



Safety

MOVEMENT OF EXPLOSIVES

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This instruction implements DoD Standards 6055.9, *DoD Ammunition and Explosives Safety Standards*, AFD 91-2, *Safety Programs*, AFI 91-202, *The US Air Force Mishap Prevention Program*, and AFMAN 91-201, *Explosives Safety Standards*. It establishes responsibilities and procedures for the movement of explosives by motor vehicle on Maxwell AFB and Gunter Annex. Further, It establishes the temporary storage location for commercial shipments requesting Safe Haven/Refuge and actions required should download be necessitated; clarifies transportation routes, aligns the use of explosive placards with Title 49, Code of Federal Regulations; eliminates the use of fire symbols while transporting explosives on base; provides guidance for the escorting of commercial trucks to and from base gates. Finally, this instruction applies to all Department of Defense (DoD) organizations and tenant organizations residing on MAFB and Gunter Annex.

1. Overview. The Ground Safety Branch (42 ABW/SEG) has established a sited Hot Cargo Pad area for Hazard Class and Division (HC/D) 1.1, 1.2, 1.3, and 1.4. (See attachment 1 for hazard class definitions.) **EXCEPTION:** Deviation to this instruction will only be considered when the safety of personnel and government properties is jeopardized. Coordination of this requirement is through Safety (42 ABW/SE), 42d Operations Support Squadron Airfield Management (42 OSS/OSAA), 42d Supply Squadron (42 SUPS/LGSCK), 42d Transportation Flight (42 TRNF/LGTT) and 42d Security Forces Squadron (42 SFS) as a minimum. Any changes to the Explosive-laden vehicles routes or parking areas must be approved by the wing commander.

2. Responsibilities.

2.1. MAFB personnel and organizations responsible for receiving, shipping and on-base transportation of explosives cargo will comply with this instruction. Additional guidance governing the movement of explosives can be found in the references listed in attachment 1.

2.2. Organizations that receive or ship explosives will notify their carriers of the provisions of this instruction. Commercial carriers will notify the 42 TRNF/LGTT Freight section of pending shipments at least 24 hours in advance.

2.3. Wing Safety (42 ABW/SE) will:

2.3.1. Ensure that all explosive safety standards are met.

2.3.2. Designate the safest possible primary and alternate explosive movement routes.

2.4. Security Forces (42 SFS) will:

2.4.1. Keep a copy of this instruction at the Law Enforcement Desk (LED) and gates.

2.4.2. Provide escorts for explosive laden commercial shipments.

2.4.3. Ensure that established explosives routes are utilized.

2.4.4. Control access to the Safe Haven/Refuge areas and Inspection station/Holding Yard.

2.5. Transportation 42 TRNF/LGTT will:

2.5.1. Inspect arriving commercial explosive-laden vehicles for DoD organizations or vehicles requesting Safe Haven/Refuge. A safe load should be determined before proceeding to off load destination or parking in the Safe Haven/Refuge location.

2.5.2. Inspect all DoD outbound explosives commercial shipments to ensure shipment meets Department of Transportation (DoT) requirements.

2.5.3. Ensure the *Terminal Facilities Guide* clearly reflects the capabilities of MAFB for both day-to-day and emergency assistance (Safe Haven/Refuge) operations.

2.6. Supply (42 SUPS/LGSCK) will:

2.6.1. Assist in loading and unloading of explosive laden vehicles.

2.6.2. Assist in developing recommendations for transportation of explosives on base and explosives vehicle routes.

2.6.3. Ensure the proper fire symbols are posted correctly for the HC/D of explosives at the Safe Haven/Refuge areas and storage structure. Notify the Fire Alarm Communication Center (42 CES/CEF) of the posted fire symbols, or any fire symbol changes.

2.8. Command Post (42 ABW/CP) will:

2.8.1. Serve as the communication focal point during receipt and shipment of explosives.

2.8.2. Contact appropriate agencies when required.

3. Procedures for Inbound and Outbound Explosives Shipment During Duty Hours.

3.1. Inbound Commercial Vehicles.

3.1.1. As stated in paragraph 2.2, commercial carriers notify 42 TRNF/LGTT of pending shipments at least 24 hours in advance. In turn, the Freight section will notify 42 SUPS/LGSCK and the 42 ABW/CP. The 42 ABW/CP will notify 42 ABW/SE, 42 CES/CEF, 42 SFS and 42 OSS/OSAA of the time the shipment is expected to arrive and highest classification of explosives on vehicle if known.

3.1.2. Drivers transporting explosives cargo, (HC/D 1.1, 1.2, 1.3, or 1.4) for DoD agencies onto MAFB will enter through the Kelly Street Gate, designated as the primary entrance for all explosive shipments. On arrival of explosive laden vehicle at the designated Gate, the gate guard will notify the LED. The LED will dispatch an escort and notify the command post. The 42 ABW/CP will subsequently notify 42 TRNF/LGTT, 42 ABW/SE, 42 CES/CEF, 42 SUPS/LGSCK and 42 OSS/OSAA. The escort vehicle will lead the explosive laden vehicle to the Inspection Station/Holding Yard. The area is located north of the Kelly Street gate, across the street from base supply, building 1154. (See Attachment 2). Deviation to this instruction can only be made with approval of 42 ABW/CC. **NOTE:** Drivers of escort vehicles must be certified to drive on the flightline before escorting a vehicle across the flight line in either a movement or non-movement area. Every effort will be made to use the Kelly Street Gate. At no time will an explosive laden vehicle be allowed to travel through a heavily populated or mission critical area (for example, base housing, schools, clinic).

3.1.3. Should an explosive laden vehicle arrive at the Bell Street Gate, it will be directed to the Kelly Street Gate. If it cannot safely turn around they will be escorted by SFS personnel to the nearest parking lot, and turned around to proceed off base and to the Kelly Street Gate.

3.1.4. If the vehicle arrives at the Day Street Gate, he will be escorted by SFS using the most direct route to the Inspection Station/Holding area, located north of the Kelly Street Gate.

3.1.5. Park commercial vehicles in the explosives Inspection Station/Holding Yard area west of the Kelly Street Gate guard building. This is across from base supply. (See Attachment 2).

3.1.6. Using DD Form 626, **Motor Vehicle Inspection (Transporting Hazardous Material)**, 42 TRNF/LGTT will conduct an incoming inspection of the vehicle for satisfactory safe passage to its delivery destination or to the Safe Haven/Refuge area.

3.1.7. The SFS will escort the vehicle to the specified destination.

3.1.8. The SFS escort will ensure that explosive laden vehicles leaves through Kelly Street Gate.

3.1.9. The explosives cargo will be off-loaded as directed by the consignee. The 42 SUPS/LGSCCK will provide off-load assistance of explosives cargo.

3.2. Outbound Commercial Vehicles.

3.2.1. All explosives shipments from DoD activities are tendered only to motor carriers, authorized to transport explosives, and complies with DoT, and other directives regarding transportation of explosives.

3.2.2. The vehicle will be inspected by 42 TRNF/LGTT personnel for compliance with safety regulations, before loading the explosives. DD Form 626 is used to complete the required inspection.

3.2.3. When an explosive laden vehicle is ready to proceed off base; SFS will escort the vehicle to the Kelly Street Gate.

4. Procedures for Explosives Shipments Arriving After Normal Duty Hours.

4.1. If vehicles with an explosive cargo arrive after duty hours described in the *Terminal Facilities Guide*, (0700 - 1600, Monday through Friday, or on weekends and holidays), SFS guards on duty should inform the driver that formal receipt of the material cannot be accomplished, unless prior arrangements have been made with 42 TRNF/LGTT for shipments.

4.2. The gate guard notifies the LED, who in turn, notifies the command post advising them of the shipment. The driver will be escorted to the appropriate destination for Safe Parking until the truck can be off-loaded the next morning. If an explosive loaded vehicle is parked on the hot cargo pad the command post must notify the appropriate agencies. If the vehicle is parked in the explosive parking area, the command post will notify the appropriate agency the next morning.

5. In-Transit Commercial Shipments. (Safe Haven/Refuge)

5.1. When DoD Arms, Ammunition, and Explosives or classified shipments are en route but are prevented from proceeding to destination by emergencies or other circumstances beyond the carriers control; at the request of Military Traffic Management Center Personnel, commander of military activities with appropriate facilities will grant Safe Haven or Refuge. Further information on assistance to carriers can be found in DoDR 4500.9, Part II, Paragraph 250.Q. The procedures in DoDR 4500.9, Part II, paragraph 205.P., require drivers to request Safe Haven/Refuge through the Military Traffic Management Hot Line. Anyone receiving a request should direct the caller to the hot line at 1-800-524-0331.

5.2. There are two types of Safe Havens that can be requested:

5.2.1. DoD Safe Haven, (commercial), for Military Traffic Management Command commercial shipments is defined in DoDR 4500.9 Part 11, Chapter 205. This definition for Safe Haven, (commercial), is for emergency assistance for hazard class/division 1.1, 1.2, 1.3, and 1.4 commercial shipments of government shipments of explosives.

5.2.2. DoE Safe Haven is normally shipments of high explosives, chemical warfare, contaminants, munitions, or radioactive material components.

5.3. Command Post personnel will initiate Safe Haven checklist upon initial notification of inbound shipments.

5.4. Trucks are inspected and loaded by 42 TRNF/LGTT using DD Form 626 to determine if safe passage to the Safe Haven/Refuge area can be provided. Commercial vehicles requesting Safe Haven (for hazard class and division 1.1, 1.2, 1.3) are parked on the Hot Cargo Pad located at the north end of the airfield. The load remains in the guarded custody of the driver, unless the trailer is disconnected. At all times, carrier maintains liability for the load until arrival at the intended shipment destination.

5.5. If Safe Haven/Refuge is provided to a commercial carrier, and a download is necessary to accomplish repairs, 42 SUP/LGSCK provides assistance as requested by the carrier. Upon completion of repairs, 42 SUP/LGSCK assists in reloading, and 42 TRNF/LGTT again inspects the load.

5.6. Supply (42 SUP/LGSCK) makes the appropriate notifications to the 42 CES/CEF Fire Alarm Communications Center when fire symbols are changed.

6. Transportation of Explosives Within MAFB.

6.1. Vehicles used by DoD organizations and their designated contractors will be inspected according to AFMAN 91-201 before use.

6.2. Vehicles transporting HC/D 1.1, 1.2, 1.3, 1.4 explosives will use the designated explosives movement routes shown on the Explosives Limits and Convoy Routes Map, Base Comprehensive Plan Map, (available from 42 CES/CEC). Attachment 2 is a local rendition of the map. **EXCEPTION:** Movements of munitions or explosives within a munitions storage area to and from licensed storage facilities are not restricted to designated routes. Required movements should avoid built-up areas to the maximum extent possible.

6.3. DoD organizations transporting HC/D 1.1, 1.2, 1.3, or 1.4 explosives within MAFB must follow the procedures outlined in DoDM 5100.76.

6.4. DoD and its designated contractor organizations, will call the 42 CES/CEF Fire Alarm Communications Center when HC/D 1.1, 1.2, 1.3 explosives are transported over the established explosives routes, to and from aircraft, or between authorized points on base. Include caller's name, telephone number and organization, present location of explosives, HC/D of explosives, N.E.W., and destination. This information is entered in the fire department log by the dispatcher; however, fire department assistance is not requested to cover internal movements

unless there are special needs, and fire protection is considered essential to the safety of the movement.

7. DoT Placard and Fire Symbol Requirements.

7.1. All commercial and DoD designated contractor vehicles transporting explosives must display the applicable DoT placard according to AFMAN 91-201 and DoT Title 49, CFR.

7.2. When vehicles are to be parked more than 24 hours or at the Safe Haven/Refuge area, post the approved fire symbols.

7.3. Department of Energy vehicles involved in the courier shipment or transportation of explosives, safe secure trailers and escort vehicles are exempt from placarding requirements.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DOD Regulation (DODR) 4500.9, Part 11, Defense Transportation Regulation (Cargo Movement).

DoD Manual (DoDM) 5100.76, Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives. AFI 31-101, Air Force Installation Security Program

AFI 91-202, The US. Air Force Mishap Prevention Program.

AFMAN 91-201, Explosives Safety Standards.

Technical Order (T.O.) 11A-1-46, Fire Fighting Guidance, Transportation and Storage Management Data, and Ammunition Complete Round Chart.

Department of Transportation (DoT) Title 49, Code of Federal Regulations (CFR), Transportation.

Explanation of Terms

Armed Guard Surveillance. As a minimum, security risk category I munitions and explosives movement shall be under constant armed guard surveillance, with two drivers for each conveyance.

Constant Employee Surveillance. As a minimum, security risk category 2 ammunition and explosives movements shall be under constant employee surveillance with two drivers for each conveyance.

Constant Surveillance. As a minimum, security risk categories 3 and 4 ammunition and explosives movements shall be under constant surveillance with one driver for each conveyance.

NOTE: The specific requirements for transportation security for explosives are in DoDM 5100.76.

Driver. An individual authorized and qualified to operate vehicles loaded with explosives. DOD drivers and operators of vehicles and equipment will be carefully selected, physically fit, adequately trained and tested in the operation of the type of vehicle or equipment being used and informed of the explosives hazards involved as outlined in AFMAN 91-201. They will also have in their possession an AF Form 2293, *Operator Identification Card*, for the vehicle being operated. Training must be documented. Supervisors or managers will give the training with help from unit weapons safety personnel. As a minimum, the training will address vehicle placarding, munitions compatibility while being transported, munitions delivery routes, vehicle inspection, cargo tie-down requirements, vehicle refueling safety requirements and emergency procedures.

Explosives. All ammunition, munition fillers, demolition material, solid rocket motors, liquid propellants, cartridges, pyrotechnics, mines, bombs, grenades, warheads of all types, explosive elements of ejection and aircrew egress systems, air-launched missiles and those explosive components of missile systems and space systems and assembled kits and devices containing explosive materials. Explosives, explosive weight, net weight, and other like terms also refer to the fillers of an explosive item. Fillers may be explosive mixtures, propellants, pyrotechnics, chemical agents and other toxic substances. **NOTE:** This term does not include liquid fuels, and oxidizers that are used with missiles, rockets and other such weapons or explosives items.

Explosives Hazard Classification. Identifies the hazardous characteristics of explosives items by their assignment of established hazard categories governing storage and transportation. These categories are United Nations Organization (UNO) hazard class and division and Department of Transportation (DoT) class. Explosives are hazard classified by their predominant hazard. TREAT AND STORE EXPLOSIVES HAZARD CLASSIFIED AS OTHER THAN HAZARD CLASS 1 AS EXPLOSIVES EXCEPT WHEN THE NET EXPLOSIVE WEIGHT (NEW) IS ZERO. Explosives used by USAF organizations must have a DoD hazard classification assigned (interim or final). Final hazard classifications for USAF explosives are listed in T.O. 11A-1-46, to include predominant hazard classifications. Interim hazard classifications are applied for a period of one year. Initiate renewal of interim classification prior to expiration.

Hazard Class and Division and Security Risk Categories.

Class 1 Division 1 (1.1) Mass-Detonating Explosives. Items in this division are principally blast hazards and may be expected to detonate when a small portion is initiated by any means. Examples: bulk explosives (TNT [trinitrotoluene] and C-4), bombs, demolition charges, detonating cord (prima-cord), and security risk category 1 or 2 ammunition and explosives.

Class 1 Division 2 (1.2) Non-Mass Detonating Fragment Producing Explosive. Items in this division are principally fragmentation and blast hazards. The hazards may be either individual or in combination but do not mass detonate. **EXAMPLES:** 20 millimeter (mm) high explosive incendiary cartridges, bomb fuses, 40 mm high explosive cartridges, and security risk category 2 ammunition and explosives.

Class 1 Division 3 (1.3) Mass Fire Explosives. Items in this division burn vigorously and are principally a mass fire hazard. **EXAMPLES:** Most rocket motors, pyrotechnic flares and signals, and security risk category 3 ammunition and explosives.

Class 1 Division 4 (1.4) Moderate Fire-No Blast Explosives. Items in this division present a minor fire hazard but no blast hazard. There is virtually no fragmentation or toxic hazard beyond the fire hazard clearance zone required for high risk items. **EXAMPLES:** Small arms ammunition without explosives projectiles, riot-control munitions, colored smoke grenades, most impulse cartridges, and security risk category 4 ammunition and explosives.

Department of Transportation (DoT) Hazard Classification. Effective 1 October 2001, the DoT hazard classification and placarding and labeling requirements change to the United Nations Organization (UNO) hazard class and division system.

Irritant (IRR). These items contain irritating material. Munitions in UNO Class 6 Divisional are transported in commercial vehicles as DoT IRRITANT cargo. **NOTE:** The specific UNO class and division and DoT class for each explosive item in the Air Force inventory are shown in T0 11A-1-46. The specific security risk categories for explosives items are contained in DoDM 5100.76.

Explosives Parking Area. Designated areas at authorized entry gates for vehicles loaded with explosives.

Explosives Storage Area. A facility or designated location containing explosives for the exclusive storage, or warehousing of bulk unit explosives stock. Facilities include: igloos, magazines, operating buildings, modules, revetments, and outdoor storage sites.

Holding Yard. A specified area designed or used to accommodate explosives-laden carriers before movements to a storage area or to their next destination.

Inspection Station. A designated location at which vehicles and railcars containing ammunition or explosives are inspected.

Net Explosives Weight (N.E.W.). The total quantity, expressed in pounds of explosives material or high explosives equivalency in each item or round, used when applying quantity-distance criteria or other explosives safety standards. For example, the total N.E.W. for an explosives laden vehicle is the sum total of the explosive content of all items or rounds that have been loaded on the vehicle. N.E.W. only applies to explosives items in hazard class 1.

REFUGE. Emergency assistance provided to Military Traffic Management Command (MTMC) commercial shipments for explosives in hazard class 1.4 or classified shipment.

Safe Haven. The two types of Safe Haven are: (1) Safe Haven for DoE shipments is defined in AFI 31-101, *The Air Force Physical Security Program*, paragraph 11.9.3 and AFMAN 32-4004, *Emergency Response Operations*, paragraphs 2.7 and 2.9. (2) Safe Haven (commercial) for Military Traffic Management Command commercial shipments is defined in DoDR 4500.9 Part 11, Chapter 205. This definition for Safe Haven (commercial) is for emergency assistance for hazard class/division 1.1, 1.2, 1.3, and 1.4 commercial shipments of government shipments of explosives.

Vehicle. For the purpose of this instruction, any device (truck, tractor, trailer, van, etc.), on wheels that is used to carry explosives cargo. Commercial vehicles are those operated by trucking companies authorized to transport explosives. Military vehicles are those registered and controlled by a DoD agency and its authorized or designated contractors (US Air Force, US Army, US Navy, etc.). DoE vehicles are those registered and controlled by DoE and DoE contractors.

Vehicle Inspection Station. A designated site, where all motor vehicles carrying, ammunition and explosives will be inspected by an authorized inspector.

