional space requirements through the MAJCOM/A4/A7 to AF/A4O-A.

## 1.3. Scope Determination.

1.3.1. Provide space for the NCOIC, OIC, administration, debrief, training, field service representatives, Air Force Engineering and Technical Services (AFETS), scheduling, production, section flight chiefs (Production, Aircraft, Specialist, Scheduling, Weapons, Debrief, and Support), and staff. Space is also required for test/support equipment and tools to support all mission taskings. Equipment includes aircraft test equipment, maintenance tools, mobility pallets (ISU 70/90s), and -21 equipment. Specific mission requirements may require additional storage space to be validated through the MAJCOM/A4/A7 to AF4O-A.

1.3.2. Helicopter units with weapon mission requirements, are provided an additional General Purpose Maintenance facility. Recommended square footages provided are for a Primary Assigned Aircraft (PAA) Squadron. Spatial requirements include: Weapons vault for weapons storage of 93 m<sup>2</sup> (1,000 ft<sup>2</sup>); weapons maintenance area of 557 m<sup>2</sup> (6,000 ft<sup>2</sup>); avionics vault of 28 m<sup>2</sup> (300 ft<sup>2</sup>); avionics maintenance area of 23 m<sup>2</sup> (250 ft<sup>2</sup>); engine maintenance of 297 m<sup>2</sup> (3,200 ft<sup>2</sup>); and helicopter blade repair area of 237 m<sup>2</sup> (2,550 ft<sup>2</sup>).

1.3.3. Squadrons in a severe winter environment need additional space for covered storage of non-powered support equipment. Severe winter environments have at least 30 days per year at minus  $23^{\circ}$ C ( $-10^{\circ}$ F) or lower or have an average January temperature of minus  $7^{\circ}$ C ( $+20^{\circ}$ F) or lower as determined from two 10-year (or greater) weather databases. Additional covered spaces required are 760 m<sup>2</sup> (8,200 ft<sup>2</sup>) for a bomber squadron and 780 m<sup>2</sup> (8,400 ft<sup>2</sup>) for a tanker

squadron.

1.3.4. An annex to the loading shop, consisting of a permanent shelter approximately 22  $m^2$  (240 ft<sup>2</sup>), is necessary at bases where tactical aircraft use arm/disarm pads (CATCODE 116661). One is located beside each pad and provides between-flight shelter for crews stationed there to arm and de-arm weapons and quick-check taxiing aircraft. Process waiver requests if siting violates airfield criteria in UFC 3-260-01.

1.4. **Dimensions.** Table 1.1 lists space requirements for the A/HMU functions. Additional space may be authorized in high-threat areas.

1.5. Design Considerations. Locate next to assigned aircraft parking apron, and maintenance hangar. Special Q-D standards apply to hardened facilities. See AFMAN 91-201.

Table 1.1 Space Requirements for Aircraft/Helicopter Maintenance Unit (A/HMU)

MISSION	Gross Area <sup>1,2,3,6,7</sup>	
	m <sup>2</sup>	ft <sup>2</sup>
KC-135 (12 PAA)	1,167	12,555
C-17 (12 PAA)	1,276	13,735
C-5 (11 - 12 PAA)	1,328	14,295
KC-10 (12 - 15 PAA)	1,182	12,715
C-130 (14 PAA)	1,691	18,205
F-16 (18 PAA)	885	9,520
F-15 (18 PAA)	1,078	11,600
Special Operations Squadrons <sup>4</sup>	1,523	16,394
Combat Search and Rescue Helicopter Unit (15 PAA) <sup>4,5</sup>	2,800	30,144
Combat Search and Rescue HC-130 Unit (9 PAA) <sup>4</sup>	1,526	16,427

NOTES:

1. An additional 19  $m^2$  (200 ft<sup>2</sup>) is authorized for each pararescue person.

2. Criteria are developed between MAJCOM and AF/A3O-A or on an individual basis.

3. Gross area for training squadrons varies due to size and mission. Consult AETC for definitive guidance.

4. Space is determined by individual analysis and validated by the appropriate MAJCOM.

5. Includes 1,301 m<sup>2</sup> (14,000 ft<sup>2</sup>) requirement for gun vault storage/maintenance, engine maintenance, and avionics vault/maintenance (see paragraph 1.3.2).

6. Refer to Chapter 6 of this Manual for approved administrative space standards. Number of personnel requires user justification.

7. Includes common use and maintenance areas.