

**BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING
COMMAND**

AIR FORCE MANUAL 91-201

**AIR EDUCATION AND TRAINING COMMAND
Supplement 1**

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Safety

EXPLOSIVES SAFETY STANDARDS



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AFMAN 91-201, 18 October 2001, is supplemented as follows:

This supplement applies to anyone involved with explosives operations of any kind at AETC-owned or-leased facilities. This publication applies to all personnel involved in AETC explosives operations, including Air Force Reserve Command (AFRC) units collocated on AETC installations. This publication does not apply to the Air National Guard (ANG). AETC units are authorized to publish supplements to AFMAN 91-201 establishing unit-unique procedures and requirements. Send comments and suggested improvements to this supplement on AF Form 847, **Recommendation for Change of Publication**, through channels, to HQ AETC/SEW, 244 F Street East Suite 1, Randolph AFB TX 78150-4328. Maintain and dispose of records created as a result of processes prescribed in this publication in accordance with AFMAN 37-139, *Records Disposition Schedule*, (will become AFMAN 33-322, Volume 4).

SUMMARY OF REVISIONS

AFMAN 91-201/AETC Sup 1 incorporates guidance for security forces carrying “in use” ammunitions into public places (paragraph **2.26.4**). It also includes provisions to apply public traffic route (PTR) quantity-distance (Q-D) to on base roads. A bar (|) indicates revision from the previous edition.

2.3. The base explosives safety manager or equivalent will review written instructions annually.

2.8.1. HQ AETC/SEW is the major command (MAJCOM) focal point for safety certification actions of nonnuclear munitions for the Air Force as prescribed in AFI 91-205, *Nonnuclear Munitions Safety Board*. Submit each request through channels to HQ AETC/SEW.

2.9. The wing safety office and fire chief will help the wing commander determine the best and safest location for fireworks demonstrations in relationship to the audience.

2.13. The local commander issues written permission and develops local operating instructions for hunting around munitions storage areas on AETC installations. Coordinate local instructions with all affected base agencies, and with the base safety office prior to publication (for example, OG, LG, and SF). Include the following information in local instructions:

- 2.13.1. (Added) List exact areas where hunting is authorized as well as prohibited areas.
- 2.13.2. (Added) Provide safety requirements; include any special requirements pertaining to local conditions.
- 2.13.3. (Added) All hunting will conform to applicable local, state and federal regulations.
- 2.15.2. Training may be documented on AF Form 55, **Employee Safety and Health Record**.
- 2.15.4. In the event a smoke grenade fails to function and explosive ordnance disposal (EOD) personnel cannot respond, ensure the following procedures are adhered to (as applicable):
- 2.15.4.1. (Added) Personnel will wear the following protective equipment: a long-sleeved shirt, leatherwork gloves, and safety shield and/or goggles.
- 2.15.4.2. (Added) Establish a 25-foot clear zone around the smoke grenade.
- 2.15.4.3. (Added) Personnel will wait one hour before approaching the smoke grenade, and then place it in a metal container. The metal container must have cushioning material to support the smoke grenade.
- 2.15.4.4. (Added) Local munitions personnel will place the smoke grenade in storage awaiting disposal by EOD personnel.
- 2.15.5. In the event a ground burst simulator (GBS) fails to function and EOD personnel cannot respond, ensure the following procedures are adhered to (as applicable):
- 2.15.5.1. (Added) When the photoflash powder is exposed isolate the GBS and notify EOD personnel.
- 2.15.5.2. (Added) Establish a 125-foot clear zone around the GBS.
- 2.15.5.3. (Added) Personnel will wear the following protective equipment: a long-sleeved shirt, hearing protection, leatherwork gloves, safety shield and/or goggles, and a flak jacket.
- 2.15.5.4. (Added) Personnel will wait one hour before approaching the GBS and then place it in a metal container. The metal container must have cushioning material to support the GBS.
- 2.15.5.5. (Added) Local munitions personnel will place the GBS in storage awaiting disposal by EOD personnel.
- 2.16. Develop the training and exercise plans in accordance with paragraphs 2.3. and 2.4; include procedures for EOD support, and for identifying and handling misfires and duds. Request the commander or equivalent approve them in writing.
- 2.16.1. Only personnel who have been properly trained are authorized to use explosive devices.
- 2.16.2. Security forces ammunition must not exceed HC/D 1.4 items. This restriction applies to training and exercise scenarios only. Reference paragraphs 2.26.4. and paragraph 2.59, for additional guidance.
- 2.18.2. The weapons safety manager (WSM) will visit the fire alarm communications center (FACC) every 6 months to review and evaluate locally written procedures, prefire plans, facility licenses, explosives area fire drills, training, etc. Coordinate FACC training plans relating to explosives with the wing safety office.
- 2.19. Munitions control will maintain, as a minimum, a record of the last fire drill.
- 2.19.2. Munitions control personnel will notify weapons safety 24 hours prior to the fire drill.

2.21.8.5. The base fire chief makes the final determination on fire protection equipment in the absence of regulatory guidance/requirements.

2.23. The base fire chief has jurisdiction.

2.26.1.2. In addition, contact the appropriate numbered Air Force (NAF) and HQ AETC/SEW for assistance. For locally purchased munitions, ensure technical information is obtained and, as a minimum, include procedures for inspecting, loading, storing, dud or misfire, and disposing of the munitions.

2.26.2. Requests for temporary storage of nonmunitions items must identify the items to be stored, and include the impact on the explosive storage mission. Send requests for joint storage of nonmunitions items with explosives to HQ AETC/SEW and HQ AETC/LGMW. Storage of firearms requires additional approval by HQ AETC/SFR. Requests must include project number to correct the storage shortfall with an estimated completion date. Nonmunition items will be removed immediately, if dictated by the explosive storage mission.

2.26.4. The wing commander has final decision authority to allow personnel armed with 40MM, M406, HE, DODIC B568, NSN 1310-00-724-8081, to enter dining facilities for meal purposes.

2.26.4.1. (Added) This decision should be based upon an operational risk management (ORM) assessment conducted by the security forces (SF) commander, coordinated with the wing safety office, and approved by the support group commander. Further, incorporate the following minimum requirements:

2.26.4.1.1. (Added) Only arming (operational) quantities of munitions will be taken into the facilities.

2.26.4.1.2. (Added) Tactical vest/bandoleers will be secured in an ammunition container (for example 5.56MM).

2.26.4.1.3. (Added) Munitions will remain under positive control and surveillance of armed individuals, or on duty accompanying SF members.

2.26.4.1.4. (Added) Meals will be consumed in a designated reserved area.

2.27.8. Check fusible links during the annual explosive safety inspection.

2.27.9. Check ventilators during the annual explosive safety inspection.

2.28.4. Outdoor storage may be used for 30 days or less as long as such storage is authorized by an applicable munitions technical order (TO), the area meets Q-D criteria, and prior approval is received from HQ AETC/SEW and HQ AETC/LGMW. When notifying HQ AETC, include the following information: quantity and type of munitions, Q-D requirements and exposures, storage locations, clear zones depicted on a map (1" = 400') and required duration of storage.

2.29.4. (Added) In an igloo or magazine, do not point the forward firing munitions items toward the door unless no other options are available.

2.30. This includes damaged and dud munitions awaiting disposal.

2.31.2. In munitions holding areas unserviceable munitions may be held temporarily (less than 24 hours) until they can be moved to the munitions storage area. Segregate and identify the unserviceable munitions. Serviceability tags (for example, 1500 series) qualify as other highly visible means.

2.32.14. Send requests and risk assessments through command channels to HQ AETC/SEW.

2.35. Do not license locations inside an explosive storage area without HQ AETC/SEW approval.

2.35.8. Review explosives facility licenses and locally written procedures during the annual explosives inspection. Maintain the review in the unit's inspection report.

2.35.9. (Added) Return the original copy of each approved license to the originator and give one copy of each license to the FACC.

2.37.3. Provide a copy of the engineer's protective features evaluation of the facility to the using agency, and then attach a copy to the explosive facility license.

2.37.5.1. Refer to AETCI 21-101, *Maintenance Management of Aerospace Equipment*.

2.37.8. Display cases containing sample packages of propellant (bulk powder) or primers will be empty and marked according to TO 11A-1-53, *Identification of Empty and Inert Loaded Ammunition Items and Components*. Do not exceed the quantities of explosives exempt from Q-D standards.

2.54. Maintain records of lightning protection system inspections; users will maintain copies of all records pertaining to their facilities.

2.54.1.7. The WSM will review lightning protection systems (LPS) inspection reports and electrical tests when performing explosive safety inspections.

2.63.3. Only HC/D 1.3 and 1.4 explosives may be shipped, received, or temporarily stored at the base shipping and receiving facility. When explosives are temporarily stored at this facility, post applicable hazard symbols and notify the FACC and security forces.

2.64.3. Transport blasting caps separately in an approved container. Keep the container separated from demo charges to the maximum extent possible.

2.64.4. EOD personnel will determine if dangerously unserviceable munitions are safe to transport. Only EOD personnel will transport these items on base.

2.71.4. Do not use forklifts to transport explosives in over-the-road operations or out of the immediate work area.

2.74.13.1. Each installation will designate an inspection station site for incoming/outgoing vehicles carrying explosives.

3.2.1.1. Document the quarterly review. It may be done as a spot inspection.

3.2.2. Apply public traffic route (PTR) distance for all potential explosion sites (PES) to on-base roads relationships involving personnel not associated with explosive activities. PTR exposures that existed prior to 1 October 2000 require risk that assessment and documentation be accomplished. See Attachment 10 for specific information and guidance.

3.2.2.4. Military only small classrooms that do not meet inhabited building distance (IBD) will not be used for other unrelated functions (for example, college classrooms during nonduty hours).

Table 3.2.

NOTE. The 22,000-pound NEW class/division 1.1 limit for ready service storage facilities does not apply to flight line munitions holding areas.

3.12.8. The WSM will review the test records to ensure the earth cover is at least 2 feet deep. Do the review on an annual basis, and document it in the inspection report.

3.13.3. Personnel and facilities of operations group, the quality assurance, and the maintenance squadrons of the logistics group are considered related operations or activities to the generation of combat aircraft.

3.15. Do not leave explosive items unattended on loading docks overnight.

4.1. The installation civil engineer (CE) will ensure proposed construction falling within explosives Q-D clear zone or involving explosive facilities is coordinated with the wing safety office. Early coordination between CE and wing safety is essential; don't start construction on a project requiring an explosive site plan until the DoD Explosives Safety Board (DDESB) grants approval.

4.3.3. Submit site plans in original and three copies to the appropriate NAF (2 AF/SE or 19 AF/SE). The NAF will review each site plan before submitting the original and two copies to HQ AETC/SEW. When applicable, forward an information copy to tenant's MAJCOM.

4.6. Wing safety and communications personnel must review the siting of transmitter antennas for compliance with explosive safety criteria. When the equipment location presents a hazard to electro-explosives devices, request assistance according to paragraph 2.58.10.

4.7.1. The approval level for facility modifications or changes in use will be at the MAJCOM level. Coordinate facility modifications with HQ AETC/SEW and HQ AETC/CEVN. **NOTE:** Use the official memorandum format to request a facility modification or change in use. Describe modification details and include a listing of all PES that encompass the modified facility. Keep a copy of the approved request in each site plan encompassing the modified facility.

4.8.1. Approval authority is HQ AETC/SEW. Format will be a 1" = 400' map with accompanying transmittal letter.

4.8.1.1. Refer to paragraph 3.27.1 to process site plans.

4.8.1.3. During local or higher headquarters (HHQ) operational readiness inspections (ORIs) the exercise play areas need to comply with paragraphs 2.15, 2.16, and any local directives.

4.11. Coordinate plans for modification or rehabilitation of facilities inside established (sited) clear zone with the appropriate NAF/SE before programming construction.

4.11.7. An electronic copy of the cover memorandum and AF Form 943, **Explosives Safety Site Plan**, may be included in the site plan package.

4.16.1. Submit requests for temporary reduction or redesignation (original and two copies) through the wing safety office to the appropriate NAF. Include site plan maps showing both the established (sited) clear zone and the temporary one.

4.47. Waiver and exemption requests must also include a risk assessment showing anticipated overpressures and damages or injuries that can be expected. Where overpressure and damage or injury exceeds what could be expected at required separations, also provide a memorandum of risk assumption with the request. Only the appropriate level of command may assume the risk.

4.47.3. The requesting base is responsible for funding for an engineering analysis.

5.2.3.1. Prepare an emergency event waiver using the official memorandum format.

5.3.1. HQ AETC/SE is the approval authority for deviations of all exposures. Approval authority of all other exceptions will not be lower than NAFs. Forward copies of all approved exceptions at NAF level to HQ AETC/SEW.

5.4. For elimination of violations submit an official memorandum signed by wing CC or CV. Forward official memorandum to HQ AETC/SEW.

5.4.1. Forward unit reviews through the appropriate NAF to HQ AETC/SEW. Units must indicate the status of actions to correct problems, provide and validate estimated completion dates, and confirm interim controls and procedures to reduce or control exposure and risk. For permanent exemptions, units will reaffirm that corrective action remains unfeasible. The unit review must be accomplished at least 60 days before the approval expiration date.

5.6. Waivers and exemptions will not be approved unless the request package includes an investment strategy for corrective action. Submit waiver, exemption, and/or deviation requests in an original and three copies to the appropriate NAF. The NAF will review and forward an original and two copies to HQ AETC/SEW for approval or disapproval. The wing safety office will keep a current file of approved waivers, exemptions, and deviations.

6.5.1. Environmental restoration of formerly used defense sites (FUDS) is the responsibility of the United States Army Corps of Engineers (USACE). Refer all potential FUDS-related environmental restoration requirements to HQ AETC/SE and CE, along with all readily available information concerning location, dimensions/acreage, known use of land prior to turnover, and any other information available. HQ AETC/CE will, in turn, evaluate/validate the information, and coordinate responsibility transfer with USACE FUDS program representatives.

6.8.3.4. Submit three copies of clearance remediation plans to HQ AETC/SEW for review.

7.10. (Added) Forms Adopted. AF Form 55, AF Form 847, and AF Form 943.

NOTE: The following are added to Attachment 1:

References (Added)

AETCI 21-101, *Maintenance Management of Aerospace Equipment*

TO 11A-1-53, *Identification of Empty and Inert Loaded Ammunition Items and Components*

Abbreviations and Acronyms (Added)

IBD—inhabited building distance

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