BY ORDER OF THE COMMANDER
AIR FORCE RESERVE COMMAND

AIR FORCE RESERVE COMMAND
HANDBOOK 32-1001

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Civil Engineering

STANDARD FACILITY REQUIREMENTS

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This handbook implements AFPD 32-10, *Installations and Facilities*. It contains guidelines and information for facility requirements in support of Air Force Reserve Command missions. The criteria in this handbook represent standard space allowances. These guidelines shall be used by key personnel in AFRC civil engineering, and key personnel in other AFRC organizations who allocate space in existing facilities or develop or approve facility requirements. This publication does not apply to the Air National Guard (ANG) but does apply to the Air Force Reserve Command (AFRC) and their units. The use of existing facilities will conform to criteria contained within this handbook unless the physical configurations of existing structures require variances from these guidelines. Criteria for items not addressed in this handbook may be found in AFH 32-1084, *Facility Requirements*. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records,* and disposed of in accordance with (IAW) Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rds/rds_series.cfm**. Refer recommended changes, comments, or questions about this publication to the Office of Primary Responsibility (OPR) at Headquarters Air Force Reserve Command (HQ AFRC/A7PP), 255 Richard Ray Blvd, Bldg 220, Robins AFB GA 31098-1635, using the Air Force (AF) IMT Form 847, Recommendation for Change of Publication, route AF IMT 847s from the field through the appropriate functional chain of command. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include updates to space authorizations to reflect current mission requirements and Air Force standards. Mathematical errors in previous publication have been corrected. Data and tables for Facility Category Codes, Civil Engineering squadrons, Wing and Group Command Sections, Aircrew Flight Equipment, Aircraft Jack Test Stands, Bioenvironmental Engineer, Explosive Ordnance Disposal, Avionics, Wing Process Manager, Exercise Evaluation Team, Maintenance Supply Liaison, Maintenance Squadrons, Contracting, Intelligence Squadron, Guardian Angel Squadron, Force Support Squadron, RED HORSE Squadron, Wing Information Protection, Judge Advocate, Intelligence Flight, Military Personnel Flight, and Combat Arms Training have been updated to reflect new space allocation standards. Requirements for open office construction standards have been amplified. Paragraphs in Chapters 7, 8 and 9 have been re-numbered.

Chapter 1

OVERVIEW

1.1. Purpose. The guidelines in this handbook are applicable to the Air Force Reserve Command (AFRC) and implement DOD construction criteria directives.

1.2. Requirements and Criteria Development:

1.2.1. The criteria in this handbook are the space allowances authorized within AFRC. HQ AFRC functional managers are consulted for space requirements within their areas of responsibility. HQ AFRC/A7PP gathers and compiles these requirements into this handbook. Actual space requirements for each facility (existing or to be constructed) are programmed and justified on the basis of the authorized unit strength and the quantity and type of equipment and supplies to be stored. Adaptive use of existing facilities should be implemented to the maximum extent possible. The use of existing facilities should conform to the following criteria as nearly as possible; however, it is recognized that physical characteristics of existing structures will, in some cases, restrict adherence. Although the facility space standards contained herein are expected to adequately accommodate the majority of AFRC units, we recognize that, due to the highly diversified and, in some cases unique, structure of AFRC operations, a single facility standard will not accommodate every need. Exceptions to facility space criteria will be considered when specific unit functions are not addressed within the established standards or when unique and compelling circumstances exist.

1.2.1.1. All requests for facility space exceptions and waivers shall be forwarded in writing to AFRC/A7P for staffing and coordination through HQ AFRC. The waiver request will contain an analysis of the requirement and depict cost avoidance as applicable.

1.2.1.2. All requests for facility space exceptions and waivers will be reviewed by appropriate members of the HQ AFRC staff and functional experts within the Command. Requests for waivers and exceptions shall be reviewed in a timely fashion and a written reply provided back to the generating unit.

1.2.2. All facility space requirements are given in terms of net area, unless noted otherwise. Gross area for new construction can be computed by use of noted factors (overhead {common use space} 33%) and includes the entire facility to the outside enclosure walls.

1.2.2.1. The gross authorization calculation does not always apply to the use of existing facility space (renovation or alteration). A circulation space factor of only 10% is applied if the mechanical rooms, entryways, bathrooms, hallways, and other common use spaces are not modified.

1.2.3. The space allowances for communications closets and electrical closets are intended for planning purposes and are not to be taken as design criteria. A communication/electrical closet area is added to each reserve facility space. This calculation is 3% of the subtotaled net authorization.

1.2.4. All new construction and renovation projects shall configure buildings to support an open office concept with moveable partitions, demountable walls and systems furniture to allow maximum flexibility for the projected and future users. Hard walls shall be used only when necessary to provide required building integrity, security or to meet building code standards. Where possible, offices shall be joint use and the number and size of exclusive offices kept to a minimum. The allocation for cubicle space in Table 2.1 includes circulation space within the open office area.

1.2.5. When more than one activity occupies a single facility, overhead space (mechanical rooms, halls, etc.) is accounted appropriately against the individual functional authorizations.

1.2.6. Program joint use facilities to the maximum extent practicable where the ANG, Active Force, and Air Force Reserve Command (AFRC) are collocated. Consider facilities such as medical training, dormitories, dining halls, bulk fuel storage, vehicle maintenance, communications centers, small arms ranges, fire stations, munitions/ pyrotechnics storage facilities, etc., for joint use.

1.2.7. Facility space authorizations are based on actual personnel authorizations for each function. Although it is recognized that local variations in unit manning, facility configurations, and customer needs will result in diverse arrangements of internal space, total (gross) authorizations for facilities should not be exceeded and, in many cases, will be reduced to reflect actual unit authorizations.

Chapter 2

BUILDING A REQUIREMENT

2.1. This handbook does not cover every possible mission or function within its chapters and tables. In order to identify new requirements, HQ AFRC/A7PP, in coordination with functional experts within the Command, creates new templates or tables for the purpose of defining space authorizations for a particular mission need. Space authorizations for unique activities are reviewed by HQ AFRC/A7PP on a case-by-case basis. When establishing a space authorization for a new or unique mission need, the programmer should make a comparison with similar facilities as well as review active duty Air Force and DOD facility standards, guidance, and design standards.

2.2. Open areas will be constructed for administrative functions (see 1. 2.4.).

Table 2.1. Typical Administrative Spaces.

Function	Scope (net SF)
Wing Commander	350
Group Commander, Wing Vice Commander	250
Squadron Commander or equivalent Function Chief (SF, CE, etc.)	200
Deputy Group or Squadron Commander, First Sergeant	120
Flight CC, Supervisor, NCOIC, Superintendent	100
General Office cubicle, Full time position, Executive Officer	70
Administrative/Secretary	100
Traditional reservists (TRs) requiring administrative office space	40

2.3. Conversion of net scope to gross facility scope: There are typically three calculations that may be used to arrive at the gross SF authorized depending on the scope of work being done; minor modification to an existing facility, major modification to an existing facility or new construction, and construction of storage space.

2.3.1. **Minor modification to existing facility:** When completing minor modifications to an existing facility, add 10% circulation space to the net scope for the gross authorization.

2.3.2. **Major modification to existing facility or new construction:** If major facility modification or new construction is required, determine the gross facility requirement by adding 3% to the subtotaled net scope for communications/electrical closet requirements, add 10% for circulation space, and then add an additional 20% for facility overhead.

2.3.3. **Storage space construction:** When constructing storage space, add 20% facility overhead to the net scope for the gross authorization. Only add the 3% communications/ electrical closet factor if these elements are required within the facility.

2.4. Facility Category Codes: Real Property Cat Codes are assigned based on the functions of the subject facility.

2.4.1. Facilities located on AFRC host installations should be coded in accordance with active duty Cat Codes contained in AFH32-1084.

2.4.2. In order to avoid duplication of facility coding at AFRC tenant unit locations, use Cat Codes noted herein.

2.4.3. Category Codes for unique AFRC facilities, or other facilities not addressed in this publication will be determined by HQ AFRC/A7IA on a case-by-case basis.

Chapter 3

BASE OPERATING SUPPORT

3.1. Base Operating Support (BOS) functions. Base Operating Support (BOS) functions include those activities that, while necessary to provide a fully functional installation, are not directly in support of the base primary mission. Most BOS functions are the responsibility of the Host installation.

3.2. Base Operating Support (BOS) – Wing Functions: The requirements for the BOS functions listed below can be found in Paragraph 8.7.

3.2.1. Financial Management (Budget Office).

3.2.2. Civilian Personnel.

3.2.3. Force Support Squadron.

3.2.4. Contracting.

3.2.5. Public Affairs.

3.2.6. Judge Advocate.

3.2.7. Chaplain.

3.2.8. Safety.

3.2.9. Historian

3.2.10. Sexual Assault Response Coordinator (SARC)

3.2.11. Protocol Office.

3.2.12. Anti-terrorism Officer (ATO)

3.2.13. Office of Special Investigations

3.3. Base Operating Support (BOS) - AFRC Host Base Functions. The requirements for the BOS functions listed in paragraph 3.4 through paragraph 3.9 are indicated here for convenience even though some may have separate category codes.

3.4. Security Forces Squadron at AFRC Bases.

3.4.1. **Security Forces Control and Identification (Gate House) (Cat Code 730-839):** Reference Air Force Installation Entry Control Facilities Design Guide for design criteria.

3.4.2. **Security Forces Operations (Cat Code 730-835):** This facility is the command center for the direction of security, police services (law enforcement), crime prevention, training, information/personnel/industrial security, force protection, and resource protection operations. It is also the site for the SF control center (Central Security Control/Law Enforcement Desk), armory, and unit mobility/supply. Space authorization for this facility is determined by unit manning and number of assigned unit task codes (UTCs). Offices in the facility include the Chief of Security Forces (CSF), Chief of Operations Flight, Security

Forces Manager, and other support sections. Table 3.1 shows proposed space allocation for a Security Forces Squadron (SFS).

Table 3.1. Security Forces Squadron.

DESCRIPTION	SCOPE (SF) Large Unit (note 1)	SCOPE (SF) Medium Unit (note 2)	SCOPE (SF) Small Unit (note 3)
Chief, Security Forces/Commander (CSF/CC)	200	200	200
CSF/CC (TR)	100	100	N/A
Conference Room	200	200	N/A
First Sergeant	120	120	N/A
Orderly Room/Administration (300 SF + 40 SF/Auth TR)	340	340	N/A
Security Forces Manager (SFM)	100	100	N/A
Quality Control NCO (70 SF + 40 SF/Auth TR + 100 SF for QC Test Area)	210	170	N/A
Chief, SF Administration (SFA)	100	100	100
Information/Personnel/Industrial Security	100	100	100
Pass & Registration/Waiting Area	200	200	200
Chief, Operations Flight (SFO)	100	100	100
Superintendent, Operations Flight	70	70	N/A
SFO Support Staff (70 SF/Auth Pos)	560	70	N/A
Shift Supervisor/Flight Chief/Leader (70 SF/Auth Pos)	210	210	210
Squad Leader (70 SF/Auth Pos)	210	210	N/A
Fire Team Leader (70 SF/Auth Pos)	210	210	N/A
SF Control Center/Battle Staff Room	600	600	600
Evidence Storage Room	50	50	N/A
Lost & Found Property Room	50	50	N/A
Report Writing Room (2 @ 50 SF)	100	100	100
Interrogation/Interview Room (note 4)	100	100	N/A
Chief, Training & Resources Flight (SFT)	100	100	100
Superintendent, SFT	70	N/A	N/A
Training Instructor	70	70	N/A
Instructor Support (60 SF/Auth Pos)	70	70	N/A
Classroom (Partitioned)	1,295	1,140	440
Unit Career Advisor/Safety/Historian/DP	70	70	N/A
SF Resources (SFTT)	100	100	N/A
SF Resources Support (70 SF/Auth Pos)	280	280	N/A
Armory (note 5)			
Weapons Cleaning Area	100	100	100
Mobility Storage/Pallets/Build-up (note 6)	4,900	3,500	N/A
Home Station Equipment Storage	250	200	150

Break Room	200	200	100
Men's Locker Room/Shower	350	300	200
Women's Locker Room/Shower	150	150	150
Subtotal (net)	11,935	9,680	2,850
Overhead Space (30%)	3,580	2,900	860
Communications/Electric (3%)	360	290	90
Total (gross)	15,880	12,870	3,800

NOTES:

1. Large Units: 439/452/482 SFS
2. Medium Units: 94/434/910/911/914/934 SFS
3. Small Units: 301/926 SFS
4. Includes one-way glass room
5. Calculating storage requirements will involve several factors unique to each individual installation. These factors include: number/type of SFS unit daily weapons, munitions and equipment; i.e., radios, night vision equipment and other essential equipment. Also included in the calculation are any other weapons stored in the armory, to include: tenant, mobility, privately owned, aircrew, honor guard, etc.
6. Calculation is based on 700 square feet per authorized unit equipped UTC. Adjust authorization to reflect actual number of unit equipped UTCs.

Table 3.2. Vault for Deployable Weapons Storage.

DESCRIPTION No. of Deployable Personnel	**SCOPE Net SF**	**SCOPE Gross SF**
<500	200	240
501-1000	300	360
1001 – 2000	400	480
2001 – 3000	500	600
3001 – 4000	600	720

3.4.3. **Visitors Control Center (Cat Code 730-832):** If constructed as a separate facility, each host installation is authorized a visitors center. This authorization includes space for Pass and ID, restrooms, and a media relations room (large conference room). Table 3.3 shows proposed space allocation for a Visitors Control Center (VCC). Additional functions may be added to this facility (such as recruiters offices) as desired by the installation commander. Do not duplicate functional space present in the VCC (i.e. Pass and ID, recruiters, etc.) elsewhere on the installation.

Table 3.3. Visitors Control Center.

DESCRIPTION	**SCOPE (SF)**
Pass and ID	340
Waiting Area	300
Restrooms	350

Media Center (conference room)	300
SF Storage	100
Break Area	150
Subtotal (net)	1,540
Overhead Space (30%)	460
Communications/Electric (3%)	50
Total (gross)	2,050

3.5. Logistics Readiness Squadron - Vehicle Operations Element (Cat Code 610-121): AFRC units with an assigned Vehicle Operations and Maintenance function are authorized a facility. This allowance includes space for all administrative, supervisory, and training activities associated with the Vehicle Operations function at AFRC installations. Table 3.4 shows proposed space allocation for a base vehicle operations administration function.

Table 3.4. Vehicle Operations Administration.

DESCRIPTION	SCOPE (SF)
Transportation Officer	120
Operations Supervisor (1 @ 100, 1 @ 40)	140
Dispatch Control (2 @ 70, 6 @ 40)	380
Administration Area	100
Break Room	200
Conference/Classroom	400
Vehicle Operations	320
Subtotal (net)	1,660
Overhead Space (30%)	490
Communications/Electric (3%)	50
Total (gross)	2,200

3.6. Logistics Readiness Squadron - Vehicle Maintenance Element (Cat Code 214-425): AFRC units with an assigned Vehicle Operations and Maintenance function are authorized a facility. This allowance includes space for all maintenance and tool/equipment storage activities associated with the Vehicle Maintenance function. Typical vehicle maintenance facilities will contain no more than nine vehicle maintenance bays with at least two bays able to accommodate the largest vehicle assigned to the unit. At least a single bay must have a door opening width of 17 feet (based on 60K loader maintenance requirement). Floor drains in this facility should be avoided but, if present, will be connected to oil/water separators or waste water recovery/recycling systems. Table 3.5 shows proposed space allocation for a base vehicle maintenance shop facility. Vehicle Operations Administration and Vehicle Maintenance Shop should be constructed together in one facility.

Table 3.5. Vehicle Maintenance Shop.

DESCRIPTION	SCOPE (SF)
Inspector's Office / QAE (1 @ 70, 1 @ 40)	110
Library/Tech Manual	100
Dynamometer Bay	1,020
Alignment	540
Battery	145
Wheel and Tire	700
Tool Crib	375
Material Control/Bench Stock	300
Machine Shop	800
Maintenance Lift Bays (4 @ 510)	2,040
General Purpose Maintenance Bays (4 @ 510)	2,040
Wash rack	600
Drive Through Corridor	3,250
Subtotal (net)	12,020
Overhead Space (30%)	3,600
Communications/Electric (3%)	360
Total (gross)	15,980

3.6.1. **Refueler Vehicle Maintenance Shop (Cat Code 214-467):** Space for this function may be provided as either a separate maintenance bay or by adding one bay to the vehicle maintenance shop. Re-fuel maintenance bay is authorized a scope of 1,800 square feet (based on R-11 vehicle requirements). If added to the automotive shop, this bay must be separated by a fire wall. If constructed as a separate facility, add 300 square feet for work bench and tool storage. Co-located office or administrative area is not authorized. Re-fuel maintenance facility must be provided with a single overhead door, a forced ventilation/exhaust system, a fume monitoring system, floor drains connected to an oil water separator, and an explosion proof electrical/telephone system.

3.6.2. **Enclosed Vehicle Parking (Northern Tier):** Installations meeting the definition of northern tier locations are authorized 6,000 square feet (gross) of heated vehicle storage space (Cat Code 214-426) and an additional 6,000 square feet (gross) of unheated vehicle storage space (Cat Code 214-428). This space is typically used for storage of high value and special purpose vehicles.

3.7. Contractor Operations (Cat Code 610-811): At AFRC installations that have contractor operated BOS functions, the contractor personnel should be provided administrative and functional work space equivalent to the lesser of either a) existing space for that function at the installation or b) the space authorized for their function in this handbook. BOS contractor project management and administrative staff are authorized no more than 400 square feet for office functions and file storage.

3.8. Base Civil Engineer Administration and Maintenance Facility (Cat Code 610-127): This facility provides shop and administrative space necessary to support all host base

maintenance functions performed by the base civil engineer as well as administrative and training space for assigned personnel. Table 3.6 shows proposed space allocation for a Base Civil Engineering facility. Additional space may be provided for additional activities (such as a pavements and ground facility (Cat Code 219-943)) where fully justified, using active force criteria. Space authorization for mobility tasked Civil Engineering Squadrons is addressed in section 8.5.

Table 3.6. Base Civil Engineering.

DESCRIPTION	SCOPE (SF)
ADMINISTRATION	
- Base Civil Engineer	200
- Administration	100
- Industrial Engineer	70
- LAN/Systems Administrator	200
- Environmental (Chief 100, 5 @ 70, 70 storage)	520
- Engineering (Chief 100, 4 @ 70, 100 storage)	480
- Chief of Resources	100
- Financial Management (2 @ 70, 60 storage)	200
- Real Estate (1 @ 70, 60 storage)	130
- Training Storage	60
- Drafting/CADD (2 @ 90)	180
- Reproduction/Plans Storage	400
- Break Room	300
- Conference Room	300
Subtotal (net)	3,240
OPERATIONS AND MAINTENANCE	
- Operations Chief (Contract QAE at BOS locations)	100
- Production Control (1 @ 70, 200 storage)	270
- Material Control (1 @ 70, 60 storage)	130
- Planning (2 @ 70)	140
Subtotal (net)	640
WORK AREA and SHOP (See Note 1, 2):	
- Pest Management	1,000
- Roads and Grounds	2,800
- Refrigeration, HVAC, Liquid Fuels	1,300
- Sheet Metal	1,200

- Plumbing	500
- Welding Shop	500
- Paint	900
- Carpentry Shop	1,900
- Key Shop	120
- Sign Shop	360
- Power Production, Electric	1,100
Subtotal (net)	11,680
STORAGE (See Note 2):	
- Warehouse	3,000
- Paint Storage	120
- Janitorial Supplies	300
Subtotal (net)	3,420
Subtotal (net)	18,980
Overhead Space (30%)	5,700
Communications/Electric (3%)	570
Total (gross)	25,250

NOTES:

1. Includes space for four superintendents.
2. Individual shops and storage spaces utilized space saver equipment.

3.8.1. **Base Engineer Storage Shed (Cat Code 219-947):** This facility provides covered storage for items of equipment and supplies needed for installation operations and maintenance which do not require regular warehouse storage. A scope of 2,000 square feet is authorized for AFRC host base civil engineer organizations.

3.8.2. **Base Engineer Recycling Operations Center (Cat Code 219-946):** This facility provides enclosed and covered storage for equipment and supplies needed for operation of the installation recycling program and for storage of recyclable material prior to removal. Facility includes open office space for a single individual and utility connection for recycling processing equipment. A scope of 2,900 square feet is authorized for AFRC host installations. Additional outdoor secure space may be provided as needed to meet local storage requirements for material prior to removal.

3.9. Logistics Readiness Squadron – Distribution Element (Cat Code 442-758): This element of the Logistics Readiness Squadron operates the packing, crating, and traffic management office (TMO) (Cat Code 610-142) functions at Host and Tenant base locations. Table 3.7 shows proposed space allocation for the distribution element. Function space is typically located within the main base warehouse facility.

Table 3.7. Logistics Readiness Squadron – Distribution Element.

DESCRIPTION	SCOPE (SF)
Distribution Operations	750
Packing and Crating	2,600
TMO Administration	550
Subtotal (net)	3,900
Overhead Space (30%)	1,170
Communications/Electric (3%)	120
Total (gross)	5,190

Chapter 4

AIRFIELD PAVEMENTS

4.1. General Criteria. AFRC Requirements for items in this group are determined in the same manner as for active duty units when located at Air Force installations. Adherence to these requirements at other locations may not always be possible due to the multiplicity of situations under which AFRC operates. Federal Aviation Administration (FAA) airfield criteria are normally used for construction of runways, taxiways and associated work located on civil airports. Use naval airfield criteria for construction of airfield facilities located at Naval Air Stations.

4.2. Civil Airport Criteria. The criteria are detailed in AFH 32-1084.

4.3. Runway (Cat Code 111-111): Use active force criteria for runway length and other design elements. Standard runway width is 150 feet. Determine minimum runway width and lengths by operating function based on type of aircraft, weather conditions, and mission requirements.

4.4. Paved Overrun (Cat Code 111-115): Use AFH 32-1084 criteria.

4.5. Taxiway (Cat Code 112-211): Use active force criteria (UFC 3-260-1). A taxiway width of 15.2 m (50 ft) and 22.9 m (75 ft) are standard for class A and B runways respectively. Taxiways supporting towing operation will adhere to the following: Taxiway width will be in accordance with outside gear width of design aircraft plus 3.05 m (10 ft) or 15.2 m (50 ft) total width, whichever is less

4.6. Apron (Cat Code 113-321): Follow active force criteria. AFRC will not construct ramp space for transient aircraft parking but will provide transient aircraft parking on existing ramp space on as as-available basis.

Chapter 5

PETROLEUM DISPENSING AND OPERATING FACILITIES

5.1. Logistics Readiness Squadron Fuels Management Element (Cat Code 121-111): A fuels operations building is required to provide a centralized facility for administering all base functions related to the receipt, storage, and issue of petroleum products and, when required, liquid oxygen and nitrogen (LOX and LIN). The facility allowance includes space for all management, administration, laboratory, and functional work space associated with the Logistics Readiness Squadron Fuels Management Element. Only one Fuels Operations facility is authorized per installation. Table 5.1 shows proposed space allocation for a base Fuels Operations Building.

Table 5.1. Fuels Operations Facility.

DESCRIPTION	SCOPE (SF)
Vehicle Checkpoint Building (Detached)	100
Lab	300
Ready Room/Classroom	550
Dispatch/Control	150
Administration	250
Locker/Latrine/Showers	300
FMO Office	100
Subtotal (net)	1,750
Overhead Space (30%)	530
Communications/Electric (3%)	50
Total (gross)	2,330

5.2. Hydrant Refueling System (Cat Code 121-122): Hydrant refueling systems are required to support aircraft that carry over 20,000 gallons of fuel. Where hydrant systems are justified, provide a fueling position for the total number of primary assigned aircraft (PAA) minus two.

5.3. Vehicle Fueling System (Cat Code 123-335): Provide two duel outlet dispensing pedestals for ground fuels for each increment of 150 motor vehicles to be served. Provide at least one pedestal for mogas and another for diesel. Provide storage in above ground tanks.

5.3.1. **Alternative / Bio-Base Fuel.** Provide a minimum of one dispensing pedestal for E-85 fuel and one pedestal for B-20 fuel at each AFRC installation.

5.4. Jet Fuel Operating Storage (Cat Code 124-135): Provide combined storage requirements for both operating and bulk storage based on the requirements of the assigned weapon system per table 5.2. Combined operating and bulk storage not to exceed the following quantities for 12 PAA airlift and 24 PAA fighter units:

Table 5.2. Jet Fuel Storage Maximum Capacity.

AIRCRAFT	QUANTITY (BL)
Fighter	5,000
C-130	5,000
KC-135/C-5/C-17	20,000

NOTE: Additional storage may be justified based on PAA, tenant support, and contingency requirements for the installation. Provide a minimum of two cone roof storage tanks.

Chapter 6

COMMUNICATION, NAVIGATIONAL AIDS, AIR TRAFFIC CONTROL, AND AIRFIELD LIGHTING

6.1. General Criteria. At AFRC owned locations, AFRC is responsible for air traffic control, air navigation facilities, Meteorological and Navigational Aids (METNAV) facilities and equipment, and airfield lighting. At joint use facilities, AFRC is responsible for these functions and facilities as described in the applicable Joint Use Agreement. AFRC responsibility will include, but is not limited to financial responsibility for operating and/or maintaining permanently installed NAVAID systems such as control towers, radar facilities, ground controlled approach (GCA), radar approach control (RAPCON), instrument landing system (ILS), VHF omnidirectional range (VOR), tactical navigational aid (TACAN), airport surveillance radar (ASR), and precision approach radar (PAR) navigational aids. All facilities will meet standard requirements established in AFH 32-1084.

6.2. Special Criteria. Installation of ground-based aids to air traffic control, air navigation facilities, and airfield lighting at civil airports is normally accomplished by the FAA and airport authority. The FAA has the responsibility for, and normally programs for, these facilities.

6.3. Communications and Information Facility (Cat Code 131-111): This host base facility provides centrally located communications and information systems, both for intra-base and off-base communications. This facility normally includes a switchboard room, frame room, administration, radio maintenance and communication/crypto centers for base communications, information system flight, mission systems flight, communications plans and programming flight, and automated data processing (ADP)/network control center (NCC). Table 6.1 shows proposed space allocation for a base communications facility.

Table 6.1. Base Communications Facility.

DESCRIPTION	SCOPE (SF)
Network Control Center (NCC) / Help Desk	1,800
Classified Destruction	50
Communications Security Vault	400
Communications and Information Manager/ Commander	140
Information Systems Flight Chief	100
Mission Systems Flight Chief	100
Plans and Programs Flight Chief	100
Base Radio Operations	200
Training	400
Administration and files	300
Base Telephone Switchboard	180
Comm - Computer Radio Maintenance	400
Comm - Computer Telephone Maintenance	400
Comm - Computer Maintenance Equipment Storage	150
Comm - Computer PC Maintenance	200
Storage & Supply Room (Computer receiving and turn-in)	500
Network Vulnerability & Configuration Management (AFNetOps)	120
Break Area	200
Base Test Facility	250
Switchboard Operator	140
ATCALS Maintenance	400
IM Personnel (work space for 15 TRs @ 40 SF each)	600
Mail Room	360
Records Center Storage	200
Electronic Pubs/Forms/FOIA Reading Room	200
Subtotal (net)	7,890
Overhead Space (30%)	2,370
Communications/Electric (3%)	240
Total (gross)	10,500

6.3.1. **Information Systems Flight (Cat Code 131-111):** When the AFRC Wing is located on an Active Duty installation (tenant location) the Information Systems Flight provides communication and information systems support to the Reserve Wing or Group. This function (typically located within the Reserve Headquarters facility) is authorized a total of 1,200 square feet for all management, administrative, training, storage, and functional work space (including mail distribution and message centers).

6.3.2. **Client Systems Technicians (CST) (Cat Code 131-111):** AFRC Wings and Groups with full time CST positions are authorized 80 square feet for each dedicated position. Work

area may be within the individual Group facilities or consolidated within the communications squadron or information systems flight. Storage for computers is included in the communications squadron or information systems flight.

Chapter 7

OPERATIONAL FACILITIES

7.1. Base Airfield Operations Management (Cat Code 141-453): This facility provides space for functions necessary for daily airfield operations and should be located near the main aircraft parking areas and runways. Airfield management function requires space for the airfield manager and administrative support staff, flight planning, flight plan filing, airfield condition chart, pilot briefing, aircrew lounge, supplies, map and chart storage, and communications and tool storage. Airfield Management/Base Operations facilities at Joint Air Reserve Bases use active duty requirements in AFH 32-1084. Airfield Management/Base Operations facilities at Joint Air Reserve Stations are authorized a total of 2,840 square feet for all included functions. Table 7.1 shows proposed space allocation for a base operations facility. There will be only one host operated base operations facility unless special circumstances exist.

Table 7.1. Base Operations Facility.

DESCRIPTION	SCOPE (SF)
Airfield Manager	100
Base Operations Staff (based on seven full time staff)	490
Flight Planning	400
Flight Plan Filing – Ops Desk	200
Pilot Briefing	300
Aircrew Lounge (Note 1)	150
Storage (Maps and Charts)	200
Secure Communications Storage (Crew Comm.)	150
Tool Storage	200
Weather Office (See section 7.1.1)	650
Subtotal (net)	2,840
Overhead Space (30%)	850
Communications/Electric (3%)	90
Total (gross)	3,780

Note: A distinguished visitors lounge and snack bar (not to exceed 400 square feet) may be included in the Base Operations facility if not otherwise available nearby.

7.1.1. **Weather Section.** The weather section is located within the Base Operations facility and includes space for the forecasting office, supervisor office, computer work stations, automated weather observation equipment, and aircrew briefing. The weather office should include windows that face the runway complex and have direct access to a point that provides a view of the runway and approach zones. A total of 650 square feet is authorized for the Weather Section.

7.2. Air Traffic Control Facility (Cat Code 149-962): This facility is necessary for safe and efficient conduct of flight operations. Use the Design Guide for Air Traffic Control Towers/

RAPCON (HQ AFCEE/DGA) and HQ AFFSA design requirements in accordance with AFI 32-1084.

7.3. Command Post (Cat Code 141-461): Each installation is authorized a single USAF Command Post facility. Command Posts for OPLAN 8010 tasked units are authorized an additional space for classroom, communications and security requirements. Table 7.2 shows proposed space allocation for a Command Post Facility at AFRC host installations. See notes accompanying Table for additional design criteria associated with Command Post facilities.

Table 7.2. Command Post.

DESCRIPTION	SCOPE (SF)	SCOPE (SF) OPLAN 8010
Officer In Charge (note 2)	120	120
Senior ART/Operational Reports	100	100
Superintendent	70	70
NCOIC, SORTS and Training	140	140
Training Cab (note 3)	400	400
Console/Emergency Action Cell (note 4)	600	600
Battle Staff / CAT / ICC (note 5)	900	900
Support Battle Staff	400	400
Latrine/Shower	300	300
Administrative Support	120	120
Classroom	0	400
Entrapment Area	0	40
Kitchen/Break Area	200	200
Subtotal (net)	3,350	3,790
Overhead Space (30%)	1,000	1,130
Communications/Electric	100	260
Total (gross)	4,450	5,180

NOTES:

1. The working area for a Command Post is based upon the functions to be performed and on the maximum number of persons required to perform those functions during anticipated peak workloads.
2. An area will be reserved for the Chief, Superintendent, and the administrative staff with adequate office space to accommodate the number of personnel and any equipment necessary to perform their day-to-day duties. Privacy and immediate access to the console area are key considerations for the administrative area.
3. The training section should have easy access to the console area to facilitate training and testing of C2 personnel.
4. Special attention should be made to ensure the Emergency Action (EA) controllers are provided a secure area to execute EA procedures. Emergency Action Message (EAM) formats may only be viewed by certified command post controllers, controller trainees, and the Crisis

Action Team Director. A means of restricting visibility by other personnel in the Battle Staff /Battle Staff Support and Command Post must be in place and used during EAM processing. If unit missions dictate that Top Secret discussion between controllers must take place, then a workable method must be in place to ensure that personnel without both a need to know and the proper clearance are restricted from hearing these conversations. Collocated command posts occupied by personnel with differing levels of clearances must ensure provisions are made to ensure protection of the classified material or equipment.

5. Crisis Action Team (CAT) / Installation Command Center (ICC) Area. To ensure a good cross flow of information, a collocated ICC area is highly desired. If not possible, secure communications must exist between the Command Post and the ICC to ensure effective coordination. The area should be sized to accommodate the ICC and all associated equipment requirements, but is at the discretion of the unit commander.

6. Wall and ceiling silencing materials or other means of noise reduction will be used in Command Posts to reduce noise level to a minimum. Raised flooring will be used to facilitate the addition of future communications systems.

7. All Command Posts must have a non-interruptible power supply. All facilities will be equipped with emergency lighting.

8. The facility that contains the Command Post must be designated as a USAF Restricted Area at the protection level equal to the highest protection level resources they support operationally. Entry control to the Command Post, associated equipment/communications rooms, and emergency generators are outlined in AFI 31-101, *The Air Force Installation Security Program*, as supplemented.

9. Command Post Facility Remodeling: Prior to construction, C2 managers will coordinate design/plans with the local Security Forces' Information Security and Physical Security sections, local Communications Squadrons EMSEC personnel and HQ AFRC/A3T to ensure compliance with guidelines.

7.4. Crew Readiness (Aircrew Alert Facility) (Cat Code 141-459): Units that require crew readiness facilities to meet primary mission requirements will use criteria established in AFH 32-1084. Dedicated facilities are not authorized for installations that have secondary mission statements requiring aircrew alert training. At these locations, temporary aircrew alert operations will be established in existing facility space as required to meet mission training and exercise requirements.

7.5. Squadron Operations (Cat Code 141-753): Each flying squadron requires a facility for planning, briefing, administration, storage, and critique of combat crews. Functions within this facility may include weapons and tactics, intelligence, briefing/debriefing, standardization and evaluation, flight planning, flying safety, flight records, physical training, scheduling, general training, and space for unit administration. Space is provided for storage of aircrew chemical warfare ensemble in the personal equipment area. Additional functions including, but not limited to, Aircrew Flight Equipment, Base Operations, Operations Support Squadron, Operations Group Command, and Wing Command Post may also be located in the Squadron Operations facility. Space authorizations for these additional functions are established separately within this handbook.

7.5.1. **Squadron Operations Facility.** Space authorization for the Squadron Operations facility is dependent on the type and number of weapons systems operated by the flying squadron. The authorizations shown in the following tables are established based on typical

squadrons. Space authorizations for unique weapons systems or mission configurations will be determined on a case-by-case basis. Tables 7.3 (airlift) and 7.4 (fighter) show space allocations for a Squadron Operations facility. Modification to these allocations will be necessary to accommodate unique functions associated with individual weapons systems, but should be accomplished within the limits of the total authorized facility space standard. Squadron Operations facilities for fighter units should be constructed to JAFAN 6/9 standards as a Special Access Program Facility (SAPF) accredited work area. Intelligence flights require access to a DCID 6/9 accredited Sensitive Compartmented Information Facility (SCIF) work area.

Table 7.3. Squadron Operations Facility – Airlift/Tanker.

DESCRIPTION	SCOPE SF (8PAA)	SCOPE SF (12 PAA)	SCOPE SF (16 PAA)	AFRC Associate Airlift (note 3)	Additional Co-located Airlift Squadron	AFRC Associate Tanker (note 3)	Additi Co-locate Tanke Squad
Commander	200	200	200	200	200	200	200
First Sergeant	120	120	120	120	120	120	120
Executive Officer	70	70	70	70	70	70	70
Ops Officer (O&T)	70	70	70	70	70	70	70
Squadron Administration	100	100	100	100	100	100	100
Aircrew Briefing	1,000	1,500	2,000	1000	300	1000	300
Conference	200	200	200	200	200	200	200
Orderly Room	400	600	800	400	400	400	400
CAT Room (if not in Command Post)	300	300	300	300	0	0	0
Intelligence Work / Storage Area (Note 1)	600	900	1200	600	0	600	0
Records/Data Management	120	120	120	120	0	0	0
Scheduling/Current Ops	200	300	400	200	0	200	0
Safety	70	70	70	70	0	0	0
Mission Planning	700	1050	1400	700	0	700	0
Tactics	250	380	500	250	250	250	250
Standards/Evaluation	300	450	600	300	300	300	300
Training	200	300	400	200	200	200	200
Testing (secure space for classified testing)	150	300	450	150	150	150	150
Operational Plans	200	300	400	200	200	200	200
Chief Engineer	70	70	70	70	70	70	70
Flight Engineering work room	300	450	600	300	300	300	300
Chief Loadmaster	70	70	70	70	0	0	0
Loadmasters work room	300	450	600	0	0	0	0
Chief Navigator	70	70	70	70	0	0	0
Navigators work room	300	450	600	0	0	0	0
Chief Pilot	70	70	70	70	70	70	70
Pilots work room	300	450	600	300	300	300	300

Mobility Storage	400	600	800	400	400	400	400
Mobility Training Ensemble Storage (Note 2)	400	600	800	400	400	400	400
Aircrew Lounge	400	600	800	400	400	400	400
Computer Room/Training Rooms	800	1200	1600	0	0	0	0
Risk Management / AFSO 21	400	600	800	400	400	400	400
Men's and Women's Locker Room/Shower	1,300	1,950	2,600	1,300	700	1,300	700
Fitness/Ergo Room	400	600	800	400	0	400	0
Subtotal (net)	10,830	15,560	20,280	9,430	5,600	8,800	5,600
Overhead Space (30%)	3,250	4,670	6,080	2,830	1,680	2,640	1,680
Communications/Electric (3%)	330	470	610	280	170	260	170
Total (gross)	14,410	20,700	26,970	12,540	7,450	11,700	7,450

NOTES:

1. Intelligence work area must be secure and capable of open storage at the collateral level.

2. This is an estimate only. Design to requirements based on actual number of mobility positions. Estimate 5 SF per authorized mobility position.

3. Associate squadrons authorization represents AFRC sole-use space required when Reserve squadron is associated with active duty counterpart. Additional Squadron authorization represents additive space required for second co-located AFRC squadron at either host or tenant operating locations.

Table 7.4. Squadron Operations – Fighters.

DESCRIPTION	SCOPE SF (16 PAA)	SCOPE SF (24 PAA)	SCOPE SF (32 PAA)	AFRC Associate Fighter
Squadron Commander	200	200	200	200
First Sergeant	120	120	120	120
Administration	100	100	100	100
Orderly Room	300	480	720	300
Flight Commanders Offices	300	400	500	300
Aircrew Briefing	750	1200	1800	0
Mission Planning	600	960	1440	600
Flight Management (Ops Office)	450	720	1080	0
Chief Ops Plans	100	100	100	100
Operations/Plans Staff	180	240	300	180
Intelligence (note)				
Intel Office	300	300	300	0
SIPRNET Area	300	300	300	300
MPC	480	480	480	0
M&C	100	100	100	0
Briefing Room	200	320	480	0
Study/Library	200	200	200	200
Ops Training	700	1120	1680	700

Standard/Evaluation	300	400	500	0
Flight Briefing Rooms (5)	700	1120	1680	0
Risk Management / AFSO 21	400	640	960	400
Operations Officer	100	100	100	100
EWO	80	80	80	80
Testing Room (secure space for classified testing)	100	200	200	0
Simulator Training (MTT)	400	640	960	0
Weapons and Tactics	300	480	720	300
Aircrew Lounge	500	800	1200	400
Storage (Mobility)	400	640	960	400
Physical Fitness Room	600	960	1440	0
Men's Latrine/Showers/Lockers	700	1120	1680	400
Women's Latrine/Showers/Lockers	300	480	720	300
Subtotal (net)	10,260	15,000	21,100	5,480
Overhead Space (30%)	3,080	4,500	6,330	1,640
Communications/Electric (3%)	310	450	630	160
Total (gross)	13,650	19,950	28,060	7,280

NOTE: Intelligence function office and work area must be secure at the compartmentalized level.

7.5.2. **Guardian Angel Operations (Cat Code 141-454):** Facility provides administrative, training, storage, and functional work space for personnel assigned to the Guardian Angel squadron. Total authorization for this facility is 35,030 square feet. An additional 16,200 square feet of covered secure unconditioned storage space is authorized for storage of squadron training and mobility equipment. Table 7.5 shows space allocation for a Guardian Angel Squadron.

Table 7.5. Guardian Angel Squadron Operations.

DESCRIPTION	SCOPE (SF)	Notes
Command Section:		
Commander	200	
PJ Chief (NCOIC)	140	1 NCOIC and 1 TR
Ed & Training Specialist	70	
Orderly Room	300	
Conference Room	300	Seats 12 individuals
Admin Storage	200	Files & storage
First Sergeant	120	
Receptionist	70	
Operations Section		
Operations Chief	100	
Operations Management	70	
Operations Superintendent	70	

Scheduling (DOS) ARMS	180	
Operations Training Office	40	
Plans / Tactics (DOX)	40	
Standardization Evaluation (Stan/Eval)	180	
SERE Instructors	220	
Aircrew Flight Equipment Maintenance/Storage	3,000	
Brief / Debrief / Planning rooms	975	Seats 50 individuals
Administrative Storage/Files	200	
Flights		
Alpha Flight Commander	140	1 AGR and 1 TR
Alpha Flight Assistant Commander	80	2 TR
Alpha Flight NCOIC	140	1 NCOIC and 1 TR
Alpha Flight Work Area	600	15 TR
Bravo Flight Commander	140	1 AGR and 1 TR
Bravo Flight Assistant Commander	80	2 TR
Bravo Flight NCOIC	140	1 NCOIC and 1 TR
Bravo Flight Work Area	600	15 TR
Charlie Flight Commander	140	1 AGR and 1 TR
Charlie Flight Assistant Commander	80	2 TR
Charlie Flight NCOIC	140	1 NCOIC and 1 TR
Charlie Flight Work Area	600	15 TR
Operator Individual Storage Lockers	3,360	7X8 for 60 operators
IDMT with training	110	
Special Medical Training	300	
Controlled Substance Storage	50	
Medical Records Storage/Flight Files	200	
Flight Surgeon	40	
Medical Supplies / Storage	980	
General/Shared Space		
Classroom(s)	900	
Dining/Kitchen /Break	390	
Supplies Storage/Supply Office	2,080	
Alert Equipment Storage	800	
Equipment Staging/Mission Build-up	600	

Parachute Packing and Storage (note 2)	7,835
Technical Library	160
Scuba Equipment Storage / Wash / Maintenance	1,090
Drying Room	650
Locker Room/Shower - Men	900
Locker Room/Shower - Women	180
Fitness / PT Evaluation Room	600
Logistics Space	
Logistics Readiness Officer	100
Logistics Superintendent	100
Supply	110
Medical Logistics	110
Logistics NCOIC	100
Programs and Mobility	110
INTEL	190
Vehicle Maintenance	110
Vehicle Workshop (note 2)	800
CATM	110
Weapons Cleaning and Maintenance	200
Weapons Vault	400
Radio Storage / Maintenance workshop	660
Computer (WGA/SSA) (note 2)	110
Computer Storage (note 2)	650
Aircrew Flight Equipment (note 2)	770
Subtotal (net)	35,030
Overhead (30%)	10,510
Communications/Electrical (3%)	1,050
Total (gross)	46,590

NOTES:

1) Provide 16,200 SF of separate secured unconditioned space for mobility/training equipment storage (ATVs, Zodiacs, boats and trailers, motorcycles, rescue craft, and ISU 90s).

2) Do not duplicate space with other Group / Wing functions if work is accomplished in other facilities.

7.5.3. **Space Operations Squadron (Cat Code 141-753):** Facility provides administrative and training space for personnel assigned to the AFRC associate Space Operations Squadron. AFRC associate Space Operation Squadrons perform mission activities in Active Duty facilities but require dedicated training and administrative space for AFRC unique functions. Total authorization for this facility is 6,990 square feet. Squadron Operations facilities for Space Operations units should be constructed to JAFAN 6/9 Special Access Program Facility (SAPF) standards. Intelligence flights require access to a DCID 6/9 accredited Sensitive

Compartmented Information Facility (SCIF) work area. Table 7.6 shows proposed space allocation for an associate Space Squadron.

Table 7.6. Associate Space / UAV Squadron.

DESCRIPTION	Standard (SF)	SCOPE Small (SF)	2nd Squadron (SF)
Squadron Commander	200	200	200
First Sergeant	120	120	120
Administration	100	100	100
Orderly Room	300	200	200
Training/Briefing	900	600	
Operations Officer	70	70	70
Superintendent	100	100	100
Intelligence Surveillance & Recon (ISR)	400	300	300
Combat Operations	400	300	300
Mission Support	400	300	300
Ops Training	400	300	200
Standard/Evaluation	400	300	200
Testing Room	100	100	0
Special Tactics	400	0	0
Combat Plans	400	0	0
Strategy	400	0	0
Computer Lab	400	400	0
Lounge	500	250	100
Men's Latrine/Showers/Lockers	500	300	100
Women's Latrine/Showers/Lockers	500	300	100
Subtotal (net)	6,990	4,240	2,390
Overhead (30%)	2,100	1,270	720
Communications/Electrical (3%)	210	130	70
Total (gross)	9,300	5,640	3,180

NOTE: Small squadrons are those with less than 45 personnel assigned.

7.5.4. **Unmanned Aerial Vehicle (UAV) Squadron Operations (Cat Code 141-753):** Facility provides administrative and training space for personnel assigned to the UAV Squadron. AFRC associate UAV Squadrons perform mission activities in Active Duty facilities but require dedicated training and administrative space for AFRC unique functions. Squadron Operations facilities for UAV units should be constructed to JAFAN 6/9 Special Access Program Facility (SAPF) standards. Intelligence flights require access to a DCID 6/9 accredited Sensitive Compartmented Information Facility (SCIF) work area. Total authorization for this facility is 6,990 square feet. Table 7.6 shows proposed space allocation for an associate UAV Squadron.

7.5.5. **Reserve Forces Aeromedical Evacuation Training Facility (Cat Code 171-449):** In general, Aeromedical Evacuation Squadrons (AES) train to perform in-flight patient care, command and control, and operational support for the joint patient movement mission. This facility provides space for training and operations of aeromedical evacuation (AE) units. AES located at AFRC installations and at Tennant locations are authorized 8,770 square feet for all administrative and training functions as well as 1,170 square feet (gross) for mobility or contingency equipment storage, including storage of medical, operations and communications equipment assemblages. Additional space is authorized for assigned crews as detailed in **Table 7.7**

Table 7.7. Aeromedical Evacuation Squadrons.

DESCRIPTION	SCOPE (SF) 8 Crews
Commander	200
Deputy or Executive Officer	120
1st Sergeant	120
Administrative / Orderly Room	450
Conference Room	200
Chief of Operations	100
Operations Management	300
Stan Eval	140
Scheduling	140
Chief Nurse	100
SARM	70
Classroom (150SF per assigned crew)	1,200
UTC Managers (70SF per assigned crew)	560
Mission Planning / Crew Briefing	700
In-flight Medical Care Staff	300
Aircrew Training	200
Secure Medical Supplies	80
Medical Equipment Storage	900
Medical Equipment Lab / Maintenance	300
Chemical Ensemble Storage	200
Stan Eval Testing	100
Computer Based Training	400
Staff Development	140
CDC Training	150
Medical Readiness and Intel/Mobility/DP/Ancillary Training	300
Men's and Women's Locker Room / Shower	1,300
Subtotal (net)	8,770
Overhead (30%)	2,630
Communications/electrical (3%)	260
Total (gross)	11,660

NOTE: Add 1,170 square feet for mobility and contingency equipment storage.

7.5.5.1. Variation in space authorization for AES will be reviewed and validated on a case-by-case basis by HQ AFRC/A3TM. Additions of various combinations of AE crews, communications, system support, ground command and control (C2) should drive authorized facility space increases commensurate with the number/volume of these UTCs

7.5.5.2. Increase Aircrew Flight Equipment (section 7.6) storage authorization by 3 square feet (net) for each flying crew member assigned to AES.

7.6. Aircrew Flight Equipment (Cat Code 218-852): The Aircrew Flight Equipment (AFE) (formerly Life Support and Survival Equipment) function may be located within the Squadron Operations facility or as a separate facility. The AFE organizational structure generally consists of an AFE Officer, AFE Superintendent, and Aircrew, Operations and Aircraft Support sections. Space authorization is dependent on the number of assigned flying aircrew members supported. Additional consideration must also be given to the type and number of weapons systems supported and any associated specialized equipment and training requirements.

7.6.1. The AFE function is authorized the approximate square footage of workshop space (based on a standard 8 PAA squadron {21/24 PAA for fighter squadrons}), as shown in **Table 7.8** Requirements are based on mission support for aircrew training/classroom space, supported aircrew equipment storage, night vision device storage/maintenance/testing, equipment inspection/maintenance, mobility operations, and administrative space.

7.6.2. For flying personnel equipment storage (primary MDS, Aeromedical, Flight Surgeon, Combat Camera, etc. aircrew), 3 square feet per supported position is authorized.

7.6.3. An additional 500 square feet is authorized for egress shop space at fighter equipped units.

7.6.4. HC-130/MC-130 units are authorized an additional 1,400 square feet for Crew Storage Space.

7.6.5. If a parachute drying tower is required, and additional 900 square feet is authorized.

7.6.6. Units co-located on the same installation with multiple MDSs should combine facility requirements.

7.6.7. Increase in space authorizations for unique weapons systems, mission configurations, or increased PAA will be determined proportionately on a case-by-case basis.

Table 7.8. Aircrew Flight Equipment Facility Requirement.

FUNCTION	**SCOPE (SF)**									
	Fighters	B-52	C-5	C-9 / C-40	C-17	C-130	KC-135	HH-60	Flight Test	Gua Ang
Administration (Note 1)	500	500	600	500	600	500	500	500	300	300
Aircrew Support Section (Note 2)	2,300	800	1,000	20	2,000	1,500	2,200	500	800	700
Aircraft Support Section (Note 3)	800	4,000	6,000	1,100	7,000	5,000	3,500	500	2,000	3,00
Continuation / Classroom Training	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,00

Night Vision Devices	300	300	N/A	N/A	300	300	N/A	300	N/A	300
Washer/Dryer Room	100	100	100	100	100	100	100	100	100	100
Mobility Storage (Note 4)										
Subtotal (net)	5,000	6,700	8,700	2,900	11,000	8,400	7,300	2,900	4,200	5,40
Overhead (30%)	1,500	2,010	2,610	870	3,300	2,520	2,190	870	1,260	1,62
Communications/electrical (3%)	150	200	260	90	330	250	220	90	130	160
Total (gross)	6,650	8,910	11,570	3,860	14,630	11,170	9,710	3,860	5,590	7,18

NOTES:

1: Includes AFEO office, Supt office, section supervisor offices, and admin functions/storage.

2: Includes inspection, maintenance, storage of helmets, oxygen masks, aircrew chemical defense equipment, Mil-G goggles/ALEP, anti-g suits, anti-exposure suits, survival vests, body armor, torso harnesses, HEEDS/HEBD/SEA, weapons receipt/issue, tester workspace/storage and bench stock/supply storage, and "light" sewing/fabric room

3: Includes inspection, testing, repack, maintenance and storage of personnel parachutes, ACESII ejection seat integrated personnel/drogue chutes, cargo parachutes, deceleration (Drag) parachutes, escape slides (C-5 & KC-135), PLZT/Mil-G Goggles/ALEP, thermal curtains, 46-person rafts (C-17 - 3 per aircraft), 25-person rafts (C-5 - 4 per aircraft), 20-person rafts (KC-135 - 3 per aircraft/C-130 - 4 per aircraft), 1-person rafts , life preservers, survival kits/vests, body armor, comm devices (radios/beacons), security operations (safe/weapons), flightline operations, long term storage & staging of equip, anti-exposure suits, PCK, EPOS, EEBDs, restraint harnesses, sea rescue kits, tester workspace/storage and bench stock/supply storage, "heavy" sewing/fabric room. Also includes packing tables for personnel parachutes (2 @ 5' x 50' = 250 sf each) and drag chutes (2 @ 5' x 100' = 500 sf each).

4: Include 200 sq ft per mobility pallet supported for inventory, inspection and storage to support assigned UTCs.

5: If Guardian Angel units are co-located on the same installation with HH-60 or C-130 units, requirements should be combined.

6: Add Flying Personnel Equipment Storage as quantified in paragraph 7.6.2 above.

7.7. Tanker/Airlift Control Flight (ALCF) (Cat Code 171-445): ALCF units are authorized a total 8,180 square feet for all administrative, training, storage, and functional work space as shown in **Table 7.9**. Facilities should include high bay storage areas in order to facilitate vertical storage of mobility equipment to the maximum extent possible.

Table 7.9. Tanker/Airlift Control Flight.

DESCRIPTION	SCOPE (SF)
Commander	100
Senior ART	70
Superintendent	100
Administration / work stations	2,000
Classroom	1,000
Communications Work Area/Storage (SIPR)	200
Mobility Storage	210
High Bay Pallet Storage	2,500

Locker Rooms	600
Vehicle Garage	1,400
Subtotal (net)	8,180
Overhead (30%)	2,450
Communications/Electrical (3%)	250
Total (gross)	10,880

7.7.1. Additional mobility storage space is required for UTC equipment items that may be assigned to the ALCF unit. The following additional authorizations (net) are approved for specific UTC packages.

Table 7.10. ALCF UTC Packages.

UTC	SCOPE (SF)
7E1CA	2,500
7E1CB	1,000
7E1AF	1,000
7E1AB	800
7E1AE	1,500

7.8. Information Operations Flight (Cat Code 610-243): Information Operations Flights require facilities for classified processing, unclassified work, storage of classified and unclassified materials. Determine facility requirements using Table 7.11.

Table 7.11. Information Operations Flight.

DESCRIPTION	SCOPE (SF)
Electronic System Security Assessment Center (ESSAC)	2,200
Secure Storage/electronics maintenance work area	1,500
Break room	150
Research/library	150
Secure Storage	200
Determine office space by number of assigned personnel	See table 2.1

7.9. Air Mobility Operations (Cat Code 141-753): The Air Mobility Operations Squadron (AMOS) provides Air Force Reserve staff and expertise to Air Mobility Command in the Air and Space Operations Center. AFRC AMOS are authorized a total of 4,820 square feet for all sole-use administrative and training space. Table 7.12 shows proposed space allocation for an Air Mobility Operations Squadron.

Table 7.12. Air Mobility Operations Squadron.

DESCRIPTION	SCOPE (SF)
Commander	200
Senior ART	70
Superintendent	100

Administrative / Mission Operations	1,500
Classroom	300
Traditional Reservists Work Area (43 TRs)	1,720
Full-time ART offices (3)	210
Mobility Storage	120
Locker Rooms	600
Subtotal (net)	4,820
Overhead (30%)	1,450
Communications/Electrical (3%)	140
Total (gross)	6,410

7.10. Survival Evasion Resistance and Escape (SERE) Instructors (Cat Code 141-753): Instructors are authorized a total of 1,090 square feet of all administrative and equipment storage space when present at AFRC flying units. Table 7.13 shows proposed space allocation for SERE instructors

Table 7.13. SERE Instructors.

DESCRIPTION	SCOPE (SF)
SIPR capable office area	200
Files	20
Locker space	200
Medical support equipment	100
Break area	50
Supply Storage	30
Parachute Storage	30
Wet / Dry Room	60
Locker Room / Shower	400
Subtotal (net)	1,090
Overhead (30%)	330
Communications/Electrical (3%)	30
Total (gross)	1,450

7.11. Intelligence Squadrons (Cat Code 141-454): Intelligence Squadron is authorized space for all administrative, training and storage requirements. Intelligence Squadron space must be a DCID 6/9 accredited Sensitive Compartmented Information Facility (SCIF) area that allows for open storage of classified material. Table 7.14 shows proposed space allocation for Intelligence Squadrons. Table 7.15 shows proposed space allocation for subordinate Intelligence Flights.

Table 7.14. Intelligence Squadron.

DESCRIPTION	SCOPE SF (3 Flts)	SCOPE SF (4 Flts)	SCOPE SF (5 Flts)	SCOPE SF (6 Flts)
Squadron Commander	200	200	200	200
Director of Operations	100	100	100	100
Superintendent	100	100	100	100

NCOIC Intel Training	100	100	100	100
First Sergeant	120	120	120	120
Administration	100	100	100	100
Orderly Room	300	480	720	1,080
Squadron Conference Room	200	200	200	200
Flight Commanders Offices	300	400	500	600
Flight NCOICs	210	280	350	420
Reservists Work Areas (40SF each)	Add space for number of Reservists assigned			
Education / Training Room	300	300	300	300
VTC Conference Room	300	300	300	300
Subtotal (net)	2,330	2,680	3,090	3,620
Overhead Space (30%)	700	800	930	1,090
Communications/Electric (3%)	70	80	90	110
Total (gross)	3,100	3,560	4,110	4,820

Table 7.15. Intelligence Flights.

DESCRIPTION	**SCOPE (SF) AOC (ISRD)**	**SCOPE (SF) AFFOR**	**SCOPE (SF) RPA**	**SCOPE (SF) SPACE**
Flight Commander	100	100	100	100
Director of Operations / Asst. Commander	100	100	100	100
Superintendent	100	100	100	100
NCOIC Intel Training	100	100	100	100
Section OICs (100SF each)	200	100	200	200
Reservists Work Areas (40SF each)	1200	560	880	1200
Education / Training Room	300	150	300	300
VTC Conference Room	300	300	300	300
Subtotal (net)	2,500	1,510	2,180	2,500
Overhead (30%)	750	450	650	750
Communications/Electrical (3%)	80	50	70	80
Total (gross)	3,330	2,010	2,900	3,330

***NOTE*:** Deployable Ground Station (DGS) flights share space with Active Duty associates due to 24 hour operations.

Chapter 8

TRAINING FACILITIES

8.1. Basic Item, Reserves Forces General Training Support. These facilities support various AFRC non-flying units including, but not limited to, Medical Squadrons, Aeromedical Staging Squadrons, Combat Logistics Support Squadrons, Communications Flights, and Security Police Flights. Space within these facilities includes office and administrative areas, administrative support space, classrooms, and lockers. Determine additional space requirements separately for additional mobility equipment storage, training mockups, work areas, or other requirements unique to a particular unit.

8.2. Communication Squadron (Cat Code 171-443): Deployable communications squadrons are authorized a total of 3,390 square feet for administrative, training, storage, and maintenance functions. **Table 8.1** shows proposed space allocation for a communications squadron facility. This unit may be co-located with the Communications and Information Facility (section 6.3) at AFRC host base locations.

Table 8.1. Communications Squadron.

DESCRIPTION	SCOPE (SF)
Commander	200
Air Reserve Technician	70
First Sergeant	120
Administrative	300
Radio Operations	300
Data Operations	400
JISCC Training Area	300
Maintenance	600
Maintenance Storage (note)	800
Classroom	300
Subtotal (net)	3,390
Overhead (30%)	1,020
Communications/Electrical (3%)	100
Total (gross)	4,510

***Note*:** Includes 300 square feet for Joint Incident Site Communications Capability (JISCC) equipment storage. JISCC equipment maintained at AFRC host bases only.

8.3. Security Forces Squadron at Tenant Bases (Cat Code 171-443): AFRC Security Forces Squadrons located on Active Duty installations (tenant locations) are authorized a total of 6,640 square feet for all administrative, training, storage, and functional work space. Authorization for unit specific mobility storage may be determined on a case-by-case basis. **Table 8.2** shows proposed space allocation for a SFS at a tenant location.

Table 8.2. Security Forces Squadron (Tenant Location).

.	SCOPE (SF)

DESCRIPTION	
Chief, Security Forces/Commander (CSF/CC)	200
First Sergeant	120
Security Forces Manager/Superintendent	70
Orderly Room/Administration	300
Air Reserve Technician (2 @ 70)	140
Career Advisor/Safety/Historian/DP	70
Classroom (Partitioned)	900
Training NCO/Instructors	240
Quality Control (100 SF test area + 2 @ 40 SF)	180
Unit Learning Center (ULC)	150
Squad Leaders' Room (3 @ 70 SF)	210
Fire Team Leaders' Room (3 @ 70 SF)	210
Mobility Storage/Pallets/Build-up (4 @ 700 SF/UTC)	2800
Mobility/Supply Administrative Area	200
Control Center (CSC/LED/GDOC) Training Area	100
General Storage	150
Break Room	150
Men's Locker Room	300
Women's Locker Room	150
Subtotal (net)	6,640
Overhead Space (20%)	1,990
Communications/Electric (3%)	200
Total (gross)	8,830

8.3.1. **Combat Arms Training (Cat Code 171-476):** This facility supports the activities of a combat arms section at AFRC locations. It contains space for classroom instruction; program administration, weapons maintenance; weapons cleaning and degreasing; alarmed weapons and ammunition storage; latrine facilities and miscellaneous storage. The facility may be equipped with either the Combat Arms Training Simulator (CATS) or the Squad Engagement Training Simulator (SETS) although neither of these systems is required to meet training standards. The standard training facility (range) supports up to 21 firing points. **Table 8.3** shows proposed space allocation for a Combat Arms Training Facility.

Table 8.3. Combat Arms Training.

DESCRIPTION	SCOPE (SF) CATS
Classroom (note 1)	975
NCOIC	100
Instructor's Offices (70 SF/Auth CA Instructor)	700
Weapons Maintenance Shop	300
Weapons Cleaning/Degreasing Room (note 2)	250
Alarmed Weapons and Ammunition Storage Room	150
Miscellaneous Storage	120
Small Arms Training Range (note 3)	16,940
Men's Locker Room/Shower	175
Women's Locker Room/Shower	140
Breakroom	150
Subtotal (net)	20,000
Overhead (30%)	6,000
Communications/Electrical (3%)	600
Total (gross)	26,600

NOTES:

1. Actual SF may vary depending on requirements. See AFH 32-1084, Table 6.1 for additional guidance.
2. Add 12 SF for each firing lane over 21 firing lanes.
3. Range size based on 21 firing positions and includes space for mechanical ventilation and bullet-trap / backstop systems. Add 2,625 SF for units using CATS equipment or 2,025 SF for units using SETS equipment.

8.4. Civil Engineer Prime BEEF Squadron: The Civil Engineer Prime BEEF Squadron is separated into two distinct portions; the Expeditionary Engineering and Installation Support portion and the Emergency Services portion of the organization. Following are the authorized space allocations for CE Prime BEEF Squadrons.

8.4.1. **CE Expeditionary Engineering and Installation Support Functions (Cat Code 171-443):** The Expeditionary Engineering and Installation Support portion of the Civil Engineer Prime BEEF Squadrons at host and tenant locations are authorized a total of 11,140 net square feet for all training, administrative, storage and functional work space. Table 8.4 shows proposed space allocation for their facilities. At AFRC host base locations the CE Squadron may be co-located with the Base Civil Engineer Administration and Maintenance Facility. 800 square feet of additional outside covered storage may be provided for securing mobility equipment and supplies.

Table 8.4. CE Prime BEEF Squadron, Expeditionary Engineering and Installations Support functions:

DESCRIPTION	SCOPE (SF)
Squadron Commander	200
First Sergeant	120
Orderly Room	300
ART (2 each)	140
Training/Test Room/CERTEST	300
Conference Room	200
Flight Commander (4@ 100 SF ea)	400
Superintendents (5@ 100 SF ea)	500
Shop Foremen (9@ 40 ea)	360
Additional Engineering Officer (70 SF ea)	70
Engineering Assistant, Supervisor, Drafting, Map Cabinet	500
Shop space (Lab environment) (Note 1)	1,500
Production Control, Scheduling, Mobility Control Center	500
Supply Room	280
Storage/Non Standard Mobility	2,000
Mobility Pallets, Storage/Build-up	2,500
Chief Enlisted Manager	100
Unit Training Manager	70
Classrooms (3 @ 300)	900
Computer / testing room	200
Subtotal (net)	11,140
Overhead (30%)	3,340
Communications/Electrical (3%)	330
Total (gross)	14,810

NOTES:

1. Only provide if Host BCE shop space is not available for training use by reservists.

8.4.2. **Emergency Services:** The Emergency Services portion of a CE Prime BEEF Squadron consists of three separate and distinct functions; Emergency Management, Fire Emergency Services (FES) and EOD. A Civil Engineer Prime BEEF organization may contain all or some of these functions. Additionally, these functions may also be present without the other portion of the CE Prime BEEF Squadron. In those instances, the Emergency Services functions must be capable to operate independently.

8.4.2.1. **Emergency Management (Cat Code 610-913):** The Emergency Management function is normally part of, and co-located with, the Civil Engineering Prime BEEF Squadron. Emergency Management functions located with Civil Engineering Squadrons

at Host installations are authorized a total of 2,130 square feet for all administrative, storage, and functional work space; based on a manning of 7 deployable UTC positions plus 2 civilian support staff. This allocation includes a dedicated classroom for the Emergency Management function. Emergency Management functions located at tenant units are authorized a total of 620 square feet for AFRC sole-use administrative, storage, and training space; based on a manning of 5 deployable UTC positions.

Table 8.5. Emergency Management:

DESCRIPTION	SCOPE (SF) HOST BASE	SCOPE (SF) TENANT LOCATION
Flight Chief or Flight Commander (1 Civ)	100	
Flight Superintendent (1 TR)	100	100
ART/AGR (1 FT)	70	70
Emergency Management Specialists (1-4 FT CIV)	70	
Training Branch (1-3 TR)	80	40
Logistics Branch (1-2 TR)	40	40
Planning Branch (1-3 TR)	80	40
MOBAG Storage (5 SF / deployable position)	40	30
UTC Equipment Storage	300	
Training Classroom	750	200
Student Break Area	200	50
Secure Storage	100	50
NBC Control Center	200	
Subtotal (net)	2,130	620
Overhead (30%)	640	190
Communications/Electrical (3%)	60	
Overhead cover for Mobile Communications Vehicle	480	20 480
Total (gross)	3,310	1,310

8.4.2.2. **Firefighters (Tenant) (Cat Code 130-142):** Reserve firefighters should be located in a separate annex to the host fire station. The annex should be located adjacent to the base fire station and include an outside entrance. Total space authorization for tenant Reserve firefighters depends on unit manning as displayed in **Table 8.6**

Table 8.6. Firefighter Training.

DESCRIPTION	SCOPE (SF)	
	24 FF	30/36 FF
Fire Chief's Office	120	120
Deputy Fire Chief's Office	100	100
Health and Safety Officer Office		70
Assistant Chief of Operations Office	100	70
Training Facilitator's Office	70	70
Training Class Room	540	700
Computer Testing Center	100	100
Student Break Area w/sink	50	50
Men's Changing Room/Bathroom w/Shower	250	380
Women's Changing Room/Bathroom w/Shower	100	150
Personal Protective Clothing (PPE) &	400	850
Self Contained Breathing Apparatus (SCBA) Storage & Maintenance	100	
Supply (Logistics) Storage	400	300
Reception Area	100	
Supply (Logistics) Officer's Office		70
Vehicle Control Officer		70
Subtotal (net)	2,430	3,100
Overhead (30%)	730	930
Communications/Electrical (3%)	70	90
Total Gross	3,230	4,120

8.4.2.3. **Explosive Ordnance Disposal (EOD) Flight (Cat Code 171-443):** The EOD function will be organized in one of three configurations: Host base support; tenant unit with CE operations flight, or tenant unit without a CE operation flight. Tenant EOD functions collocated with an Active Duty EOD flights that includes a CE operations flight are authorized 3,523 square feet. Tenant EOD functions collocated with an Active Duty EOD flights that does not include a CE operation flight are authorized 3,263 square feet for all administrative, storage, and functional work space. Classroom space at these locations should be shared with the associated CE squadron. Secure training /computer work area must be provided. If the EOD unit is a host base function is it authorized a total of 9,440 square feet. **Table 8.7** shows proposed space allocation for EOD training / operations facilities. In addition to the primary EOD training /operations facility, AFRC host installations require an outdoor high explosive training area (proficiency range) of approximately 18 acres (circle with a diameter of 1000 FT). AFRC host installations should also provide a properly configured 1 acre EOD practical training area.

Table 8.7. Explosive Ordnance Disposal (EOD) Flight.

DESCRIPTION	SCOPE (SF)		
	Host Base	Tenant Unit Without CE Operations Flight	Tenant Unit With CE Operations Flight
Equipment manager	70	40	40
First Sergeant		100	
Administrative Asst		100	
Senior Program Manager / AGR	100	120	120
Flight Chief NCOIC/Officer	100	100	100
Unit control center/Operations/Reception area/file Maintenance (SIPR-Net)	250		
Standardization Eval (QA)	200	40	40
Resources	70	40	40
Tech Orders storage/study office (SIPR-Net)	100		
Training NCO	70	40	40
EOD Workspace (remaining TRs/2*40)	320	400	400
Classroom (SIPR-Net)	1,000	500	500
Training device storage (approx 350 items)	300		
”Range” Training Device Storage	200		
Profession Gear and MOBBAG storage (# Pers*40 SF)	560	560	560
Weapons storage	100	70	70
Vehicle parking/maintenance bay	2,460		
Equipment maintenance (tool bench, tool box, etc)	950		
Men’s Locker Room/Shower	700	380	380
Women’s Locker Room/Shower	200	150	150
Secure logistics storage (supply issue/turn-in/supply Administration	90 150	70	70
Assigned UTC 4F9X1	1,000		
Assigned UTC 4F9X4	450		
Subtotal (net)	9,440	3,523	3,263
Overhead (30%)	2,830		
Communications/Electrical (3%)	280		
Total (gross)	12,550	3,523	3,263

NOTES:

1. Host base locations require 18 acres EOD Pro Range IAW AFI 91-201.
2. Host base locations require 1 acre indoor/outdoor training area (explosive tools/techniques lab).
3. Host base locations require 2 ea explosive storage 7x7 containers.
4. All flights require SIPRNET capability in class room and operations center.
5. All flights require Secure building due to weapons/classified operations.
6. All flights require Fenced and lighted vehicle parking area.

8.5. RED HORSE Squadron Facilities (Cat Code 171-443): These facilities provide administrative, training, storage, and maintenances space necessary to support all aspects of Civil Engineering RED HORSE home station operations. AFRC RED HORSE squadrons are typically associated with co-located active duty RED HORSE squadrons with whom they share training and maintenance areas. In these instances, only limited sole-use space is required for AFRC squadron administration and storage requirements. **Table 8.8** shows space authorization for stand-alone as well as associated RED HORSE squadrons. Squadron space allocation may be accommodated in multiple facilities but should not exceed total authorization.

Table 8.8. RED HORSE Squadron.

DESCRIPTION	Stand – Alone SCOPE (SF)	Associate SCOPE (SF)
ADMINISTRATIVE SPACE		
Headquarters / Command Staff	2,910	2,910
Operations Staff	1,380	1,380
Engineering Staff	3,260	3,260
Logistics Training	3,420	3,420
Medical Training	530	530
Services Training	870	870
Vehicle Operations Administration	4,220	4,220
Supply Management	600	600
Subtotal Administrative Space (net)	17,190	17,190
Overhead Space (30%)	5,160	5,160
Communications/Electric (3%)	520	520
Total Administrative Space (gross)	22,870	22,870
MAINTENANCE SPACE		
Airfields shop	6,460	2,110
Cantonments shop	15,020	4,410
Subtotal (net)	21,480	6,520
STORAGE SPACE:		
Vehicle Operations Parking Shed	1,710	0
Engineering Supply Storage	3,660	2,200
Engineering Equipment Storage	3,420	2,050
Equipment Warehouse	5,200	3,120

Services Equipment Storage	490	0
Subtotal (net)	14,480	7,370
Overhead Space (20%)	7,190	2,780
Communications/Electric (3%)	1,080	420
Total Storage / Maintenance Space (gross)	44,230	17,090
Total Squadron Space (gross)	67,100	39,960

NOTES:

1. Reserve RED HORSE with Active Associate is authorized space equivalent to a stand-alone squadron.
2. Stand-alone squadrons are also authorized up to 8,000 Square Yards of paved area for parking and outdoor (uncovered) storage for vehicles and mobility / training equipment.

8.6. Wing and Group Headquarters. These facilities include wing and/or group staff functions. Wing and Group headquarters facilities may include a variety of administrative, management, and training functions. Accurately identify the functions to be included in the facility when determining authorized facility scope to avoid duplication. Total all net facility space authorizations for functions to be included in the facility and apply overhead (30%) to determine gross facility space authorization. In addition to function specific space, Wing Headquarters facilities are authorized an additional 1,000 square feet (gross) for break areas, conference rooms, and files storage.

8.6.1. **Wing Command Section (Cat Code 610-249):** A total of 1,570 square feet is authorized for the Wing Command section administrative space. This allocation includes office space for the commander, vice commander, executive officer, secretary, Wing Chief MSGT and command conference room.

Table 8.9. Wing Command Section.

DESCRIPTION	SCOPE (SF)
Commander	350
Vice Commander	250
Executive Officer	70
Administration Section	100
Files / Storage	50
Waiting / Reception Area	50
Command Chief MSgt	200
Command Conference Room	500
Subtotal (net)	1,570
Overhead (30%)	470
Communications/Electrical (3%)	50
Total (gross)	2,090

8.6.2. **Mission Support Group Command Section (Cat Code 610-243):** The Mission Support Group Commander and associated staff are authorized a total of 930 square feet. This allocation includes space for the Commander, Deputy Commander, Executive, Career Advisor, Group Superintendent, conference room, and Administrative Assistant.

8.6.3. **Operations Group Command Section (Cat Code 610-243):** The Operations Group Commander and associated staff are authorized a total of 930 square feet. This allocation includes space for the Commander, Deputy Commander, Executive, Career Advisor, Group Superintendent, conference room, and Administrative Assistant. Add 1,580 SF for Group Intelligence Office (based on 11 part-time and 2 full-time positions). Intelligence function office and work area must be secure at the compartmentalized level and includes administrative, training, library, and mobility storage area. This function may be located in the Squadron Operations facility or the Wing Headquarters.

8.6.4. **Maintenance Group Command Section (Cat Code 610-243):** The Maintenance Group Commander and associated staff are authorized a total of 930 square feet. This allocation includes space for the Commander, Deputy Commander, Executive, Career Advisor, Group Superintendent, conference room, and Administrative Assistant. This function may be located in the Wing Headquarters or one of the maintenance shop facilities.

8.6.5. **Medical Group Command Section (Cat Code 610-243):** The Medical Group Commander and associated staff are authorized a total of 930 square feet. This allocation includes space for the Commander, Deputy Commander, Executive, Career Advisor, Group Superintendent, conference room, and Administrative Assistant. This function may be located in the Wing Headquarters or one of the medical training facilities.

8.6.6. **Intelligence Group Command Section (Cat Code 610-243):** Where established, the Intelligence Group Commander and associated staff are authorized a total of 930 square feet. This allocation includes space for the Commander, Deputy Commander, Executive, Career Advisor, Group Superintendent, conference room, and Administrative Assistant.

Table 8.10. Group Command Section.

DESCRIPTION	SCOPE (SF)
Group Commander	250
Deputy Group Commander	120
Executive Officer	70
Administration Section	70
Files / Storage	50
Career Advisor	70
Group Superintendent	100
Group Conference Room	200
Subtotal (net)	930
Overhead (30%)	280
Communications/Electrical (3%)	30
Total (gross)	1,240

8.6.7. **Wing Process Manager / CCO (Cat Code 610-249):** The Wing Process Manager office is authorized a total of 550 square feet for all associated administrative and storage space. This allocation includes space for two private (secure) offices, and open office work space for up to four reservists, and file storage.

8.6.8. **Wing Exercise Evaluation Team (EET) (Cat Code 610-249):** The Wing EET office is authorized a total of 310 square feet for all associated administrative and storage space. This allocation includes space for one private (secure) offices, and open office work space for up to four reservists, and file storage.

8.6.9. **Wing Inspector General (IG) (Cat Code 610-249):** The Wing IG offices are authorized a total of 240 square feet. This allocation includes space for two private (secure) offices and storage.

8.6.10. **Judge Advocate (Cat Code 610-112):** The Wing Judge Advocate is authorized a total space calculated to accommodate the manning at each office. The total space requirement will be calculated to provide 200 square feet for the Staff Judge Advocate, and 150 square feet for each additional judge advocate, 70 square feet for each full time paralegal, and 1,040 square feet for work/meeting, administrative, storage, library, and file space. Private (secure) offices must be provided for each assigned attorney in accordance with AFI 51-504. When collocated with an Active Duty Wing Judge Advocate office, the AFRC Judge Advocate function will include only sole-use office space for the AFRC staff.

8.6.11. **Chaplain (Cat Code 171-445):** The Wing Chaplain office is authorized a total space calculated to accommodate the manning of each office. The total space requirement will be calculated to provide 120 square feet for the Wing Chaplain (senior chaplain) and 100 square feet for each additional chaplain, 70 square feet for each chaplain assistant, 70 square feet as a waiting area for counselees and 100 square feet for all management, administrative, storage, library, and functional work space. Each chaplain is authorized a private office. Adequate wing common or shared space will be provided to accommodate worship and religious education programs. The worship space does not have to be dedicated space.

8.6.12. **Historian (Cat Code 610-249):** The Wing historian is authorized a total of 200 square feet for office/administrative and storage space.

8.6.13. **Wing Safety Office (Cat Code 610-249):** The Wing Safety office is authorized a total of 550 square feet at AFRC operating locations. This allocation includes space for all management, administrative, storage, and functional work space. The Chief of Safety should be provided a private (secure) office.

8.6.14. **Force Support Squadron (Cat Code 610-243):** The Force Support Squadron Commander and associated staff are authorized a total of 670 square feet. This allocation includes space for the Commander, First Sergeant, and Orderly Room.

Table 8.11. Squadron Command Section.

DESCRIPTION	SCOPE (SF)
Squadron Commander	200
Orderly Room (includes administrative asst.)	300
Files / Storage	50
First Sergeant	120
Subtotal (net)	670
Overhead (30%)	200
Communications/Electrical (3%)	20
Total (gross)	890

8.6.14.1. **Military Personnel Section (Cat Code 610-128):** The Military Personnel Section of the Force Support Squadron is authorized a total of 2,200 square feet for all management, administrative, storage, and functional work space. This allocation includes space for the supervisor, administrative staff, customer service area, personnel employment, personnel relocation, systems, and career enhancement offices. Communications requirements include access to Secure Internet Protocol Router Network (SIPRNET), Non-secure Internet Protocol Router Network (NIPRNET), secure and unsecure telephones, and access to facsimile machines. The Installation Personnel Readiness (IPR) office requires a room capable of classified processing. Requirements include uninterrupted power and classified storage safe. This authorization is based on a Military Personnel Section with 16 full time persons and 8 reservists. For larger sections, add 70 square feet for each additional assigned full time person and 40 square feet for each additional reservist.

8.6.14.2. **Airman and Family Readiness (Cat Code 740-253):** Airman and Family Readiness (A&FR) programs operated at AFRC owned installations are authorized a total of 1,100 square feet for all administrative and work center functions. A&FR programs operated where an AFRC unit is tenant to another command are authorized a total of 305 square feet for all administrative and work center functions. Tennant units that are authorized a full-time A&FR Director will be allowed square footage equal to that allocated for AFRC owned installations.

8.6.14.3. **Civilian Personnel Section (Cat Code 610-128):** The Civilian Personnel section of the Force Support Squadron is authorized a total of 620 square feet for all administrative functions and associated storage. This authorization is based on a Civilian Personnel office with 5 full time persons. For larger offices add 70 square feet for each additional assigned full time individual.

8.6.14.4. **Services (Cat Code 171-443):** This function includes space for base operating support services function management (where present and approved) as well as management and administrative space for mobility tasked Reservists assigned to the Force Support Squadron. Services offices at AFRC owned installations are authorized a total of 1,500 square feet for all administrative, training, storage, and work center functions. Services offices at AFRC tenant locations are authorized a total of 1,300

square feet for all associated functions. Services-unique facilities such as club, dining facility, Base Exchange and lodging, will follow the applicable design guide, or AFI 32-1022, *Planning and Programming Nonappropriated Fund Facility Construction Projects.* Storage space requirements for Services training kits are described in section 11.4.

8.6.14.5. **Fitness Centers / Gymnasium (Cat Code 740-674):** AFRC installations are authorized a single base fitness center and running track. Fitness center authorized space is determined based on population supported and approved on a case-by-case basis by HQ AFRC/A1S. Installations determine whether an indoor or outdoor track best meets their needs based on the local climate. Indoor tracks should be at least 1/8 of a mile long to provide a venue for Air Force fitness testing. Outdoor running track must allow for self directed fitness activities as well as military fitness assessment testing. Ideally, track will consist of a 400m or 1/4 mile oval with 3 to 4 lanes, but a shorter track, a tri-oval track, or even a fitness trail may be used as agreed upon by local commanders. Running tracks should consist of a level surface that allows for water to run off. Uphill/downhill grades must be kept to a minimum. Any track configuration should include a rubberized surface.

8.6.14.6. **Honor Guard (Cat Code 171-443):** AFRC units with an established Honor Guard function are authorized a total of 250 square feet for administrative / office area and 600 square feet for equipment storage.

8.6.15. **Operations Support Squadron (Cat Code 610-243):** The Operations Support Squadron and associated staff are authorized a total of 1,810 square feet. This allocation includes space for the Commander, First Sergeant, Orderly Room, Operations officer, Training, Tactics, Operations Plans, Flight Management and administrative assistance. Do not duplicate functional space in both the Squadron Operations and Operations Support Squadron allocation.

Table 8.12. Squadron Command Section.

DESCRIPTION	SCOPE (SF)
Squadron Commander	200
Orderly Room (includes administrative asst.)	300
Files / Storage	50
First Sergeant	120
Operations Officer (Director of Operations)	70
Training Office (2 full time)	140
Tactics Office (1 full time, 3 reservists)	190
Tactics Testing	300
Operations Plans (2 full time, 2 reservists)	220
Flight Management (2 full time, 2 reservists)	220
Subtotal (net)	1,810
Overhead (30%)	200
Communications/Electrical (3%)	20
Total (gross)	890

8.6.16. **Logistics Readiness Squadron (Cat Code 610-243):** This squadron provides overall direction for base logistics processes related to vehicles, cargo movement, passenger movement, personal property, supplies, equipment, deployment planning and operations, fuels, and, when appropriate, logistics plans. The Logistics Readiness Squadron command section is authorized a total of 1,200 square feet. This allocation includes space for the Commander, First Sergeant, Orderly Room, secretary, document storage and uniform issue / storage. Squadron associated functions will typically operate out of facilities dedicated to their particular function (i.e. vehicle maintenance, supply warehouse, etc.).

Table 8.13. LRS Command Section.

DESCRIPTION	SCOPE (SF)
Commander	200
1st Sergeant	120
Operations Officer	70
Orderly Room (includes administrative asst.)	300
Supply / Storage (includes uniform storage / issue)	310
Conference Room	200
Subtotal (net)	1,200
Overhead (30%)	360
Communications/Electrical (3%)	40
Total (gross)	1,600

8.6.16.1. **Logistics Readiness Squadron – Readiness Element:** This element of the Logistics Readiness Squadron manages contingency operations, deployment control, and squadron readiness planning and reporting. Total space authorizations for this function are 1,000 square feet at tenant locations and 830 square feet at AFRC host base locations. At AFRC host base locations this function is typically co-located with the installation deployment control center.

8.6.16.2. **Logistics Readiness Squadron – Management and Systems Element:** This element of the Logistics Readiness Squadron provides training, customer service, resource and systems management, and quality control oversight at AFRC installations with contractor operated base support functions (see Chapter 3). Total space authorization for this function is 2,700 square feet. Table 8.15 shows proposed space allocation for the Logistics Readiness Squadron – Management and Systems Element.

Table 8.14. Logistics Readiness Squadron – Management and Systems Element.

DESCRIPTION	SCOPE (SF)
Customer Service	400
Logistics Support Manager	100
Accountable Officer	70
QAEs (4 total) (at BOS installations)	280
Training Manager and Training Staff	300
Classrooms	1,000
Resource Management	70
Systems Management	160
Other Reservists (8 @ 40)	320
Subtotal (net)	2,700
Overhead (30%)	810
Communications/electrical (3%)	80
Total (gross)	3,590

8.6.16.3. **Logistics Readiness Squadron – Other Elements:** Additional elements of the Logistics Readiness Squadron are addressed as follows: Distribution and Traffic Management Element in section 3.9; Vehicle Management Element in section 3.5 and 3.6; Fuels Management Element in section 5.1.

8.6.17. **Public Affairs (Cat Code 610-249):** The Public Affairs office is authorized a total of 640 square feet for all management, administration, and storage requirements. This authorization is based on a Public Affairs office with 3 full time persons. For larger offices, add 70 square feet for each additional assigned full time person and 40 square feet for each additional reservist. Add 400 square feet for photography studio and graphics office when these functions are part of Public Affairs.

8.6.18. **Financial Management/Budget Advisor (Cat Code 610-249):** This function includes space for both base operations support Financial Management staff and the mobility tasked Reservists assigned to Wing/Group Finance function. Financial Management offices at AFRC owned installations are authorized a total of 3,480 square feet for all administrative, training, storage, and work center functions. Financial Management offices at AFRC tenant locations are authorized a total of 2,250 square feet for all associated functions. These standards are based on an average Financial Management staff of up to 18 full time positions at AFRC owned bases and up to 8 full time positions at tenant locations. An additional 70 square feet is authorized for each additional full time staff member. Table 8.16 shows proposed space allocation for the Financial Management function. Refer to AFI 31-101 paragraph 8.4.4.10 to determine the type of funds storage containers required.

Table 8.15. Financial Management Function.

DESCRIPTION	SCOPE (SF)
Chief	200
Financial Officer	100
Management Analyst	70
Budget Analyst (2 @ 70 SF)	140
Budget Officer	100
Administration (12 @ 70)	840
Reservists Open Office Area (18 @40)	720
FM Reserve Officer	70
Enlisted Superintendent	70
Full Time ART	120
Administration Storage	100
Files	100
Computer Server Room	50
Conference Room	200
Customer Service Area	200
Computer Training Area	300
Mobility Training Storage (100/LOG DET)	100
Subtotal (net)	3,480
Overhead (30%)	1,040
Communications/electrical (3%)	100
Total (gross)	4,620

8.6.19. **Military Equal Opportunity (Cat Code 610-249):** Military Equal Opportunity functions staffed with up to three individuals are authorized a total of 250 square feet. An additional 70 square feet is authorized for each additional full time staff member.

8.6.20. **Contracting (Cat Code 610-249):** Contracting functions operating at AFRC owned installations are authorized 1,930 square feet for all administrative and work center functions. This provides work and administrative space for up to 12 assigned individuals. An additional 70 square feet is authorized for each additional full time staff member. **Table 8.16** shows proposed space allocation for the Contracting office.

Table 8.16. Contracting.

DESCRIPTION	SCOPE (SF)
Chief	200
Administration	100
Section Supervisor	100
Contracting Staff (70 SF each)	630
Files / Storage	300
Customer Waiting	200
Computer Room	200
Conference Room	200
Subtotal (net)	1,930
Overhead (30%)	580
Communications/electrical (3%)	60
Total (gross)	2,570

8.6.21. **Wing Education and Training Office (Cat Code 730-441):** Education and Training Offices are authorized 690 square feet for administrative functions. Training space associated with these functions should include 700 square feet for Video-Teleconference or distance learning classroom, 500 square feet for Computer Classroom, 500 square feet for a computer laboratory/learning center, and 500 square feet for a testing room (computer testing and/or conventional testing). Each classroom should be configured to support 20 students and should be joint use space open to all installation squadrons for their training needs.

8.6.22. **Wing Sexual Assault Response Coordinator (SARC) (Cat Code 610-249):** Each wing is authorized a total of 150 square feet for a private office and storage use by the SARC.

8.6.23. **Wing Protocol Office (Cat Code 610-249):** Each wing is authorized a total of 150 square feet for a private office and storage use by the protocol office.

8.6.24. **Wing Antiterrorism Officer (ATO) (Cat Code 610-249):** Each wing with a full time ATO is authorized a total of 100 square feet for a private office and storage use by the antiterrorism officer.

8.6.25. **Wing Information Protection (Cat Code 610-249):** The Wing Information Protection Office is authorized a total of 550 square feet at AFRC operating locations. This allocation includes space for all management, administrative, storage, and functional work space. The Chief of Information Protection should be provided a private (secure) office.

8.6.26. **Conference / Training Centers:** These facilities for local and Command directed mass training events are regionally dispersed in order to increase their utilization and decrease travel costs for users. Designated Conference Centers are Building 404 at Homestead ARB FL, Building 1204 at Westover ARB MA, and Building 467 at March ARB CA. These designated Conference Centers are authorized at their current size with no further expansion approved. Designated conference facilities are eligible for sustainment, restoration and modernization, as well as utility funding and will be managed by the host

installation. No other Conference Centers, mass briefing facilities, auditoriums, theaters, or other similar facilities are authorized for AFRC installations.

8.6.27. **Office of Special Investigation (OSI) (Cat Code 610-915):** At AFRC Host locations the Wing OSI office is authorized a total of 2,270 square feet . This allocation includes space for two private (secure) offices, files / record storage, weapons / evidence storage, reception area, interview room, and SIPR / Communications space. **Table 8.17** shows proposed space allocation for an Office of Special Investigation facility

Table 8.17. Office of Special Investigation.

DESCRIPTION	SCOPE (SF)
Commander	200
Special Agent and Support Staff	100
Receptionist	70
Conference Room	200
Training Room	300
Visitors Waiting Area	150
Administration Support Room	120
Secure Visitors Waiting Room	120
Polygraph / Interview Room	150
Observation Room	70
Evidence Vault	200
Weapons Vestibule and Vault	120
Secure Storage Room	100
Computer / Server Room	120
Break Room	150
General Storage Room	100
Subtotal (net)	2,270
Overhead (30%)	680
Communications/Electrical (3%)	70
Total (gross)	3,020

8.7. Combat Communications (Cat Code 171-447): Combat Communications Squadrons are authorized a total of 7,000 square feet for administrative, training, operations management, and work / shop functions. Additional 21,840 gross square foot storage area / warehouse is authorized for squadrons equipped with Theater Deployable Communications (TDC) and Integrated Communications Access Package (ICAP). Outdoor uncovered storage area should be provided for storage of vehicles assigned to the squadron. **Table 8.18** shows proposed space allocation for a Combat Communications Squadron.

Table 8.18. Combat Communications Squadron.

DESCRIPTION	SCOPE (SF)
Commander	200
Conference Room	200
Command Staff Work Area Administration Personnel Training Multipurpose Computer Workstation	450
Testing Room	100
Administrative Storage Room	50
Operations Superintendent's Office	100
COMSEC Storage Room	150
Tactical Operations Room	100
Operations Work Area Communications Operations Radio Operations Systems Control Multipurpose Computer Workstation	450
Operations Storage Room	50
Chief of Maintenance Office	100
Job Control Room	150
Log Plans/Mobility Control Center	150
Maintenance Work Area Radio Maintenance Communications Systems Maintenance Multipurpose Computer Workstation	450
Maintenance Shop Bay	2,500
Test Equipment Room	200
Benchstock/Tool Room	200
Systems Maintenance Room	500
Classroom	500
UTC Equipment Computer Lab	400
Subtotal (net)	7,000
Overhead (30%)	2,100
Communications/Electrical (3%)	210
Total (gross)	9,310
Warehouse / Storage (includes	18,200

TDC-ICAP suite)	
Overhead (20%)	3,640
Total Storage (gross)	21,840

8.8. Recruiters (Cat Code 610-249): Recruiting functions are authorized a total of 840 square feet for all administrative and storage requirements. This allocation is based on an average recruiting staff of up to 5 assigned individuals. An additional 100 square feet is authorized for each additional recruiter assigned. Regional recruiting offices are authorized an additional 300 square feet for meeting space in addition to the space authorized for similar installation functions. **Table 8.19** shows proposed space allocation for an installation Recruiting function.

Table 8.19. Recruiting.

DESCRIPTION	SCOPE (SF)
Senior Recruiter	120
Administration	100
Recruiters (3 @ 100)	300
Waiting Area	200
Storage	120
Subtotal (net)	840
Overhead (30%)	250
Communications/electrical (3%)	25
Total (gross)	1,115

8.9. Deployment Processing Facility (Cat Code 141-786): Deployment processing facilities are applicable to AFRC host installations. Each base develops its own Installation Deployment Plan (IDP) defining its deployment process. The following information is provided to ensure adequate space is identified and necessary infrastructure is available for AFRC unit deployment processes. Existing facilities should be used or modified to meet these requirements. When the deployment control center (DCC) is not active, Deployment Processing Facility space will be co-used for other functions such as the Installation Deployment Readiness Cell (IDRC). Each AFRC installation will deploy personnel and cargo using the five automated Air Force standard systems for deployments, integrated deployment system (IDS). IDS incorporates logistics module (LOGMOD) for providing Load & Packing Lists to deploying squadrons and Deployment Schedule of Events (DSOE) to monitor all deployments; the Cargo Movement & Operating System (CMOS) & Automated Air Load Planning System (AALPS) for the movement and tracking of Air Force assets; Manpower & Personnel (MANPER) system for processing personnel; and LOGMOD Stand-Alone (LSA) to aid deploying squadrons in managing their assets and training. The IDS uses an installation's local area network (LAN). Basic "minimum" facility requirements are listed below.

8.9.1. **Deployment Control Center (DCC**). AFRC Host Bases are authorized 1,670 square feet for all functions associated with the Deployment Control Center. Deployment command and control for the Wing Commander is monitored from this room. This room requires "controlled access," and must be capable of operating in classified mode in support of classified DMS, Global Command and Control System (GCCS), and operations plan (OPlan) directives. DCC Manning includes the following personnel: IDO, Logistics Plans, Personnel,

Transportation, DSOE Monitors, Supply, Admin, runners, and selected unit representatives (minimum manning eight, maximum depends on the number of deployment tasked units but could exceed 20). DCC Equipment Requirements: Robust communications in the DCC are essential for positive control. Minimum IDS communications requirements include access to SIPRNET, NIPRNET, secure and unsecured telephones, and access to secure and unsecured facsimile machines. DCC personnel require a GCCS terminal to access JOPES, DCAPES, Base support Planning Tool (BaS&E - formerly LOGCAT), LOGFAC, LOGMOD, MANPER-B, classified newsgroups, secure web sites, collaborative decision support tools, and other planning aids. Additional requirements include uninterrupted power and classified storage. Video surveillance of marshaling yards and aircraft loading operation areas is optional, but desired if direct line of sight of these areas is not available from the DCC. NOTE: LOGMOD requires, as a minimum, T-1 LAN connectivity to all Unit Deployment Managers (UDMs) facilities and the wide area network. A minimum of nine workstations with combined NIPR/SIPR connectivity are required. The ideal location of the DCC is in the same building or near the personnel and cargo deployment functions, personnel processing facilities, and the flight line. All deployment facilities must be heated, air-conditioned, and lighted as well as normal offices. Automatic switching backup power generation is authorized, and back-up facilities should be identified in case fire, natural disaster, terrorist activity, or other event renders the primary facilities unusable. The DCC should be collocated with the Logistics Plans office

8.9.1.1. Space authorization for the DCC includes a conference/briefing room for deployment concept briefings. This room may be one normally used for other purposes, such as a deployment training classroom or personnel deployment function (PDF) passenger briefing room. The concept briefing room should be located within the same building as the DCC and be secure to brief classified SECRET.

8.9.1.2. The load planning function is included in Space authorization for the DCC and must be adjacent to or in the immediate proximity of the DCC and the Cargo Processing Facility (CPF). It should accommodate at least two people and two computers connected to the LAN. It should be a quiet and secure area.

8.9.1.3. The quality control function is included in Space authorization for the DCC and must be adjacent to or in the immediate proximity of the DCC. It should accommodate at least four people and two computers connected to the LAN. It should be a quiet and secure area.

8.9.2. **Installation Deployment Readiness Cell (IDRC).** On a routine basis, the DCC may not be required to stand up if the responsibilities can be handled effectively in the normal operating location of the IDRC (i.e., the IDRC must mirror the DCC requirements). The IDRC is responsible for identifying, validating, and distributing tasking and information. Coordinates with UDMs to ensure appropriate units are tasked in DCAPES, and making corrections as necessary. AFRC host locations are authorized 1,400 square feet of facility space for this function. Authorization includes all logistics plans functions, personnel readiness unit, transportation and installation deployment officer and must have SIRP and NIPR capabilities.

8.9.2.1. **Reserve Deployment Readiness Cell (RDRC).** Wings at AFRC Tenant locations are authorized a total of 1,400 square feet for a RDRC that is separate from the

active duty deployment readiness cell. RDRC manages taskings associated with Reserve specific deployment requirements, includes space for all logistics plans functions, personnel readiness unit, transportation and installation deployment officer, and must have SIPR and NIPR capabilities.

8.9.3. **Personnel Deployment Function (PDF**). AFRC Host Bases are authorized 3,025 square feet for the Personnel Deployment Function. This allocation includes all administrative, work, waiting/holding, and personnel processing functions. The PDF office is usually manned by two to four people, must have LAN connectivity, and must include a copier unless a suitable one is available nearby. The PDF continuously monitors deploying personnel requirements and publishes deployment orders. Communications requirements include access to SIPRNET, NIPRNET, secure and unsecure telephones, and access to facsimile machines. The PDF must be located in immediate proximity to the personnel processing facility:

8.9.3.1. **Personnel Processing Facilities**. This facility requires a personnel processing line consisting of eight work stations. Each station is manned by 1-2 people behind tables, in booths, or in cubicles. The facility also has a private area for legal and chaplain counseling and a medical station for administering injections in the hip; an indoor holding/briefing area at the beginning of the line for 100 people (seating desired); and at least two rooms to brief passengers after processing for deployment, and "hold" them until they board transportation (should hold at least 100 people and provide comfortable seating). These rooms at the end of the personnel processing line must allow PDF personnel to control entry and exit, to maintain the integrity of the deploying force; should include a projection screen or large screen TVs to provide training or entertainment (cable TV desired) to the deploying personnel; must be near well-stocked vending machines, water fountain, and restrooms. The holding/briefing rooms must be quiet and secure and cleared for classified SECRET. Holding/briefing rooms may be used for other functions during normal operations, such as other training or meetings, and may be used for the deployment concept briefing. Personnel processing facilities should be located adjacent to, or in the proximity of, the DCC and PDF.

8.9.4. **Cargo Deployment Function (CDF**). This function is usually located on or near the cargo marshaling area. It is the installation's focal point for all cargo processing activities. LAN connectivity is required in this area. This area should provide enough room to check and process all accompanying cargo documentation. Dispatch of cargo load teams to load and unload support aircraft occurs in this facility. Normal CDF operations (cargo in-check, marshaling, and loading) can be done outdoors (ramp, apron, etc.) or in designated hangar space. The unit Installation Deployment Plan (IDP) should specify procedures for this process.

8.9.5. **Deployment Training Classrooms**. At least two rooms conducive to training at least 20 people at a time are required. Training rooms must be equipped to use standard audio-visual equipment and have LAN connectivity to train UDMs in LOGMOD. Passenger holding/briefing rooms and the room used for the deployment concept briefing may be ideal for this purpose. The IDO, PDF, and CDF must provide various initial and recurring courses to UDMs, augmentees, and deploying personnel. These rooms may also be used for meetings, conferences, and other base requirements. Ten LAN drops and computers are needed in at least one deployment training classroom for IDS training.

8.10. Reserve Forces Medical Training and Administration Facility (Cat Code 171-450): Medical units include Aeromedical Staging Squadrons (ASTS) and Medical Squadrons (MDS). While units differ in tasking, they share similar administrative and training space requirements. However, unit tasking and unit manning must be considered when calculating space requirements. Variations in space authorization for medical units will be reviewed and validated on a case-by-case basis by HQ AFRC/SG.

8.10.1. **Aeromedical Staging Squadrons (ASTS) train to perform on-ground patient care at forward and deployed locations.** There is considerable variation in aeromedical staging squadron size throughout the Command. Small to mid-sized ASTS (those assigned a 50 to 150 bed UTC) are authorized 7,730 square feet of administrative, training and storage space. Large ASTS (those assigned a 151 to 250 bed UTC) are authorized 8,880 square feet of administrative, training and storage space. **Table 8.20** shows proposed space allocation for an ASTS.

Table 8.20. Aeromedical Staging Squadrons.

DESCRIPTION	SCOPE (SF)	
	ASTS (50 - 150 BED)	ASTS (151 - 250 BED)
Commander	200	200
Executive	70	70
1st Sergeant	120	120
ARTs/Administration	750	900
Conference Room	200	200
Chief Nurse	100	100
Nursing Services Area	750	1,000
Training/Scheduling	150	150
Skills Laboratory (one per installation)	750	1,000
Medical/Dental Records	300	300
Physician Section	220	220
Medical Readiness Staff	150	200
Mental Health Office	120	120
Pharmacy Staff	200	250
Dental Administration	150	150
Optometry Administration	100	100
Logistics	200	300
Classrooms	1,100	1,400
General Storage	500	500
Mobility / Training Gear Storage	500	500
Critical Care Air Transport (CCAT) storage	100	100
Aeromedical Staging Facility (Training)	500	500
OJT	300	300

Break Area	200	200
Subtotal (net)	7,730	8,880
Overhead (30%)	2,320	2,660
Communications/electrical (3%)	230	270
Total (gross)	10,280	11,810

8.10.1.1. If an ASTS unit located on an Active Duty installation includes an aerospace medicine package (responsible for physical exams on AFRC personnel), they are authorized an additional 975 square feet (gross) for the Chief of Aeromedical Services and the Physical Exam Section staff. Space for conducting physical exams is joint-use space located in the host Active Duty clinic. If an ASTS unit located at a Host installation includes an aerospace medicine package (responsible for physical exams on AFRC personnel), treat them as an AMDS for facility space authorization purposes.

8.10.2. **Medical Squadrons (MDS) and Aerospace Medicine Squadrons / Flights (AMDS)** are responsible for operation of medical exam facilities at AFRC installations (AMDS) and may have mobility taskings (MDS). There is considerable variation in medical squadron size throughout the Command depending primarily on the size of the wing they are assigned to support. Small to mid-sized MDS (those located at a base with a Traditional Reserve (TR) population of less than 1,500) are authorized 7,970 square feet for administrative, training and medical exam space. Large MDS (those located at a base with a TR population greater than 1,500) are authorized 9,170 square feet for administrative, training and medical exam space. Table 8.13 shows proposed space allocation for an MDS/AMDS. Each installation is authorized only a single medical exam facility. Medical exam space should be joint-use with other co-located services (i.e. Navy, Air National Guard, etc.) where possible. Reserve Medical Units located on Active Duty facilities are authorized space for administrative and training functions but will perform physical exams / customer service within the Active Duty clinic. Space authorization for MDS/AMDS tenanted on Active duty facilities is shown in **Table 8.21**

Table 8.21. Medical Unit.

DESCRIPTION	SCOPE (SF)			
	MDS / AMDS (< 1,500 TRs supported)	MDS/ AMDS (> 1,500 TRs supported)	Tenant MDS / AMDS (< 1,500 TRs supported)	Tenant MDS / AMDS (> 1,500 TRs supported)
Commander	200	200	200	200
Administration	300	300	300	300
1st Sergeant	120	120	120	120
Orderly Room	300	300	300	300
Chief Nurse	100	100	100	100
Office/Exam Rooms (8 @ 80)	640	800		
Immunizations	150	150		
Trauma Treatment	300	300		
EKG (2 @ 90)	180	180		
Medical Technical Station	110	110		
Supplies	120	180	120	180
General Lab	120	120		
Skills Lab (one per installation)	700	850	700	850
Nursing services Area	700	850	700	850
Audio Exam	100	100		
Optometry	120	120	120	120
Dental (2 @ 120)	240	240		
Eye Exam	100	100		
Pharmacy	100	100		
Dental Administration	120	120	120	120
Training Officer	80	80	80	80
Classrooms (300SF each)	900	1,200	900	1,200
Patient Affairs	100	100		
Vital Signs	100	100		
Radiology	100	100		
Fetal Protection Program	100	100		
Drug Demand Reduction	200	200		
Interview Rooms (2 @ 100)	200	200		
Medical Records	175	255	175	255
Conference Room	200	300	200	300
Waiting	600	800		
X-Ray	275	275		
Dark Room (if required)	60	60		
Medical Storage	60	60	60	60
Subtotal (net)	7,970	9,170	4,195	5,040
Overhead (30%)	2,390	2,750	1,260	1,510
Communications/electrical (3%)	240	270	130	150
Total (gross)	10,600	12,190	5,585	6,700

8.10.2.1. If Medical unit (MDS/AMDS) located on an Active Duty installation includes an aerospace medicine package (responsible for physical exams on AFRC personnel), they are authorized an additional 975 square feet (gross) for the Chief of Medical Services and the Physical Exam Section staff. Space for conducting physical exams is joint-use space located in the host Active Duty clinic.

8.11. Bioenvironmental Engineering/Military Health (Cat Code 171-443): Bioenvironmental engineering (BEE)/military health (MH) offices provide occupational protection services to AFRC personnel. BEE/MH offices are authorized 2,410 square feet for administrative, storage, and work space. **Table 8.22** shows proposed space allocation for the BEE/MH function.

Table 8.22. Bioenvironmental Engineering.

DESCRIPTION	SCOPE (SF)
Shop Chief	100
NCOIC	100
Administrative (70 Per Person x 9)	630
CBRN Prep	150
Classroom	400
Locker Room	100
Shower	50
Forms Storage	80
Quantitative Fit Test Room	100
Threat Agency Surveillance Package Storage	150
Water / Environmental Sampling Lab	200
Industrial Hygiene Lab	200
Industrial Hygiene Equipment Storage	150
Subtotal (net)	2,410
Overhead (30%)	720
Communications/electrical (3%)	70
Total (gross)	3,200

8.12. Aerial Port Training Facility (Cat Code 171-873):

8.12.1. **Facility Requirement.** These facilities provide for administrative, classroom training, cargo processing and aerial delivery operations functions. Aerial port squadrons (APS) at AFRC installations with 12 PAA, and at Geographically Separated Units, are authorized 8,820 square feet for all administrative and training functions. Squadrons that support Aerial Delivery Systems (air drop operations) are authorized an additional 9,500 square feet for build-up, storage, training and parachute packing space. **Table 8.23** shows proposed space allocation for an APS.

Table 8.23. Aerial Port Squadron.

DESCRIPTION	SCOPE (SF)	SCOPE (SF) Aerial Delivery Systems	SCOPE (SF) Aerial Delivery Systems on AMC Base
Administrative			
- Commander	200	200	200
- 1st Sergeant	120	120	120
- Advisor (ART)	100	100	100
- Orderly Room/Admin.	400	400	400
- Break Room	200	200	200
- Locker Room	400	400	400
- Supply	300	300	300
- Storage for mobility bags	500	500	500
- High Value Item Storage	100	100	100
Training			
- Material Handling Equipment	200	200	200
- Air Terminal Operations Center (ATOC)	200	200	200
- Port Operations (RAMP)	200	200	200
- Freight	200	200	200
- Load Build-up/Storage/Training (see notes)	3,500	13,000	0
- Equipment and Supplies	700	700	700
- Safety/Quality	200	200	200
- Special Handling	200	200	200
- Training Office	200	200	200
- Classrooms	900	900	900
Subtotal (net)	8,820	18,320	5,320
Overhead (30%)	2,670	5,500	1,600
Communications/electrical (3%)	270	550	160
Total (gross)	11,830	24,370	7,080

NOTES:

1. Storage should include high bay area for vertical platform storage racks.
2. Space can also be used for indoor vehicle storage at Northern tier locations.

8.12.2. Aerial Port Squadrons (APS) co-located with Active Duty functions are authorized 5,320 square feet for all training and administrative functions and use the host base air freight terminal for "hands on" training.

Chapter 9

MAINTENANCE FACILITIES

9.1. Hangar (Cat Code 211-111): Protected space for aircraft maintenance. Includes necessary utility systems and limited office/administrative space. Each AFRC airlift or aerial refueling unit with 8 PAA is authorized one fully enclosed scheduled maintenance hangar, one nose dock unscheduled maintenance hangar, and adequate access to one nose dock fuel systems maintenance hangar as required to meet mission and training requirements. Northern tier bases should be provided access to a fully enclosed hangar for accomplishing fuel systems maintenance. Dedicated corrosion control or paint / de-paint hangars are not authorized for AFRC units. The number of dock spaces to be provided for fighter/helicopter units, as well as units with more than 8 PAA can be determined by multiplying the number of primary assigned aircraft (PAA) by the following factors as shown in table 9.1.

Table 9.1. Hangar Quantity Factors.

AIRCRAFT	FACTOR
Fighter/helicopter	0.25
C-5	0.16
C-17	0.20
C-130, KC-135, B-52	0.15

Formula: Number of aircraft by type x factor = Required covered spaces. Fuel maintenance/corrosion control hangar (Cat. Code 211-179) is not included in this number.
Example: 12 each C-130 x .15 = 1.8 or 2 covered spaces + one fuel maintenance hangar.

9.2. Maintenance Operations Squadron (Cat Code 610-129): This squadron is responsible for developing and publishing the wing flying/maintenance schedule, determining long-range fleet health maintenance priorities, assigning priorities for and coordinating use of shared maintenance resources, providing trend analysis information to the squadron commanders, and providing supply liaison and engine management support for flight line and back shop maintenance. Total authorized space for this squadron is 3,280 square feet. This allocation provides space for offices for the chief of maintenance, classroom, maintenance operations control, plans, scheduling, documentation, quality control, records and analysis and administration. Table 9.2 shows proposed space allocation for the Maintenance Operations Squadron.

Table 9.2. Maintenance Operations Squadron.

FUNCTION	SCOPE (SF)
Commander	200
Administration	100
Files/Storage	50
1st Sergeant	120
Orderly Room	300
Quality	160
Maintenance Operations Center (MOC)	450
MOS Superintendent	100
Plans and Scheduling	220
Analysis	220
Conference Room	200
Classrooms (2 @ 300)	600
Computer Room/Tech Order Library	150
Financial and storage	150
Training Office and storage	150
Programs & Mobility	110
Subtotal (net)	3,280
Overhead (30%)	980
Communications/electrical (3%)	100
Total (gross)	4,360

NOTES:
Maintenance Operations Center requires secure communications access and frequently serves as the Wing alternate Command Post

9.3. Maintenance Supply Liaison (MSL) (CAT Code 211-154): Assigned to the Logistics Readiness Squadron, the MSL provides forward supply control and parts storage in support of aircraft maintenance operations. MSL is typically located within aircraft maintenance shops or in separate facilities proximal to aircraft maintenance shops. MSL is authorized 140 square feet for administrative space and 600 square feet for parts and supply storage.

9.4. Maintenance Squadron (MXS) (Cat Code 211-154): This squadron is responsible for performing scheduled and unscheduled maintenance on assigned aircraft as well as maintenance and repair of specific component systems. Squadron is typically organized into subordinate flights that are responsible for maintenance and repair of specific component systems. Squadron Command section is authorized a total of 1,980 square feet for administration and training activities. **Table 9.3** shows proposed space allocation for the Maintenance Squadron command section.

Table 9.3. Maintenance Squadron.

FUNCTION	SCOPE (SF)
Commander	200
Administration	100
Files/Storage	50
Conference Room	200
1st Sergeant	120
Orderly Room	300
Maintenance Officers (3 Officers)	160
Superintendent	100
Classrooms (3 @ 200)	600
Computer Room/Tech Order Library	150
Subtotal (net)	1,980
Overhead (30%)	600
Communications/electrical (3%)	60
Total (gross)	2,640

9.4.1. **MXS General Purpose Shops (Cat Code 211-152):** Use the following authorizations for shops supporting 12 PAA airlift/aerial refueling, 16 PAA fighter units, and 8 PAA bomber units. Shop space required to support additional PAA will be determined on a case-by-case basis in coordination with HQ AFRC/A4M. Shop space includes area for superintendent office, break room, locker room, tool storage and computer stations / tech order library as required.

Table 9.4. Maintenance Squadron and Shops (MXS) Sized by Weapon System.

FUNCTION	**SCOPE (SF)** Fighters / Bombers	C-130	KC-135	C-5	C-17
Squadron Commander	200	200	200	200	200
1st Sergeant	120	120	120	120	120
Administrative Assistant	100	100	100	100	100
File Storage	50	50	50	50	50
Orderly Room	300	300	300	300	300
Squadron Conference Room	200	200	200	200	200
Flight Chief Offices (4 @ 100)	400	400	400	400	400
Fabrication Flight					
Machine	2,500	2,500	2,500	4,000	4,000
Welding	2,500	2,500	2,500	2,500	2,500
Sheet Metal	2,500	2,500	2,500	2,500	2,500
Corrosion Control (Note 1)	2,900	2,900	2,900	3,400	3,400
Fiberglass, Composite Material	1,000	700	700	2,500	3,200
NDI (Note 3)	4,000	4,000	4,000	4,000	4,000
Propulsion Flight					
Engine / APU Inspection and Maintenance	7,070	7,070	6,900	10,160	10,160
HAZMAT issue / recycling	200	200	200	200	200
Inspection Flight					
Wheel and Tire Repair/Reclamation	1,500	2,000	2,000	2,000	2,000
Isochronal Shop Management	300	300	300	300	300
Accessories Flight					
Electric, Environ, Battery	1,500	2,500	2,500	4,500	3,000
Hydraulic, Pneudraulic (Note 2)	1,000	1,500	1,500	2,000	1,700
CTK/RSP/Tool Kit Storage	1,000	1,000	1,000	1,000	1,000
Crash Recovery Equipment Storage	400	800	800	800	800
MXS Break Room	800	800	800	800	800
Subtotal (net)	30,540	32,640	32,470	42,030	40,930
Overhead (20%)	6,110	6,530	6,490	8,410	8,190
Total (gross)	36,650	39,170	38,960	50,440	49,120

NOTES:

1. Paint booths require 10 foot minimum ceiling height. Only one AFRC owned paint spray bay/booth is authorized per base. AFRC units are not authorized any aircraft painting other than maintenance touch-up and then only to the extent authorized by the base environmental office.
2. All units with refueling capability require additional space to service the re-fuel boom. This periodical task is normally accomplished in any open area (that is, engine shop aisle, support equipment shop, etc.); however, if no other area is available, an additional 260 square feet (gross) is authorized for the hydraulic shop.
3. If a NDI shop exists on a given base, joint use is required. Facility will not be duplicated.

9.5. Aircraft Organization Maintenance Shop (Cat Code 211-154): Aircraft Maintenance Squadron (AMXS) or "flightline maintenance" is responsible for maintenance and inspection of unit assigned aircraft. Facility requirements are determined by the weapons system supported, number of assigned aircraft (PAA), and hours of maintenance operations. Use the authorizations shown in **Table 9.5** for units supporting 12 PAA airlift/aerial refueling, 21/24 PAA fighter, and 8 PAA bomber units. Additional authorizations for units required to support additional PAA will be determined on a case-by-case basis in coordination with HQ AFRC/A4M.

Table 9.5. Aircraft Maintenance Squadron (AMXS).

FUNCTION	SCOPE (SF)							
	Fighters/ Bombers	Rescue Helicopter	Rescue C-130	C-130	C-5/C-17	KC-135	Associate Tanker/Airlift	Assc Figh
Squadron Commander	200	200	200	200	200	200	200	200
Administration	100	100	100	100	100	100	100	100
Maintenance Officer	70	70	70	70	70	70	70	70
Maintenance NCOIC	100	100	100	100	100	100	100	100
1st Sergeant	120	120	120	120	120	120	120	120
Superintendent	70	70	70	70	70	70	70	70
Maintenance Debrief	500	300	200	200	200	200	200	300
Flight Officers 2 @ 100	200	200	200	200	200	200	200	200
Conference Room (Briefing)	400	400	400	200	200	200	200	200
Maintenance Training Classroom	600	600	600	600	600	600	600	600
Computer work stations / open office	300	200	300	300	300	300	300	300
Tool Room/Bench Stock	800	400	800	800	1,200	800	0	0
Tail No. Bins	600	400	700	600	1,000	600	0	0
Tech Order Library	100	100	100	100	100	100	100	100
Ready Room/Lockers	2,000	1,500	1,500	1,500	1,500	1,500	1,500	2,00
Production Supervisor	100	100	100	100	100	100	100	100
Production Scheduling	120	120	120	120	120	120	120	120
Alternate Mission Equipment (AME)	2000	0	0	0	0	0	0	0
SUPPORT Equipment Maintenance	4,000	3,200	3,500	3,000	4,500	3,000	0	0
LOOSE-21 Equipment	0	0	1,000	2,000	4,000	2,000	0	0

Storage								
Subtotal (net)	12,380	8,180	10,180	10,380	14,680	10,380	3,980	4,58
Overhead (30%)	3,710	2,450	3,050	3,110	4,400	3,110	1,190	1,37
Communications/electrical (3%)	370	250	310	310	440	310	120	140
Total (gross)	16,460	10,880	13,540	13,800	19,520	13,800	5,290	6,09

9.5.1. **Aircraft Armor Kits:** Provides storage for armor kits associated with tactical and strategic airlift as required by mission configuration. Add 80SF per PAA for storage or armor kits, containers cannot be stacked more than 2 high.

9.5.2. **Aircraft Jack Test Stand (Cat Code 218-712):** At installations with aircraft jack test stand, a facility may be provided to enclose test equipment protecting it from weather and premature degradation. Aircraft Jack Test Stand facility is not authorized climate control beyond mechanical ventilation.

9.6. Fuel Systems Maintenance Dock (Cat Code 211-179): The facility provides the area to perform maintenance on aircraft fuel systems (also may incorporate aircraft washing capabilities). Each unit with primary assigned aircraft is authorized a fuels systems maintenance space. Maintenance Dock includes 2,500 square feet for office / administrative area, tool storage, locker room, break room and showers. See section 9.1. For F-16 equipped units add 3,000 square feet to the Fuel System Maintenance Dock for tank build-up/training.

9.7. Weapons Release, Gun Systems, Munitions Maintenance, and Munitions Training: Refer to Air Force Munitions Facilities Standards Guide Volume 1 and Volume 2 for all munitions, weapons release, gun system maintenance or associated training facility requirements.

Table 9.6. Weapons Related Facility Summary.

Facility	Cat Code	SCOPE (SF)
Munitions Load Crew Training Facility	171-875	Use Active Duty Standard
Missile Assembly Shop/Integrated Maintenance Facility	212-212	Space determined by weapons system acquisition
Tactical Missile/Glide Weapon Maintenance Shop	212-213	One bay/missile + admin space
Weapons and Release Systems Shop	215-552	Space outlined in standards guide
Surveillance and Inspection Shop	215-582	Use Active Duty Standard
Conventional Munitions Maintenance Shop	216-642	Use Active Duty Standard
AGE Facility used for Munitions Support Equipment Maintenance	218-712	Use Active Duty Standard
Munitions Administrative Facility	610-144	Use Active Duty Standard

9.8. Avionics Shop (Cat Code 217-712): This shop is used to perform maintenance on aircraft equipment and accessories such as airborne communications, cameras, bombing, navigation and fire control systems. The facility includes shop space, classroom, office, parts/tool storage,

restrooms and locker room space. Use the authorizations shown in table 9.7 for units supporting 12 PAA airlift/aerial refueling, 21/24 PAA fighter, or 8 PAA bomber units. Electronic countermeasures (ECM) maintenance and storage may be added to this facility. See category code 217-713, ECM POD/STORAGE. Additional space may be authorized for special requirements unique to that mission. The following space requirements apply:

Table 9.7. Avionics Shop.

AIRCRAFT	SCOPE (SF)
F-16	7,700
A-10	5,300
F-22	8,000
C-130E/H	4,480
HC-130/MC-130 (See note below)	10,850
HC-130/HH-3(H-60)(ARS) (See note below)	4,480
KC-135	3,780
C-17	4,300
B-52	5,300
C-5	6,400

NOTE: Provide an additional 1,000 square feet secure room for C-130 aircraft and 400 square feet for H-60 Helicopters Equipped with Defensive Systems. Provide an additional 600 square feet for shops supporting aircraft equipped with LAIRCM.

9.9. Electronic Countermeasures (ECM) Pod Shop/Storage Facility (Cat Code 217-713): This facility supports ECM activities of specific fighter and special operations units such as A-10, F-16 and others. The facility contains maintenance/testing space for ECM pods and radar warning receivers, storage space for pods, receivers and other needs, and administrative space. The function can be added to category code 217-712, Avionics Shop.

9.9.1. **ECM/LANTIRN/LANA Pod Maintenance Shop/Storage Facility.** The facility supports low altitude night attack (LANA) pod requirements of specific fighter units such as F-16. The facility contains maintenance and storage for LANA pods and associated equipment. The function can be added to category code 217-712, Avionics Shop. Required areas are shown in **Table 9.8**.

Table 9.8. Pod Maintenance Shop/Storage Facility.

AIRCRAFT	SCOPE (SF)
A-10	6,700
F-16C/D (LANTIRN included)	8,700
C-17	500
AC-130/HC-130/MC-130	8,700
H-60	400

9.10. Aerospace Ground Equipment (AGE) (Cat Code 218-712): This facility supports inspection, maintenance, repair, and servicing of all assigned aircraft support equipment. Units

supporting up to 75 pieces of powered AGE are authorized a total of 4,000 square feet for all maintenance bays, tool crib, storage, battery shop, administrative, and training space. Exterior paved parking sufficient for all assigned AGE should be provided. A dedicated AGE fuel service facility may also be provided. **Table 9.9** shows space allocation for the AGE function.

Table 9.9. Aerospace Ground Equipment Facility.

DESCRIPTION	SCOPE (SF)
Maintenance Bays	2,500
Tool Crib	200
Parts Cleaning Room	200
Battery Room	100
Parts/Storage	400
Administration	200
Cams/Computer	100
Classroom/break Area	300
Subtotal (net)	4,000
Overhead (30%)	1,200
Communications/electrical (3%)	120
Total (gross)	5,320
EXTERIOR STORAGE	
Storage/Paved Parking	2,.250
Fuel Servicing/Tanks	750

NOTES:

1. Units maintaining 76-120 pieces of powered AGE are authorized an additional 600 SF in the maintenance shop area and an additional 600 SF of storage/paved parking area.
2. Units maintaining 121-160 pieces of powered AGE are authorized an additional 1200 SF in both the maintenance shop and the storage/paved parking area.
3. For units maintaining support equipment (non-powered AGE), add 3,200 SF paved parking area.
4. Units located at Northern Tier installations can convert up to 50% of storage/paved parking area to enclosed heated storage.

Chapter 10

EXPLOSIVES STORAGE

10.1. Rocket Storage and Assembly Building (Cat Code 422-256): This facility provides combined assembly shops and live ammunition storage space. Authorization for AFRC units is 11,160 Square Feet where mission requires.

10.2. Segregated Magazine (Cat Code 422-257): This magazine is used to store small quantities of many different types of explosives and ammunition. Authorization depends on mission requirements and is established by HQ AFRC/A4MW.

10.3. Above Ground Magazine (Cat Code 422-258): This facility is used to store general munitions as authorized by AFM 91-201 and includes small arms ammunition without explosive projectiles, fuse lighters, distress signals, and 20mm/30mm ammunitions without explosive projectiles. Authorization depends on mission requirements and is established by HQ AFRC/A4MW.

10.4. Storage Multicube (Cat Code 422-253): Facility is used to store flares, rockets, smoke grenades, and small arms ammunition where separate rooms are required. Authorization depends on mission requirements and is established by HQ AFRC/A4MW.

10.5. Storage Igloo (Cat Code 422-264): Facility designed for storage of all types on explosives and preferred for mass detonating explosives where moisture and condensation are not a problem. Structure is earth covered and either concrete or steel construction. Siting must be DDESB approved. Authorization depends on mission requirements and is established by HQ AFRC/A4MW.

10.6. Inert Spares Storage (Cat Code 422-265): Facility designed for storage of inert spares. Authorization for AFRC units is 2,500 Square Feet where mission requires.

Chapter 11

STORAGE FACILITIES - COVERED/OPEN, AND SPECIAL PURPOSE

11.1. Base Hazardous Storage/Hydrazine Storage and Servicing Facility (Cat Code 442-257):

11.1.1. **Base Hazardous Material Storage (Pharmacy Program).** This provides for the centralized storage and dispensing of paints, oil, solvents, chemicals, bottled gases, and other hazardous materials as required at each host base. May be constructed as a separate facility or identified as a separate area within the base general warehouse. This function is authorized 300 square feet for administrative, computer and customer service space and a total of 2,500 square feet for hazardous material storage.

11.1.2. **Base Hazardous waste Storage.** Facility provides centralized storage for hazardous waste materials prior to transport off base for ultimate disposal. Facility must be constructed and operated in accordance with federal and State environmental regulations. May be constructed as a separate facility or identified as a separate area within the base hazardous material storage facility. This function is authorized 140 square feet for administrative, computer and file storage space and a total of 800 square feet for hazardous waste storage.

11.1.3. **Hydrazine Storage and Servicing Facility.** For F-16 equipped units, provides space for servicing and storage of hydrazine fuel containers. HQ AFRC/A4M determines on a case-by-case basis whether to provide a full service facility or storage only.

11.2. Liquid Oxygen/Nitrogen Storage (LOX/LIN) (Cat Code 442-258): A pad, cover, fencing and road access to provide protected storage are authorized for this equipment. Use AFH 32-1084 criteria.

11.3. Base Supply and Equipment Warehouse (Cat Code 442-758):

11.3.1. **Warehouse Space.** Warehouse space is required for bulk and bin storage of materials. This facility includes space for aisles, receiving, shipping, packing, crating, equipment storage and issue, central mobility weapons storage, general supply and base issue/supply point, personnel clothing and equipment, latrines, utility room, administration, equipment management, and transportation management. Due to the various taskings of AFRC units, use scope in this section for planning purposes only. Design actual requirements on a case-by-case basis in coordination with HQ AFRC.

11.3.1.1. **Administrative Space.** At AFRC host installations, multiply number of full time personnel assigned to the base supply warehouse administrative staff by 70 square feet to determine net administrative facility space authorization. Add 30% facility overhead to determine gross facility space authorization.

11.3.1.2. **Basic Supply Storage.** Multiply base population of any given UTA weekend (not total assigned personnel) by 15 square feet to determine basic supply storage requirement. Supply storage may be located in centralized warehouse or distributed within individual unit facilities.

11.3.1.3. **Aircraft Parts Storage Space.** Multiply number of assigned aircraft (PAA) by the factors shown to determine net storage space required for aircraft parts storage. Add 20% facility overhead to determine gross facility space authorization.

Table 11.1. Aircraft Parts Storage.

WEAPON SYSTEM	SCOPE (SF) PER PAA
Fighter	500
Tactical Airlift/Tanker	700
Strategic Airlift	1,200

11.3.1.4. **Mobility Bag Storage (Cat Code 442-758).** Storage space for deployable mobility bags (A bags, B bags, C bags) shall be calculated per base requirements, at 5 square feet per authorized mobility position. Determine space for other deployable mobility equipment on a case-by-case basis. ***NOTE:*** Mobility bags may be stored in central warehouse facilities or in unit/squadron facilities as determined by local commanders. Do not duplicate space authorizations for mobility equipment storage.

11.3.1.5. **Mobility Training Equipment:** Storage space for non-deployable mobility training equipment issued to individuals (masks, helmets, and vests) shall be calculated at 3 square feet per authorized mobility position. This equipment is typically stored within individual squadron / flight facilities but may be consolidated in central storage locations. Do not duplicate space authorizations for mobility training equipment storage.

11.3.2. **Warehouse Space at Tenant Locations.** At tenant locations, operation of the central base warehouse is a supplier function unless otherwise documented in the support agreement. Dedicated storage space for AFRC parts and Mobility Bags should be established using the above criteria. AFRC units at tenant locations have the following additional requirements:

11.3.2.1. **Readiness Spares Package (RSP):**

Table 11.2. Readiness Spares Package.

WEAPON SYSTEM	SCOPE (SF)
Fighter	3,500
Tactical Airlift/Tanker	2,000
Strategic Airlift -	3,500

11.3.2.2. In addition to RSP storage, an additional 3,500 square feet is required for deployable mobility equipment storage at tenant locations.

11.4. Equipment Storage for Force Support Squadron (Cat Code 740-672): Services Section of the Force Support Squadron is authorized storage space for home station training equipment as described in **Table 11.3**

Table 11.3. Home station Training.

HOME STATION TRAINING (HST)	SCOPE (SF)
RFL01 Leadership Command and Control	100
RFL03 Lead Bed down Package	200
RFSR1 Lead Bed down	200
RFSR9 Readiness Management	200
RFSRB Follow Augmentation	150
RFSRJ Port Mortuary Lead	50
RFSRK Follow Remains Team	50
RFSRL Non-Appropriated Fund Accounting	150
RFSRQ Protocol Enlisted	0
RFL04 Field Grade Base-level Officer	0
RFL05 Company Grade Base-level Officer	0
RFL07 Company Grade Staff Officer	0
RFL08 CEM Superintendent	0
R-Z Services In-Place UTC (Mortuary)	0
R-H Services Staff Management Augmentation	0

NOTE: Outside storage required for Single Palletized Expeditionary Kitchen (SPEK), minimum of 200 square feet; fuel storage, minimum of 50 square feet (at least 50 ft from buildings); and SPEK Supplies, 150 square feet. Additional storage required (5 square feet per person) for Mobility A-Bags and Mobility C-Bags, unless storage provided by Supply.

CHARLES E. STENNER, Lt Gen, USAF
Commander AFRC

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 32-10, *Installations and Facilities,* 27 Mar 1995

AFH 32-1084, *Facility Requirements,* 1 Sep 1996

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UFC 3-260-1, *Airfield and Heliport Planning and Design,* 1 Nov 2001

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Adopted Forms

Air Force (AF) Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

A&FR—Airman and Family Readiness

AALPS—Automated Air Load Planning System

ADP—Automated Data Processing

AES—Aeromedical Evacuation Squadron

AF—Air Force

AFRC—Air Force Reserve Command

AFSO—Air Force Smart Operations

AGE—Aerospace Ground Equipment

AGR—Active Guard and Reserve

ALCF—Airlift Control Flight

AMDS—Aerospace Medicine Squadron

AME—Alternate Mission Equipment

AMOS—Air Mobility Operations Squadron

ANG—Air National Guard

APS—Aerial Port Squadron

APU—Auxiliary Power Unit

ART—Air Reserve Technician

ASR—Airport Surveillance radar

ASTS—Aeromedical Staging Squadrons

ATCALS—Air Traffic Control and Landing System

ATO—Antiterrorism Officer

ATOC—Air Terminal Operations Center

ATV—All Terrain Vehicle

BEE—Bioenvironmental Engineer

BOS—Base Operating Support

C2—Command and Control

CAT—Crisis Action Team

CATM—Combat Arms Training and Marksmanship

CATS—Combat Arms Training Simulator

CC—Commander

CCAT—Critical Care Air Transport

CCO—Central Control Officer

CDF—Cargo Deployment Function

CE—Civil Engineer

CLSS—Combat Logistics Support Squadron

CMOS—Cargo Movement & Operating System

COMSEC—Communications Security

CSF—Chief of Security Forces

CSS—Computer Support Specialist

CST—Client System Technicians

DCAPES—Deliberate and Crisis Action Planning and Execution Segments

DCC—Deployment Control Center

DDESB—Department of Defense Explosives Safety Board

DGS—Deployable Ground Station

DOD—Department of Defense

DSOE—Deployment Schedule of Events

EA—Emergency Action

EAM—Emergency Action Message

ECM—Electronic Counter Measures

EET—Exercise Evaluation Team

EOD—Explosive Ordnance Disposal

FAA—Federal Aviation Administration

FSS—Force Support Squadron

GCA—Ground Control approach

GCCS—Global Command and Control System

HARM—Host Aviation Resource Manager

ICAP—Integrated Communications Access Package

ICC—Installation Command Center

IDO—Installation Deployment Officer

IDP—Installation Deployment Plan

IDRC—Installation Deployment Readiness Cell

IDS—Integrated Deployment Readiness System

IG—Inspector General

ILS—Instrument Landing System

IM—Information Management

IPR—Installation Personnel Readiness

ISR—Intelligence Surveillance and Reconnaissance

JAFAN—Joint Air Force-Army-Navy

JISCC—Joint Incident Site Communications Capability

JOPES—Joint Operation Planning and Execution System

LAIRCM—Large Aircraft Infrared Countermeasures

LAN—Local Area Network

LANA—Low Altitude Night Attack

LANTIRN—Low-Altitude Navigation & Targeting Infrared for Night

LIN—Liquid Nitrogen

LOGFAC—Logistics Feasibility Assessment Capability

LOGMOD—Logistics Module

LOX—Liquid Oxygen

MANPER—Manpower & Personnel

MDS—Medical Squadrons

METNAV—Meteorological and Navigational Aids

MH—Military Health

MOS—Maintenance Operations Squadron

MPF—Military Personnel Flight

MSL—Maintenance Supply Liaison

MTT—Mission Task Trainer

MXS—Maintenance Squadron

NAVAID—Navigation Aids

NCC—Network Control Center

NCOIC—Non-Commissioned Officer in Charge

NIPRNET—Non-secure Internet Protocol Router Network

OPR—Office of Primary Responsibility

OSI—Office of Special Investigation

PAA—Primary Assigned Aircraft

PAR—Precision Approach Radar

PDF—Personnel Deployment Function

QAE—Quality Assurance Evaluator

RAPCON—Radar Approach Control

RDRC—Reserve Deployment Readiness Cell

RDS—Records Disposition Schedule

RPA—Remotely Piloted Aircraft

RSP—Readiness Spares Package

SARC—Sexual Assault Response Coordinator

SARM—Squadron Aviation Resource Manager

SCIF—Sensitive Compartmented Information Facility

SERE—Survival Evasion Resistance and Escape

SETS—Squad Engagement Training Simulator

SF—Square Feet

SFS—Security Forces Squadron

SIPRNET—Secure Internet Protocol Router Network

SPEK—Single Palletized Expeditionary Kitchen

TACAN—Tactical Navigation Aid

TDC—Theater Deployable Communications

TMO—Traffic Management Office

TR—Traditional Reservist

UAV—Unmanned Aerial Vehicle

UDM—Unit Deployment Manager

UTC—Unit Task Code

VCC—Visitor Control Center

VHF—Very High Frequency

VOR—VHF Omnidirectional Range

WGA—Work Group Administrator

WMD—Weapons of Mass Destruction

Terms

Northern Tier— Those installations with 30 or more days per year of minus 12 ° C (10° F) or lower or with an average January temperature of minus 7° C (20° F) or lower as determined from two 10-year (or longer) weather data bases.

Open Office— Administrative work space constructed with the minimum amount of interior walls required to provide structural support.

Minor Modification— Facility modifications that do not significantly alter existing common areas such as entry ways, hall ways, mechanical rooms, and bathrooms.