1.1. **Description.** This facility is used to perform maintenance operations including assembly, disassembly, corrosion control, testing and troubleshooting, repair, and time compliance technical orders (TCTO) on various munitions components and containers. The maintenance facility consists of drive-through work bays, office space, tool room, a training and ready room, and latrines.

1.2. **Requirements Determination.** Provide a Conventional Munitions Shop at bases required to conduct maintenance operations as specified in paragraph 1.1 above. Obtain additional information from AF/A4LW through ACC/A4MC. The following documents should be utilized to determine the scope of the facility: The UCML, AFI 11-212, the Air Force Standard for Non-Expendable Air Munitions Training Authorizations, test plans, and bed down plans.

1.3. **Scope Determination.** The number of bays and bay dimensions are dependent on mission requirements. Usually a minimum of three 9.1 m x 15.2 m (30 ft x 50 ft) work bays are required. Separate bays should be provided to support munitions involving different explosives hazards. Compatibility between the various munitions has to be considered when determining the total number of required work bays. For example, one bay for 20 mm operations, one bay for BDU-33/MK-106 operations, and one bay for general maintenance. An adjoining administrative area consists of approximately 232 m² (2,500 ft²). The proposed UMD and guidance in Facility Class 6 of this Manual should be used to determine specific personnel administrative space.

1.4. **Design Considerations.**

   1.4.1. A 1,810 kg (4,000 lb) transverse-mounted hoist may be required in each bay.

   1.4.2. Provide high security hasps or ILDs on all bay doors with the intrusion system if required by AFI 31-101.

   1.4.3. Q-D safety criteria in AFMAN 91-201 control siting of this facility.

   1.4.4. Provide lightning protection and electrical grounding system according to DoD 6055.9-Std and AFMAN 91-201.

   1.4.5. See AFMAN 91-201 for additional guidance on personnel and propagation protection between operating bays.

   1.4.6. Provide SDWs between operating bays to support concurrent operations as per the criteria in AFMAN 91-201. Provide separate facilities to support concurrent operations if substantial dividing wall criteria in AFMAN 91-201 cannot be met.

   1.4.7. Low pressure (0 to 150 psig) and high pressure (0 to 3,500 psig) air is necessary. 115 VAC, 60 Hz, single-phase and 115 VAC 400 Hz, 3-phase power
is necessary. Emergency electric power generator is necessary per AFI 32-1063.

1.4.8. Environmental controls for humidity and temperature are necessary to assure proper protection for weapon systems and test equipment. Provide HVAC for office, training, and bay areas.