BY ORDER OF THE COMMANDER 62D AIRLIFT WING (AMC) DEPARTMENT OF THE AIR FORCE MANUAL

21-201

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MUNITIONS MANAGEMENT

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Department of the Air Force Manual (DAFMAN) 21-201, *Munitions Management*, is supplemented as follows: implements and extends the prescribed policies and procedures governing munitions management in the 62d Maintenance Group (62 MXG). The instruction applies to 62d Aircraft Maintenance Squadron (62 AMXS), 62d Maintenance Squadron (62 MXS), and 62d Operations Support Squadron (62 OSS). All other unit custodians will prescribe to the policies and procedures found in applicable governing documents. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Instruction (AFI) 33-322 *Records Management and Information Governance Program*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate chain of command.

7.8.1.4.1.1. (Added) Ensure all vehicles, munitions material handling equipment (MMHE), and support equipment are inspected for serviceability prior to the pickup and delivery of all requested, issued, and turn-in custody munitions to and from the munitions storage area.

7.8.1.4.1.1.1. (Added) IAW Defense Explosive Safety Regulation (DESR) 6055.09_AFMAN91-201_*Explosive Safety Standards*, V1.E6.42.26.8, ensure explosives loaded on all types of vehicles and handling equipment are stable and secure before movement. Load



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stability is required for all movements. "Secure" is defined as protecting the load by an effective restraining system. Chock wheels and set parking brakes on explosive loaded vehicles and trailers. Explosive containers must be restrained, blocked, braced, tied down, or otherwise secured to the vehicle to prevent movement, and must not damage explosives or containers. Restraining devices may include chains and binders, cargo nets and tie-down straps, etc. A vehicle loaded with explosives will never be left unattended with the motor running. Vehicles will not be refueled while munitions are on board. Personnel may ride in the cargo compartment of a motor vehicle transporting explosives, as authorized below in this supplement.

7.8.1.4.1.1.2. (Added) IAW DESR_6055.09_AFMAN 91-201, V1.E6.42.20.1 NOTE: Minimum essential personnel and limited quantities of HC/D 1.4, 1.3 and 1.2.2 explosives, may be transported together in the cargo area of vehicles, including Metro type vans used on flight lines.

7.8.1.4.1.1.3. (Added) No maintenance will be performed on an explosive-loaded vehicle or trailer that would increase the probability of fire or would require the use of heat-producing equipment.

7.8.1.4.1.2. (Added) Ensure all required personal protective equipment (PPE) is readily available and utilized.

7.8.1.4.1.3. (Added) Ensure a radio is available to communicate with the Maintenance Operations Center (MOC) or the Command Post.

7.8.1.4.1.4. (Added) Ensure applicable technical orders (TOs), safety briefing, checklists, and operating instructions are available and utilized at each work site.

7.8.1.4.1.5. (Added) Ensure explosive operation signs are posted to prevent entry of nonessential vehicles and personnel.

7.8.1.4.1.6. (Added) Use the applicable portions of the Pre-Task Checklist in Attachment 2 to prepare the Pre-Task Safety Brief.

7.8.1.4.1.7. (Added) Ensure a pre-task safety briefing is accomplished and documented IAW Attachment 3 of this instruction. Ensure all members are present during the pre-task safety briefing.

7.8.1.4.1.8. (Added) Ensure all personnel involved in handling, operating, or transporting explosives are properly trained and qualified. Training for applicable course codes will be available on the distance learning center (DLC) website (62 MXG organizations) or with the applicable program manager at the respective squadrons and will be updated by applicable training monitor

7.8.1.4.1.8.1. (Added) All personnel involved in the operation will complete course code SAFE 000536, *Explosive Safety*, and document as is typical for their unit's training (i.e. G081, TBA, or other). This training consists of reviewing and understanding applicable instructions, to include handling. After initial training, this must be completed NLT (no later than) every 15 months (as defined in AFI 91-202, para 9.11.3).

7.8.1.4.1.8.2. (Added) All personnel involved in the transport operation will complete course code SAFE 000538, *Explosive Handling and Transportation Training*, and document as is typical for their unit's training (i.e. G081, TBA, or other). This is a two-part training requirement:

7.8.1.4.1.8.2.1. (Added) Part I will consist of reviewing and understanding applicable instructions from course.

7.8.1.4.1.8.2.2. (Added) Part II will consist of a ride-along that includes simulated pick-up, transport, and drop-off procedures, and familiarization of applicable explosives routes. Part II can be accomplished and signed-off by previously trained personnel.

7.10.4.1.1. (Added) Ensure personnel are authorized to receive munitions via a current CAC, and validated by an AF Form 68, *Munitions Authorization Record*, before transferring possession of munitions items.

7.10.4.5.1. (Added) Ensure an explosive operations supervisor will be designated for each operation. This individual is in charge of the entire operation, to include pick-up and delivery and will:

7.10.4.5.1.1. (Added) Determine the location(s) of the operation and identify location(s) during the pre-task safety briefing in Attachment 3.

7.10.4.5.1.2. (Added) Determine safety requirements and PPE specific to each operation and identify them during the pre-task safety checklist in Attachment 2.

7.10.4.5.1.3. (Added) Minimize the number of personnel to safely accomplish the explosive operation task as outlined in specified TOs. However, it is recommended a maximum of 10 personnel, in any combination of the below, be allowed in the area during explosive operations.

7.10.4.5.1.3.1. (Added) 2 SUPERVISORS (minimum of 1 required)

7.10.4.5.1.3.2. (Added) 6 WORKERS

7.10.4.5.1.3.3. (Added) 2 CASUALS (as defined in DESR_6055.09_AFMAN 91-201, V1.E6.15.3)

7.10.4.5.1.4. (Added) Emphasize all applicable warnings, cautions, and notes from safety briefing and applicable item technical orders.

7.10.4.5.1.5. (Added) Update safety briefing whenever changes occur (i.e. personnel, net explosive weight (NEW), hazardous class/division (HC/D), etc.).

7.10.4.5.1.6. (Added) Act as approval authority to allow entry into the explosives operations, and immediately provide safety briefing to new members, casuals (i.e. quality assurance (QA), safety, inspector general), and visitors.

7.10.4.5.1.6.1. (Added) Ensure operations will be placed on hold when visitors arrive and operations will not resume until visitors depart.

7.10.4.5.1.6.2. (Added) Monitor NEW and authorized compatibility group mixing of munitions during explosive operations.

7.10.4.5.2. (Added) Step-by-step procedures for task accomplishment are located in each item technical order. The applicable technical orders will be identified in the pre-task safety briefing in Attachment 3.

7.10.4.5.3. (Added) Actions to be taken during an emergency or when abnormal conditions are noted:

7.10.4.5.3.1. (Added) Personnel will stop the operation, order an immediate evacuation of the area, and relay full details to the MOC or the Command Post.

7.10.4.5.3.2. (Added) The MOC will initiate the applicable quick reaction checklist (QRC), Explosive Handling Mishap.

7.10.4.5.3.3. (Added) Personnel not directly involved in firefighting or lifesaving actions IAW DESR_6055.09_AFMAN 91-201 will evacuate.

7.10.4.5.3.4. (Added) When a lightning watch/warning notification is received, all operations will be terminated, explosives will be secured, and personnel will be evacuated.

7.10.4.5.3.4.1. (Added) In the event operations in progress cannot be immediately terminated due to sensitivity or urgency, the operation will be continued until completed or safe to suspend using the minimum manpower necessary. Upon completion or suspension of the operation, affected personnel will also evacuate the area as directed by the MOC or the Command Post.

7.10.4.5.4. (Added) The following are McChord Field-specific requirements for munitions movements:

7.10.4.5.4.1. (Added) Special attention will be given at all times to ensure safe operations of vehicles transporting explosives. DESR_6055.09_AFMAN 91-201, Enclosure 6 provides specific guidance when transporting explosive items. Prior to use, inspect motor vehicles used to transport explosives to ensure that a minimum of two serviceable 2A:10BC rated fire extinguishers are required for each vehicle.

7.10.4.5.4.2. (Added) IAW DESR_6055.09_AFMAN 91-201, enclosure 6, movements of munitions within the MSA, airfield, or to and from licensed storage locations and transportation of explosives in support of training of workings dogs are not restricted to designated routes. Rather, they are encouraged to take the most direct route to their licensed facility. If transporting explosives 1.3 and higher to an unlicensed location (i.e. flares to Bldg. 744), personnel must use the explosive safety routes outlined in Attachment 4. Do not exceed 30 miles per hour on McChord Field.

7.10.4.5.4.3. (Added) Contact the MOC and report route of travel for all explosives movements outside of the Munitions Storage Areas.

7.10.4.5.4.4. (Added) Notify the MOC upon termination of movement.

7.10.4.5.4.5. (Added) Explosives will not be transported in the passenger compartment of a vehicle, except as authorized by DESR_6055.09_AFMAN 91-201, para V1E6.42.20.

7.12.3.1. (Added) Coordinate with MIKE 2 (982-7070) to store munitions in building 744 if the explosive operation cannot be completed on the current shift.

DAVID A. FAZENBAKER, COLONEL Commander, 62d Airlift Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

TO 11A18-10-7, Specialized Storage and Maintenance Procedures for Cutter Impulse Cartridges

TO 11A18-14-7, Specialized Storage and Maintenance Procedures for Fire Extinguisher Cartridges

TO 11P3-24-7, Specialized Storage and Maintenance Procedures for Escape Handle Initiators Assembly and Arm/Fire Initiators

TO 11P3-3-26-7, Specialized Storage and Maintenance Procedures for C-17 Shielded Mild Detonating Cord Sets

TO 11P3-3-1-117, Specialized Storage and Maintenance Procedures for Cartridges/Initiators

TO 11P3-3-27-7, Specialized Storage and Maintenance Procedures for Linear Charge and Panel Assemblies

DAFMAN 21-201, Munitions Management, 14 April 2021

AFI 91-202, US Air Force Mishap Prevention Program, 11 March 2020

DESR6055.09_AFMAN91-201_Explosive Safety Standards 28 May 2020

AF Form 68, Munitions Authorized Record, 19 January 2018

Abbreviations and Acronyms

62 AMXS—62d Aircraft Maintenance Squadron

62 MXS—62d Maintenance Squadron

62 OSS—62d Operations Support Squadron

CAD—Cartridge Actuated Device

DLC—Distance Learning Center

HC/D—Hazard Class Division

IAW—In Accordance With

MOC—Maintenance Operations Center

MMHE—Munitions Materiel Handling Equipment

NEW—Net Explosive Weight

NLT—No Later Than

PAD—Propellant Actuated Device

PPE—Personnel Protective Equipment

QA—Quality Assurance

QRC—Quick Reaction Checklist **TO**—Technical Order

Attachment 2 (Added)

PRE-TASK CHECKLIST

Figure A2.1. Pre-task Checklist.

- []C/W[]N/A Qualified Crew Members
- C/W[]N/A Current Tech Data
- C/W [] N/A Pre-task Safety Briefing
- C/W [] N/A Serviceable Vehicle(s)
- C/W [] N/A Proper Equipment/Tools/Applicable Documents
- C/W [] N/A 2A10BC Fire Extinguishers (2 ea.)
- C/W [] N/A Explosive Operations Signs (at each entry point)
- C/W [] N/A Serviceable Ground Cords
- [_] C/W [] N/A Serviceable Radio
- C/W [] N/A Sufficient Tie-Downs/Dunnage/Placards/etc.
- [] C/W [] N/A Clear Exits and Fire/Safety Equipment
- C/W [] N/A No Concurrent Operations
- C/W [] N/A As applicable, notify Maintenance Operations Center at Start/End of Operation and as Changes Occur

Attachment 3 (Added)

PRE-TASK BRIEFING

Figure A3.1. Pre-Task Briefing.

WARNING

IAW DESR_6055.09AFMAN91-201, V2.E3.8.1. Warning signs must be posted at any location where radar equipment or other possible sources of EMR might create the potential for premature initiation of military munitions. Warning signs must be placed along transportation routes approaching military munitions operations (e.g., missile assembly, ammunition pier) at designated locations. Warning signs should alert operators of mobile or portable emitter systems to a potential hazard and restrictions when using these emitters (e.g., radios, cellular telephones) past the designated point.

WARNING

IAW DESR_6055.09AFMAN91-201, V2.E3.4.2.5. Areas where electrically initiated munitions and explosive devices are undergoing maintenance and electrical test operations and the responsible engineering function has determined grounding is necessary. Refer to the specific item TO or similar product (*i.e.* test data package) to determine if grounding is necessary.

Operation to be performed:
Location of Operation:
Explosive Hazard Class/Division/Compatibility Group:
Principle Hazard/s:
Withdrawal Distance:feet.
Evacuation Point
Hazard/abnormal conditions in work <u>area:</u>
Personnel Limits:
Supervisors: Workers: Explosive Limits:
Casuals:

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Figure A3.2. DROP DISTANCES.

DROP DISTANCES:

		Hazard	Class Comp	DROP DISTANCE	
Noun or Item Name	Technical Order			PACKED	UNPACKED

GENERAL SAFETY GUIDELINES:

____ Post explosive operation signs/cones

_____ Fire and hazard symbols posted as required

- _____ Technical order warnings, cautions, and notes briefed
- _____ Safety requirements and procedures reviewed (para 2 & 4 of this instruction)
- ____ Remove rings, watches, and other jewelry
- _____ Fire extinguishers available and serviceable for the specific hazard(s) involved
- ____ Check all exits free of obstructions
- As applicable, notify the MOC, (253) 982-3336, before starting explosive maintenance and once again upon completion of explosive maintenance
- _____ Safety equipment required (PPE) (CHECK ALL THAT APPLY)

[] Safety toe boots	1] Gloves
[] Safety glasses/shield	1] Hard hats
[_] Spill kit	1] Other:

Figure A3.3. Visitors And Casuals.

VISITORS AND CASUALS:

VISITORS: Visitors are nonessential personnel with limited access.

CASUALS: Person(s) not normally part of an operation but have duties that require their presence. (i.e., Quality Assurance).

WARNING

Personnel, regardless of rank, who observe an unsafe act or condition, must immediately stop the operation. The operation will not resume until the unsafe act/condition is eliminated/corrected.

EMERGENCY PROCEDURES:

In the event of fire, accident, or dropped munition(s) the following actions will be taken:

______will notify the fire dept. 911 and Command Post, as applicable notify: MOC 982-3336, Blue-3 982-6916, Silver-3 982-6606, and MIKE-2 982-7070.

> Will inspect the fire-extinguishers prior to the operation and will fight the fire if necessary.

_will proceed to entry control point (ECP) to direct fire department and emergency response personnel and brief type/quantity of explosives involved, time engulfed in flames, and status of personnel.

NOTE

Nonessential personnel are anyone not involved in the emergency procedures

will evacuate nonessential personnel and direct them to the evacuation point.

ITEM	ТО
Tow Severance Assembly	11A18-10-7
Fire Extinguishing Squibs	11A18-14-7
Armed Fire Initiator	11P3-3-24-7
SMDC Lines	11P3-3-26-7
Retractor Cartridge	11P3-3-1-117
Shape Charge Assembly	11P3-3-27-7

Figure A3.4. Reference Table.

Attachment 4 (Added)

PRIMARY/ALTERNATE EXPLOSIVE ROUTES TO FLIGHT LINE

Figure A4.1. Primary/Alternate Explosive Routes to Flight Line

