Aircraft Corrosion Control. FAC: 2113

CATCODE: 211159

OPR: AF/A4L OCR: N/A

Updated 10 Apr 2023

- 1.1. **Description.** This facility provides hangar space for corrosion treating, corrosion repairing, paint stripping, and repainting of an entire aircraft and an environmentally controlled area to wash aircraft. This facility also provides space for the corrosion control shop, which includes preparation and drying areas, abrasive blasting rooms, paint booths for mixing and/or applying paint, tool storage, lockers, and administrative areas. Corrosion control shops are also required to support small aircraft components, aerospace ground equipment, vehicles, weapons and munitions, and avionics shops.
- 1.2. Requirements Determination. The number and size of corrosion control facilities is the minimum size required to accommodate the largest aircraft serviced and workload required to support the total Air Force corrosion control concept. A hangar provides enclosed space for aircraft washing and for inspecting the aircraft for corrosion damage. Additionally, the facility can accommodate surface preparation and repainting of the aircraft. Some installations, such as depot-type operations, AETC pilot training bases, and MAJCOM regional corrosion prevention and control facilities, may need a strip/repaint hangar in addition to an aircraft corrosion control hangar. The corrosion control shops are necessary to provide an enclosed area for corrosion treatment, inspections, stripping, and painting of aircraft components and other associated support equipment.

1.3. Scope Determination.

- 1.3.1. Corrosion control is both a base and a depot responsibility. Specific workloads vary from base to base, but the minimum required facilities include a wash rack, shop space for complete corrosion treatment, painting removable aircraft parts, ground support equipment, and a corrosion-approved facility to perform aircraft maintenance painting.
- 1.3.2. Complete aircraft corrosion control and strip and repaint facilities are authorized only at AFMC depots, AETC bases, and at regional support bases as determined by MAJCOM needs. Mid-life scuff and complete repaint is necessary to support each base. At centralized and/or regional support bases, the MAJCOMs may use this facility to supplement depot painting requirements. The required size for this centralized or regional complete strip-and-repaint facility is the minimum size required to accommodate the largest aircraft supported. Due to the unique purpose of these facilities, do not link the centralized or regional facility to the maximum number of covered facilities as described in CATCode 211111.
- 1.3.3. Base facility requirements emphasize prevention and detection. Since freedom from dirt, oil, and other contaminants is important in this regard, base facilities are primarily designed for cleaning and maintaining protective coating/corrosion control systems.
- 1.4. **Dimensions.** Determine the required interior dimension of an aircraft bay by the

largest aircraft dimensions and the required structural clearances listed in **Table 1.2 of CATCode 211111**. The corrosion control shops may require up to 530 m₂ (5,700 ft₂) for medium size aircraft. Minimum requirements for an F-15 facility is 492 m₂ (5,292 ft₂) and an F-22 facility is 495 m₂ (5,330 ft₂). Bases with a large number of aircraft (above 40 large or medium aircraft assigned) or in a severely corrosive area are authorized, with proper justification, a corrosion control hangar and a wash hangar. Minimum aircraft separation is 3 m (10 ft) on each side to facilitate maintenance stands.

1.5. Design Considerations.

- 1.5.1. Corrosion control facilities need hot and cold water, electric power, and compressed air. Base corrosion control operations require collection, treatment, and disposal facilities for oils, alkalis, salts, hydroxides, paint stripping agents, paint residue, and other substances generated by aircraft cleaning. For detailed information on corrosion control operations see TO 1-1-691, *Aircraft Weapons System Cleaning & Corrosion Control*, and TO 1-1-8, *Application of Organic Coatings*.
- 1.5.2. Locate the abrasive blasting rooms away from the paint booths to eliminate contamination.
- 1.5.3. Ensure siting of new hangars complies with UFC 3-260-01. See paragraph 1.2 and paragraph 1.3 of CG 21 General Criteria for additional maintenance facility criteria.