

Base Operations (Airfield Management, Weather, etc.) FAC: 1412

CATCODE: 141453

OPR: AFFSA/A3AS, AFWA/A5/8

OCR: AF/A3O-W, AF/A3O-A

1.1. Description. This facility provides space for numerous functions essential for daily airfield operations and should be located near aircraft parking areas and runways.

1.2. Requirements Determination.

1.2.1. The airfield management function requires space to support the following functions. (These facilities are authorized under AFI 13-213, *Airfield Management*.)

1.2.1.1. Airfield Manager, Deputy/NCOIC, and Administration Staff Offices.

The Airfield Manager's office should be suitable to hold daily meetings with a number of contractors. The office should be able to hold a small conference table that can also be used for conducting airfield design reviews, waiver validations, etc. This office should be of sufficient size to hold numerous airfield construction/design plans in storage as required by AFI 13-213. Refer to **Facility Class 6** of this Manual for approved office types and sizes.

1.2.1.2. Airfield Management (AM) Operations (AMOPS) Section. This section is the focal point for coordinating AM activities to include airfield construction and repair projects, apron, taxiway and runway closures, quiet hours, prior permission required/official business only requests, snow/ice removal operations, and aircraft in-flight/ground emergencies. AMOPS sections also provide flight planning assistance to aircrews.

1.2.1.3. Airfield Management Drivers Training Classroom. This classroom should be suitable for conducting local airfield drivers training and/or simulator training. Refer to **Facility Class 6 Typical Assembly Space Programming** for authorized classroom space standards.

1.2.1.4. Planning Room. Locate this room near the AMOPS but separate it from other work areas for aircrew to conduct mission planning briefings, review airfield status displays, charts/maps, etc.

1.2.1.5. Aircrew Lounge. A separate section suitable for aircrews awaiting aircraft servicing, passenger or cargo on/off load, etc., is necessary. A distinguished visitor lounge and snack bar may also be necessary if not located in the vicinity of base operations. Refer to **Facility Class 6** for authorized break room/lounge space standards.

1.2.1.6. Equipment Storage Room. Include space for an outside storage area for storage of AM equipment, such as airfield friction measuring equipment, Bird Aircraft Strike Hazard(BASH)/wildlife program support equipment and airfield construction marking equipment (cones, measuring wheels, tape, construction Xs, portable lights, etc.).

1.2.1.7. Flight Information Publications (FLIP) Storage Room/Navigational Services.

1.2.1.8. Emergency Power/Back-up Generator Room.

1.2.1.9. Munitions Storage Room. It should be in close proximity to the AMOPS and capable of storing munitions and pyrotechnics such as a shotgun, Very pistol, shotgun shells, etc.

1.2.1.10. **Break Room.** See **Facility Class 6**, for typical special purpose space requirements.

1.2.2. The weather operations function requires space for three elements (in some instances, all or some of these functions may be performed under a combined element).

1.2.3. **Staff Weather Element.** The Weather Flight (WF) Commander (or Officer-in-Charge [OIC] or Detachment Commander [DetCo]) (Type C office)

and Non-Commissioned OIC (NCOIC) (Type E office) perform both operational and staff weather functions. This requires work space for the New-Tactical Forecast System (N-TFS) or Joint Environmental Toolkit (JET), which includes communications/data management, one to two server/client workstations, and one to two desktop computers (Type F office). Refer to **Facility Class 6** of this Manual for approved office types and sizes.

1.2.4. **Mission Weather Element (MWE).** This element requires work space for the N-TFS or JET, which includes communications/data management; two to four server/client workstations; weather radar (WSR-88D) Open Principal User Processor Terminal (some MWE also have a Unit Control Position); desktop computers for receipt and display of satellite and radar data; and an aircrew briefing area and office space for the flight commander (Type D office), instructor meteorologist (Type E office), and NCOIC (Type E office).

1.2.5. **Airfield Services Element (ASE).** This element is responsible for direct interface with supervisors of flying, the servicing operational weather squadron (OWS), and other operational users on the parent/host installation. This element requires work space for the N-TFS or JET, which includes communications/data management; two to four server/client workstations; weather radar (WSR-88D) Open Principal User Processor Terminal (some ASEs also have a Unit Control Position); desktop computers for receipt and display of satellite and radar data; and an aircrew briefing area and office space for the flight commander (Type D office), instructor meteorologist (Type E office), and NCOIC (Type E office).

1.3. **Scope Determination.** See [Table 1.1](#) below.

1.4. **Dimensions.** See [Table 1.1](#) below.

1.5. **Design Considerations.**

1.5.1. The Air Traffic Control Tower **CATCODE 149962** may be in the same building. This is highly desirable for economy of effort and improved communication. Locate to satisfy explosives safety standards in relationship to other flight line explosives storage and operating facilities.

1.5.2. In accordance with AFMAN 15-111, *Surface Weather Observations*, ensure Weather technicians, unless otherwise specified, are physically within five statute miles (SM) of the center of the aerodrome. Additionally, for meteorological observations, the observing location is defined as the “point of observation.” Points of observation are locations where the various elements of the observation are evaluated (see AFMAN 15-111). At automated weather observing locations, the point of observation is the location of the primary sensor group and the discontinuity sensor group. However, at manual observing locations and during augmentation of automated weather observations, the point of observation may coincide with the weather observing location. If this is the case, the normal operating location is in Base Operations **CATCODE 141453** or another suitable facility which provides consistent visually determined values. Either location should be as free from man-made obstructions as possible. Generally, locations with windows facing the runway

complex that provide direct access to a view of the runway and approach zones and have appropriate safety features satisfy this requirement. Weather observing locations in base operations are normally combined with the base weather station for cost efficiency. **NOTE:** The Federal Interdepartmental Committee for Meteorological Services, Subcommittee for Aviation Meteorological Service (SC/AMS) defines the ideal site for representative weather observations for aircraft arrivals and departures.

1.5.3. Locate to satisfy explosives safety standards in relationship to other flight line explosives storage and operating facilities. Noise attenuation measures are necessary due to the proximity of this facility to the runway. Factors to consider in site selection are climatology, available structures, length of weather equipment cable runs, and communications requirements

1.5.4. Obtain further information from Air Force Flight Standards Agency, Director of Airfield/ATC Standards (AFFSA/A3A). Obtain further information for weather forecasting and observation information portion of base operations through AFWA/A5/8 or MAJCOM A3 weather staff.

1.5.5. Underground connectivity to weather sensing equipment (on and off the airfield) supporting the airfield, Non-Secure Internet Protocol Router Network (NIPRNet) connections to the Global Information Grid (GIG) and weather observing equipment, Worldwide Class A DSN/land line connections, and direct/dedicated phone lines to air traffic control facilities supporting the installation.

1.5.6. The requirement for emergency power is determined under AFI 32-1063. Provide stable electrical power 220 VAC and 110 VAC/60 Hz with backup power capability.

Table 1.1. Base Operations Space Requirements (Airfield Management, Weather, etc).

Function Area	Net Building Area	
	m ²	ft ²
Airfield Manager (Type D)	11.15	120
Deputy/NCOIC Airfield Mgmt (Type E)	7.43	80
Administration1,2 (Type F)	5.95/person	64/person
Airfield Mgmt Operations Section1,2	--	--
Airfield Mgmt Drivers Training Classroom1,2	--	--
Flight Planning Room	39	425
Aircrew Lounge1,2	--	--
Storage	22	247
FLIP Room/Navigation Services	93	1,000
Emergency Power/Back-up Generator	8	93
Equipment	8	93
Munitions Storage Room	8	93
Break Room/Area1,2	7.43	80
Staff Weather Element1,2,3,4 (Type E)	7.43	80
Mission Services Weather Element1,2,3,44 (Type E)	7.43	80
Airfield Service Element1,2,3,4 (Type E)	7.43	80

Function Area	Net Building Area	
	m ²	ft ²
Weather NCOIC1,3 (Type E)	7.43	80
Weather CC (WF, OIC & Det)/Meteorologist1,3 (Type D)	11.15	120

NOTES:

1. Refer to Facility Class 6 of this Manual for approved office types and sizes.
2. Number of personnel requires user justification.
3. No space requirement formulas or tables have been developed for weather operations. Space requirements vary with the number of personnel, the mission, and any special requirements. This also applies to Battlefield Weather organizations (not Battlefield Weather Squadron headquarters) on Army installations (for each brigade combat team [BCT] or equivalent), on Army airfields, or supporting Army corps, division, brigade, and regiment headquarters functions.
4. Additional space may be needed for more than one staff meteorologist, flight commander, or flight NCOIC on USAF and Army installations.
5. For AMC bases, add the Intelligence space requirements into the Base Operations.