Fixed VHF Omni-Range (VOR) Station. FAC: 1341

CATCODE: 134482 OPR: AFFSA OCR: AFNIC, AF/A3O, AFCEC/COS

1.1. **Description.** The VOR system is a ground-based, short range, line-of-sight radio NAVAID producing a theoretically infinite number of signals emanating from the station (similar to spokes of a wheel) that provides the pilot with bearing information only.

1.2. **Requirements Determination.** VOR stations may be used as either terminal or enroute NAVAIDS. When used as a terminal aid, the VOR may be installed on base adjacent to the runway, as close to the runway centerline as criteria specified in UFC 3-260-01 permits. It may also be installed on the extended runway centerline as a Final Approach Fix (FAF), in accordance with criteria specified in AFI 13-204, *Functional Management of Airfield Operations*; AFJMAN 11-226, *United States Standard for Terminal Instrument Procedures (TERPS)*; AFI 11-230, *Instrument Procedures; and* FAA Handbook 8260.3B, *US Standard for Terminal Instrument Procedures (TERPS)*. For on-base installations, the maximum angle of convergence between the extended runway centerline and VOR final approach course is 30 degrees at a point 900 m (3,000 ft) from the runway threshold. Where practical, the VOR should be installed as part of an on-base VORTAC facility (see **CATCODE 134511**). This follows the Air Force policy for reducing monetary expenditures for land acquisition and remote location maintenance.

1.3. Scope Determination. See UFC 3-260-01.

1.4. **Dimensions.** See UFC 3-260-01.

1.5. **Design Considerations.** The AN/FRN-44 Solid State VOR modification replaces the outmoded tube type VORs. If possible, house them in the existing VOR buildings. They also utilize the existing backup power generators, and the Alford Loop type antenna. The AN/AFN-44 VOR is designed to provide the same service with solid state reliability.