## **Hydrant Fueling System. FAC 1211**

CATCODE: 121122 OPR: AF/A4LE

OCR: AFCEC/COS, AFPET/PTOT

- 1.1. **Description.** A hydrant fueling system provides all the necessary equipment and controls to deliver clean, dry fuel to fueling points in the aircraft parking apron. The system includes a minimum of two Operational Storage Tanks (**CATCODE 124131**), but it does not include bulk storage. Bulk storage is programmed under Category Group 41, Liquid Fuel Storage.
- 1.2. **Requirements Determination.** Hydrant fueling systems are not authorized for bases where the property is not owned by the Air Force, except where the Air Force has operational control of real property at a joint base, where terms of the lease do not allow for long term Air Force tenure, or for other than main air bases. A hydrant fueling system is necessary for the following aircraft:
  - 1.2.1. Aircraft with a total tank capacity exceeding 76,000 liters (20,000 gallons).
  - 1.2.2. Aircraft, regardless of tank capacity, if a complete economic analysis shows that the annual cost of owning and operating a hydrant fueling system is less expensive than a truck fueling operation.
  - 1.2.3. Tactical aircraft, regardless of tank capacity, in support of combat turnaround requirements.
  - 1.2.4. Tactical aircraft in hardened shelters, docks, or specially designed hangars; that is, fuel loop system to aircraft shelter.
- 1.3. **Scope Determination.** Where hydrant fueling systems are justified, provide fueling positions at all aircraft parking positions and at all cargo loading positions. Provide connections compatible with the aircraft design and necessary flow rates.
- 1.4. **Dimensions.** The MAJCOM Fuels Engineer and MAJCOM Fuels Management section determine the hydrant system size based on base specific mission requirements and airframe specific upload rates.

## 1.5. Design Considerations.

- 1.5.1. For system design guidance, characteristics, and capacities, consult Section 4 of UFC 3-460-01. Ensure Types III, IV, and V fueling systems standard designs are used. Design criteria for fueling systems are established by the DoD Fuel Facility Engineering Panel. Process waivers for changes through AFCEC/COSAFCEC/COS.
- 1.5.2. Ensure all fueling and tank systems comply with local, state, and federal requirements in respect to fuel vapor emissions, as required by AFI 32-7040. For fuel spills compliance consult AFI 32-7041 and AF Policy Letter, *Oil/Water Separators Operations, Maintenance and Construction*, 21 Oct 94.