



NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: HQ AFRC/SEW (Mr. David R. Robb)

Certified by: HQ AFRC/SE
(Lt Col. Arthur A. DuLaney, III)

Supersedes AFMAN 91-201, 1 January 1998,
and AFMAN 91-201/AFRC Sup 1,
26 February 1998

Pages: 6
Distribution: F

The OPR for this supplement is HQ AFRC/SEW (Mr. David R. Robb). This supplement implements and extends the guidance of Air Force Manual (AFMAN) 91-201, Explosives Safety Standards, 18 October 2001. This supplement supersedes AFMAN 91-201/AFRC Sup 1, 26 February 1998. This supplement covers the procedures and standards that promote the safe storage and handling of Air Force munitions.

SUMMARY OF REVISIONS

This revision updates and realigns supplemental paragraphs throughout. Also, adds **Attachment 12 (Added)**. A bar (|) indicates changes from the previous edition.

1.2.1. Obtain any explosives items required for use through munitions supply channels and ship through military or contract transportation channels. Proposed deviations to these requirements must be justified as mission essential and approved by the base safety office, munitions supply, and traffic management office (TMO).

1.2.2. The unit/SEW must provide the contracting office with a composite explosive clear zone drawing of the base(s) that fall under their contracting responsibility and jointly develop notification procedures if the scope of a contract falls within the explosive clear zone(s). Following notification, the unit/SEW must make every attempt to attend concept, design, and pre-construction conferences. At this time, explain all applicable explosive safety rules to the contractor's representatives, establish oversight requirements, and comply with requirements in AFMAN 91-201, paragraph 3.2.3.6.

1.2.4. AFRC host units will complete all baseline explosive site plans in conjunction with AF mandate for 1.2.X re-siting, 31 December 2003.

1.4.2. Upon request from the appropriate commander, HQ AFRC Weapons Safety Office coordinates mobility/deployment site plans between individual units and gaining commands. Site survey deployment teams will include a weapons safety representative, trained and fully qualified in the weapons safety discipline.

2.5. Explosives operations involving unpackaged explosives requires a minimum of two qualified personnel. If deployed where performance of munitions procedures is likely, deploy a minimum of two qualified munitions personnel. EXCEPTION: (1) People who store and/or handle only the following are exempt: (a) Small arms ammunition, including cartridge-actuated tools in quantity-distance class division 1.4; (b) Other class division 1.4 items in their packaged configuration only; (c) Small tear gas items (such as grenades); (d) Aircraft and facility fire extinguisher cartridges. (2) Personnel who activate Ground Burst Simulators (GBS) and smoke producing devices are also exempt. Flight supervision using risk management procedures will define in writing any additional procedures which may be performed by a single individual.

2.13. The local commander issues written permission and develops local operating instructions for hunting around munitions storage areas on AFRC installations.

2.14.1. (Added) Prior to the use of blank ammunition for exercises or training, a comprehensive Wing instruction will be developed by the user and coordinated with safety, security forces and Munitions Accountable Systems Officer (MASO). For joint service or joint unit training or exercises, the lead Wing/unit will be responsible for establishing this guidance and procedures applicable to all participants. As a minimum include the following requirements:

2.14.1.1. (Added) Designate responsibilities for controlling ammunition in the training environment, to include separation of training and weapons courier ammunition.

2.14.1.2. (Added) Step-by-step instructions for issuing, turn-in, and controlling ammunition.

2.14.1.3. (Added) Exact location of use to include method of employment.

2.14.1.4. (Added) Actions to be taken during an emergency or abnormal condition.

2.14.1.5. (Added) Perform and document inventories of ammunition to include a reconciliation of assets at the start of training, change of shifts, and end of day. All out of balance conditions shall cause the training operations to be terminated until the out of balance condition is resolved.

2.14.1.6. (Added) Identify the process of loading, unloading, and marking magazines to include certification and separation of live and blank ammunition.

2.14.1.7. (Added) Controlling explosive residue process.

2.14.1.8. (Added) Reconciliation and certification of expenditures process.

2.14.1.9. (Added) Prior to start or termination of training, check all ammunition pouches, rucksacks, mobility bags and magazines for live ammunition. Brief personnel regarding their responsibilities from a safety and accountability standpoint.

2.14.1.10. (Added) Only trained and qualified individuals will be allowed to issue ammunition. Qualification requirements will be detailed in the instruction.

2.15.2. AFRC qualified personnel are those individuals who are trained and certified by EOD to provide simulator and smoke producing munitions training to other base personnel. As a minimum, training will be both academic and practical. Academic training includes item description and associated hazards; safety and handling precautions; technical data warnings/cautions; pre-use/post-use inspection criteria; misfire, DUD, and munitions residue disposition procedures. Practical training will not commence prior to successful completion of the academic portion.

2.18.1. (AFRC Bases Only) Coordinate all fire department pre-fire plans relating to explosives with the weapons safety office. The base fire chief ensures all mutual aid departments are aware of the placards and symbols used by USAF and how to fight a fire involving explosives.

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

2.26.2. Units send waiver requests for storage of non-munitions items in explosive storage areas to AFRC/LGMW, AFRC/SEW for consideration. Request should contain justification and Logistics Group Commander approval.

2.26.4. (AFRC Bases) Security Forces personnel are authorized to carry in-use ammunition into public assembly areas when required to meet essential mission needs. They may be brought into dining facilities provided rifles and grenades (40mm, M203, and M60) are placed into a rack and guarded by a Security Forces member while others go through the line.

2.28.4. AFRC bases seeking approval for outdoor storage of explosives. Send waiver request(s) signed by the applicable Logistic Group Commander, coordinated through the Installation Security Council and Safety office to AFRC/LGMW, AFRC/SEW, and AFRC/SF with information copy to NAF/LGM/SE/SF for consideration. Submit waiver request(s) at least 30-days in advance of need date. Waiver request(s) must include narrative justification risk assessment and why the waiver is necessary. Tenant units coordinate with the host safety and security offices for outside storage approval.

2.35. (AFRC Bases Only) At AFRC bases without a designated munitions storage area (MSA), explosive items designated for mobility may be stored in a consolidated licensed location providing all provisions of paragraph 2.35. are adhered to.

2.35.7.4.1. (Added) (AFRC Bases Only) If approved, weapons safety retains the original document and sends copies to the originator, security forces, base fire department, and MASO.

2.37.5.1. AFRC units will ensure local written procedures are established.

2.58. The base communications unit will prepare and maintain an EMR survey for the base. A copy of this survey will be provided to the base weapons safety office and affected munitions users.

2.58.1. Land mobile radio (LMR) equipment, including portable radios, pagers, and cellular phones must receive an electromagnetic hazard analysis prior to use around EEDS. Perform procedures in paragraph 2.58.2 and 2.58.5 to determine safe separation distances.

2.59. See AFRC supplement, paragraph 2.26.4.

2.62. All movements of munitions off-installation must be coordinated with the Base Traffic Management function prior to transport to ensure compliance with all regulatory requirements.

2.64.3.1. EOD or Red Horse may transport demolition explosives and initiation devices in the same vehicle as long as they are segregated. Only EOD may transport unserviceable munitions with demolition explosives and initiating devices. Ensure these items are segregated.

2.64.4. Contact HQ AFRC/CEX for guidance and direction.

2.67. Weapons Safety Manager (WSM) will review TMO procedures for incoming shipments of explosives to include during other than normal duty hours.

2.68. Provide copies of maps showing on-base explosives movement routes as a minimum to the following agencies: Base fire station, security force/law enforcement, munitions control, Command post, EOD, Base operations, and host/tenant safety office.

2.71.2.8. (Added) The following requirements apply when higher headquarters evaluator teams are using rental vehicles on base in the performance of military duties:

2.71.2.8.1. (Added) Use DOT placards.

2.71.2.8.2. (Added) Transport items in containers and/or original packaging to prevent item-to-item contact.

2.71.2.8.3. (Added) Secure containers within the vehicle to prevent movement.

2.71.2.8.4. (Added) Do not transport containers in vehicle passenger compartments.

2.71.2.8.5. (Added) Do not transport more than a total of 15 munitions items at any given time.

2.71.2.8.6. (Added) Appropriate fire extinguishers, as approved by the fire department, will be available in the passenger compartment.

2.71.2.8.7. (Added) Notify the fire department of make, model, and license number of all vehicles transporting munitions items.

2.71.2.8.8. (Added) Return all remaining explosive items to their licensed location or munitions storage area, when not required for use during normal exercise duties.

2.71.2.9. (Added) Adhere to DOT Requirements when off-installation.

3.2.2. Apply PTR distance for all PES to on-base roads relationships involving personnel not associated with explosive activities. PTR exposures that existed prior to 1 Oct 2000 require the following risk assessment and documentation be accomplished. See Attachment 11 (Added) for specific information and guidance.

3.3.9. (Added) When mission requirements dictate, no more than two concurrent operations may be performed in a single bay if munitions involved in both operations are hazard class/division 1.4 items.

Table 3.3.

Note 43. (Added) Non-explosives loaded military aircraft must be parked at no less than K30 from combat aircraft parking areas without prior coordination with AFRC/SEW.

3.25.2. Submit a MAJCOM approved airfield waiver with any explosive site plan (ESP) request allowing explosives within the explosives prohibited areas. Submit an ORM process as part of the ESP package for all Airfield Waivers.

4.2.2. Preliminary site approval should be obtained prior to start of design.

4.3.1.1. AFRC bases send original and three copies of site plan to NAF/SEW who will in turn send the original and two copies on to HQ AFRC/SEW. In addition AFRC bases will send two informational copies of site plan to NAF/LGMW who will in turn send a copy to HQ AFRC/LGMW. A single electronic copy is required for ASHS generated site plans.

4.3.2. Tenant units process site plans through the host safety channels and forward an information copy to NAF/SEW and HQ AFRC/SEW.

4.8.1.3. A comprehensive risk analysis will be accomplished for each area identified, to include the specifics of the training and a detailed list of the explosive items to be used. A detailed map will be submitted with risk analysis. The Weapons Safety office will forward one copy to NAF for review prior to submission to AFRC/SEW and will maintain one copy locally.

4.11. The wing/unit safety office has the responsibility to coordinate the complete site plan package with affected agencies (LG, OG, SPTG, BCE, and Installation CC) prior to submission to higher headquarters.

4.11.1. When submitting a facility design for final review and approval, ensure the following are included: lightning protection system, substantial dividing walls, grounding systems, fire suppression systems, locations of any windows (glass breakage assessment), etc. Scale drawings are required on all details of the lightning protection system.

4.11.5.1. Multi-Barricade Storage Cell Drawing Numbers ANG-DWG-94-001, 94-002 and 96-001 have been approved by the DDESB to store up to 425 lbs. NEW per cell in earth-covered magazines of undefined strength. Munitions authorized to be stored in the multi-barricades have also been identified on the drawings (Hazard Class/Division 1.4 is also authorized to be stored with hazard class/division 1.1.) Variations to the drawings and munitions items must be previously approved by the DDESB. Hazard Classification/Division 1.2 and 1.3 storage within these cubicles is prohibited unless specifically approved by DDESB.

4.16. Permanent reductions require AFRC/CV approval. The request will be forwarded through command channels for AFRC/CV approval/disapproval.

4.17.8.1. (Added) Analyze the worst-case event likely to expose the internal and external windows to blast hazards. For example, a facility exposed to multiple earth-covered magazines or an explosives loaded aircraft would require an evaluation of only the PES that would place the maximum PSI on windows.

4.17.8.2. (Added) Blast loading from a PES with HC/D 1.2 munitions will be based on the NEWQD of a single round for HC/D 1.2.2. or 1.2.3.; for HC/D 1.2.1. use the maximum credible event or the NEWQD times the number of rounds at the PES. However, the analysis must consider the gradual weakening and susceptibility to failure of a window after repeated blast loading at this weight.

4.17.8.3. (Added) Provide a description of actions to be taken where glass breakage is expected. Personnel evacuation is not considered an appropriate action since it is unlikely that mishap detection can be assured in all cases. Risks assessments must be accomplished and personnel must be protected against identified hazards. If assistance is required, send request to HQ AFRC/SEW.

5.2.5. AFRC/SEW is the approval authority for deviations and the Wing WSM is responsible for performing and documenting deviation reviews.

5.6. Process waivers and exemptions through intermediate commands to AFRC/SEW. Intermediate commands document the AF Form 943 Section IV to reflect concurrence, non-concurrence, or approval. Intermediate commands review and approval level will be NAF/CC or CV.

Attachment 12 (Added)**ON-BASE PUBLIC TRAFFIC ROUTE PROCEDURES**

A12.1. (Added) Units should use the following procedure to identify on-base roads.

A12.1.1. (Added) On a copy of the explosives location map, identify the following:

A12.1.1.1. (Added) All PES's which have PTR QD arcs encompassing on-base roads traveled by personnel not involved in munitions-related operations.

A12.1.1.2. (Added) The Net Explosives Weights (NEWs) and PTR QD arcs of the above PES's based on traffic density.

A12.1.1.3. (Added) The segments of the applicable on-base roads that pass through the above arcs.

A12.2. (Added) Perform a risk assessment of the relationships identified in step 1.

A12.2.1. (Added) For PTR QD arcs based on incremental PTR show how low traffic density relationship was derived. NOTE: High-density routes require IBD protection.

A12.2.2. (Added) Document the commander's risk acceptance through a formal memorandum. This memorandum must include the map showing the relationships for which the commander is accepting risk, a summary of the risk assessment, and a statement that the subject relationships existed prior to 1 Oct 00.

NOTE: Changes to existing PES's, which increase the QD arc, or construction of a new PES, require the appropriate level of exception.

JAMES E. SHERRARD III, Lt General, USAF
Commander