

**BY ORDER OF THE  
COMMANDER 911 AIRLIFT WING**

**911 AIRLIFT WING INSTRUCTION 91-204  
15 OCTOBER 2008**



**Safety**

**EXERCISES AND TRAINING INVOLVING  
EXPLOSIVES**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: 911 AW/SEW

Certified by: 911 AW/CC  
(Col. Gordon H. Elwell Jr.)

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This instruction implements Air Force Policy Directive (AFPD) 91-2, *Safety Programs*. It establishes the required operating instruction for the use of blank ammunitions, the use of explosives for training and the use of explosives during combat skill exercises as directed by Air Force Manual (AFMAN) 91-201 AFRC Sup 1, *Explosives Safety Standards*. It applies to all personnel handling, transporting and storing explosive assets on Pittsburgh ARS and applicable training sites which fall under the jurisdiction of the 911 Airlift Wing Commander. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://afirms.amc.af.mil/>. 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 Form 847 to 911 AW/CC, Pittsburgh IAP-ARS, Pennsylvania

**1. General.**

1.1. This instruction outlines procedures for the use of specific explosive items used in combat training exercises and munitions training. The use of explosive items not covered in this instruction during combat training exercises or other types of exercises involving the use of explosives must be outlined in operating instructions (OI) developed in accordance with AFMAN 91-201AFRC Sup 1. This instruction, in conjunction with the applicable references listed will be used for conducting training of personnel and planning of training exercises. A copy of this instruction will be available at the exercise site.

1.2. Commanders and supervisors are responsible for ensuring personnel are properly trained, exercises are thoroughly planned, and requirements are stringently complied with. Individuals are responsible for full compliance with all instructions given.

## **2. General Safety Requirements.**

- 2.1. Explosives will be handled, transported, and used only by personnel trained in the task to be performed.
- 2.2. Explosives will not be tumbled, thrown, dropped, or handled in a rough manner unless designed to do so.
- 2.3. No attempt will be made to disassemble, modify, or alter explosive items. Explosive items will not be use in a manner other than their intended purpose.
- 2.4. If abnormal conditions relating to the safe configuration of an explosive item are noted, no attempt will be made to use the explosive or correct the condition. Notify the 911 AW Munitions Accountable Systems Officer (MASO), Explosive Ordnance Disposal (EOD) and the Safety Office for assistance as needed.
- 2.5. Explosive items will be stored and transported in their approved storage and shipping container.
- 2.6 Only the quantity of munitions necessary for a specific operation will be drawn from storage. This will be identified in the exercise plan in accordance with section 3.
- 2.7. A pre-exercise safety briefing will be conducted for all personnel before deployment to the exercise site. Exercise plans developed in accordance with section 3 will identify specific times, locations, and briefer. The briefing must include items in Attachment 4 as a minimum.
- 2.8. A suitable number, normally two 2A:10BC, of appropriate fire extinguishers will be available in areas where grenades, simulators, and flares are used.
- 2.9. In the event of an emergency, the exercise scenario will be stopped, supervisory personnel will be notified of the emergency, all weapons will be safed, and personnel will await instructions from appropriate supervisory personnel. Supervisory personnel must be knowledgeable of all emergency procedures and notification requirements.
- 2.10. No Smoking within 50 feet of explosives.
- 2.11. If it is necessary to have personnel armed with live ammunition in the exercise area they will be readily identifiable. (e.g. red tape, white hat, reflective vest, arm band) They will wear some sort of reflective gear during the hours of darkness. Live ammunition will be kept separate, secured and clearly marked from blank ammunitions at all times. These armed personnel will not participate in the exercise and be responsible for control of their live ammunition.
- 2.12. **Do Not Enter Explosive Operations / Exercise in Progress** signs will be posted at all approach avenues not manned by an entry controller. The purpose is to keep unauthorized personnel from entering an exercise area without proper escort.

## **3. Planning.**

- 3.1. An exercise plan will be developed before each exercise (preferably 30 days) by the Office of Primary Responsibility (OPR). The plan will be signed by the OPR, coordinated with each Office of Collateral Responsibility (OCR), the base Fire Chief, Munitions Management, Environmental Health, Base Environmental and the Wing Weapon Safety Office. The plan format outlined in attachment 2 can be used for this purpose. The installation commander or his designated representative (at the base where the exercise will take place) must approve the plan. Other formats may be used, provided all information in attachment 2 is included.
- 3.2. Exercise plans will be prepared by the exercise OPR. The OPR and the Wing Weapon Safety Manager will maintain a copy.
- 3.3. When accomplishing the exercise plan, compile a detailed list of explosives and weapons authorized for use in the exercise. Locations where munitions will be deployed will be included.
- 3.4. Include base Safety Office personnel in the training and exercise planning.

3.5 Section Commander approved lesson plans will be developed and coordinated through the Wing Weapons Safety office prior to explosive training classes.

#### **4. Requisition of Munitions.**

4.1. Once munitions requirements are identified, the OPR will coordinate through the 911 Airlift Wing Munitions Management to ensure training munitions are available. The specific munitions, persons authorized or designated to draw munitions, and the scheduled pickup date/time will be included in the exercise plan in accordance with section 3. A signed AF IMT 483 **Certificate of Competency** to deploy exercise munitions will be presented to Munitions personnel prior to munitions pickup.

#### **5. Munitions Accounting and Control.**

5.1. Explosive training items, although normally containing comparatively small amounts of explosive material can be extremely hazardous if not properly handled and used. Stringent control and accountability are essential to ensure they do not fall into the wrong hands or are used in an unauthorized manner. Experience has shown those items inadvertently left on training range/exercise areas or taken to quarters and used for pranks or experimentation can result in serious mishaps.

5.2. Accurate recording of munitions issued and expended by individuals will be accomplished as follows:

5.2.1. Munitions Issue/Turn-in Log. The individual designated to draw the munitions will make a physical inventory before departing the pickup point. The munitions custodian should use an AF IMT 3126, **General Purpose Form**, or a locally designed form to record issue of munitions by lot number, to individuals at the range/exercise site. The quantity expended and turned in will be recorded at the termination of the exercise. Inventories will be conducted at each shift change. Discrepancies in accountability will be resolved before departing the range/exercise area. If an out of balance count of munitions occurs the exercise will be called to a halt until the out of balance count is corrected.

5.2.2. A 100% inspection of all blank rounds used during exercises will be completed to verify that they are in fact, all blank rounds. A disinterested official appointed by the exercise team chief will assist in this inspection. The base MASO will complete a 100% inventory on all live (projectile) ammunition that could be substituted for blanks to assure there are no out of balance conditions prior to the exercise.

5.2.3. Only trained and qualified personnel are allowed to issue ammunition. The ability to discern between a live round with a projectile and a blank round is a requirement to be qualified to issue ammunition during exercises. The ability to identify an unserviceable round and control the inventory is also a requirement to be qualified. The exercise team chief identifies these qualified individuals on the exercise plan.

5.2.4. Training munitions will be stored in original containers in the munitions storage area when not in use. Temporary storage at other location can be arranged through the use of an AF IMT 2047 coordinated through the base Safety Office.

#### **6. Training for Simulators and Smoke Producing Munitions.**

6.1. Unit commanders are responsible for ensuring all personnel who handle, transport, or use simulators and smoke producing munitions are properly trained.

6.2. The following applies to the use of these devices during exercises and training:

6.2.1. Only US Air Force stock listed items are authorized for use.

6.2.2. Only trained personnel can prepare and activate these devices. Explosives Ordnance Disposal (EOD) or EOD trained trainers will provide training on an annual basis to personnel

whose duties require them to initiate training simulators or smoke producing munitions. It is the responsibility of the user organization to request training and maintain training documentation. Any of the following may be used for documentation; AF IMT 483, AF IMT 623, **On-the-Job Training Record**, or a Certificate of Training.

6.2.3. Personnel requiring training to activate simulators and smoke producing munitions will call the Wing Safety Office or the closest available EOD office to schedule training. On the day of training, personnel will report to EOD/Safety with a completed AF IMT 483. A certificate number will be assigned to the Certificate of Competency card by EOD after successfully completing the training. The trainer will also sign the front of the AF IMT 483 to show card holder has completed the required training. Personnel who will train other personnel to activate simulators and smoke producing munitions must attend training which will consist of 4 hours of classroom instruction, a written test and be qualified to handle, maintain and inspect the simulators and smoke producing munitions. All explosive training will follow the guidelines in this regulation.

6.2.4. Units requesting training will provide one of each munitions item per student and one per instructor for training.

6.2.5. Smoke from grenades may be toxic in high concentrations. These items, along with simulators and flares present a fire hazard. Remove combustible materials before functioning. Consider winds and fire hazards such as dry grass or fire bans. Consider using a barrier to control spread of heat during functioning of grenades. Gas mask will be readily available where smoke grenades are being deployed.

6.2.6. Ground burst simulators or hand grenade simulators present a blast hazard. Exercise caution around people, facilities, and equipment. Clear the area of debris that could become projectiles from the blast. Monitor for proper functioning and disposal of residue. Notify EOD when a munitions malfunctions. Wear proper Personal Protective Equipment (PPE).

6.2.7. Smoke grenades and training simulators will be carried in metal ammo cans with a closable lid during exercises. Containers will be labeled with applicable hazard class Department of Transportation (DOT) label. Transport in accordance with applicable DOT regulations and USAF technical data and use attached step by step procedures. Munitions will not be left unattended.

## **7. Minimum distances for explosive simulators.**

7.1. Prior to functioning any simulator or smoke producing explosives device, clear all combustible material a minimum of 10 feet. It is recommended that any simulators be detonated in a hole surrounded by sandbags. Do not use any barrier material that would produce projectiles when simulator is detonated.

7.2. Personnel or vehicle: Maintain a minimum of 125 feet separation. Personnel who initiate these munitions may be closer than 125 feet, but they should be as close to 125 feet away as possible and have their back to the munitions at detonation.

7.3. Facilities without facing window: Maintain a minimum separation of 100 feet.

7.4. Facilities with facing window: Maintain a separation of 200 feet.

7.5. Bulk petroleum, oil, and lubricant storage: Maintain a minimum separation of 200 feet.

7.6. Aircraft in the open: Maintain a minimum separation of 100 feet or 200 feet if aircraft are explosives loaded.

7.7. Explosives operating locations, holding areas, open storage areas or butler-type storage facilities: Maintain a minimum separation of 200 feet.

7.8. Above ground magazines of block, brick, or concrete construction and from earth covered magazines: Maintain a minimum separation of 50 feet.

### **8. Exercise/Training Locations.**

8.1. Starvaggi Drop Zone, Paris, PA is a designated combat defense field training/exercise area. Training and exercises may also be conducted at the site of the 911 AW Firing Range in Clinton PA.

8.2. Any site selected must be surveyed by supervisors of the agency conducting the exercise/training. Wing Safety, Base Environmental, Fire Department, Security Forces, Munitions and Medical personnel will be part of the survey. Consider the following:

8.2.1. Potential fire hazards to vegetation and facilities.

8.2.2. Availability of fire fighting equipment and personnel.

8.2.3. Accessibility for emergency equipment.

8.2.4. Ability to control accesses during the exercise.

8.2.5. Disruption or interference with other installation activities.

8.2.6. Ease of cleaning and validation of the area at the completion of the exercise.

8.2.7. Adverse public reaction and safety.

8.3. Obtain approval for use of the site/installation from the authority having jurisdiction. On Pittsburgh ARS, that authority is the 911 AW/CC or designated representative (911MSG/CC).

8.4. Exercise plans developed in accordance with section 3, will identify the exercise site or installation, and specific location on the site or installation where explosive will be deployed.

### **9. Transportation.**

9.1. Individuals operating vehicles or equipment transporting explosives will be trained and qualified to handle and transport explosives in accordance with Code of Federal Regulations. Drivers will be identified in the exercise plan in accordance with section 3 and training will be documented as "Explosive Transport Qualified" on an AF IMT 483.

9.2. Explosives will be transported in military vehicles only. Specific types of vehicle to be used will be identified in the exercise plan. Use step by step procedures, attachment 8 or 9 as applicable.

9.3. The vehicle used must be in good mechanical condition. There will be no fuel leaks or excessive oil on the engine or exhaust system. Particular attention will be given to chafing or deteriorated electrical wiring. The vehicle will be equipped with sideboards and tailgate. Utilize proper motor vehicle inspection cards for inspection of the vehicle, e.g. AF IMT 1800.

9.4. A minimum of two 2A:10BC fire extinguishers will be available with the transport vehicle. Extinguishers will be secured.

9.5. Vehicles will not be fueled with explosives on board.

9.6. Vehicles loaded with explosives will not be left unattended.

9.7. Passengers will not ride in the cargo compartment of vehicles transporting explosives.

9.8. Explosive items will be packaged in original configured packing, loaded, and tied down to prevent movement during transport.

9.9. Vehicle operator will be thoroughly familiar with their explosive cargo, and in the event of a mishap, breakdown, or other unusual event, will be prepared to brief emergency response personnel or local authorities on the class, quantity, and characteristics of the cargo. For off base, the driver will carry DD IMT 836, **Dangerous Goods Shipping Paper/Declaration and Emergency Response Information for Hazardous Materials Transported by Government Vehicles and other documents required by CFR 49**. All off base explosive transport will be coordinated through the base traffic management office.

9.10. All vehicles involved with the training exercise not transporting explosives will have at least one fire extinguisher.

9.11. If vehicles have a designed safety strap to go across door opening or tail gates to prevent occupants and equipment from being thrown from a vehicle it will be used. Seat belts will be used.

9.12. All fires starting in the vicinity of ammunitions or explosives will be reported and fought immediately with all available means to prevent spreading of fire. However, if the fire engulfs explosive materials or is supplying heat to it, or if the fire is so large that it cannot be extinguished with the equipment at hand, the personnel involved shall evacuate and seek safety. For fires not involving munitions the evacuation distance is 300 feet. Use good judgment when deciding to fight a fire, do not place yourself in harms way unless absolutely necessary.

9.13. Follow fire fighting guidance in Attachment 3.

9.14. When transporting explosives, appropriate DOT placards will be displayed on the front, back, and both sides of the vehicle. When transporting off base, also see 49 Code of Federal Regulation for appropriate procedures.

9.15. Travel routes for explosives laden vehicles off base will be identified in the exercise plan. Off-base travel routes will avoid heavily populated areas, tunnels, narrow streets, or places where large crowds are gathered. Use off base transport step by step procedures, see attachment 8.

9.16. Smoking is not permitted in or within 50 feet of vehicles transporting explosives.

9.17. Except for emergencies, explosive laden vehicles will not stop nor park at any location between the pickup point and the destination.

9.18. Only compatible munitions will be transported together in a single vehicle. See compatibility chart in AFMAN 91-201.

#### **10. Weapons and Ammunition Procedures.**

10.1. All handguns will be carried in an approved holster or approved container. Shoulder fired weapons will be sling carried over the shoulder or carried at port arms when not engaged in an exercise scenario.

10.2. All weapons will be fitted with blank adapters prior to loading blank ammunition.

10.3. A complete search of personnel, ammo pouches, equipment, magazines, and blank ammunition will be conducted to ensure no live (projectile) ammunition is introduced into the exercise/training area.

10.4. Blank ammunition and live ammunition will never be stored together.

10.5. Exercise personnel will check all equipment, weapons, explosive and ammunition for serviceability prior to use.

10.6. Blank M-16A2 ammunition will not be fired at or toward personnel who are within 20' of the muzzle. Personnel within the firing limits can be acted upon by calling out "**Safety Kill**". Cadre will determine if the person being fired at will be considered a casualty. If it cannot be determined the aggressor or defender will be instructed to fall back to a safe distance and re-engage the target.

10.7. If an armed person becomes sick or injured, their weapon and ammunition will be turned over to the person in charge for proper turn-in.

10.7.1. When a real world injury is sustained by anyone in the exercise area, all activities will cease immediately and medical aid will be provided as needed. The following code words will be used by anyone in the exercise area to identify the need for medical assistance:

10.7.1.1. Minor Injuries – call out "Band-Aid"

10.7.1.2. Major Injuries – call out "Lifesaver"

10.7.1.3. Fire (any size) – call out “Chicago”

10.8. After the completion of exercises and training using explosives and blank ammunition, the person in charge will ensure all weapons/explosives are cleared/empty/safe prior to leaving the exercise area.

10.8.1. Upon arrival at armory, weapons storage facility, or designated camp all weapons must be cleared at an approved clearing barrel area.

10.8.2. If an approved clearing barrel is not available, the commander may designate an approved area where weapons handling (clearing) can be performed in accordance with (AFMAN 31-229, **USAF Weapons Handling Procedures**, section 1.2.)

10.8.3 Written clearing barrel instructions for specific weapons cleared will be available on site and used as directed in AFMAN 31-229 section 3.3.

### **11. Post Exercise Clean-up.**

11.1. A thorough policing of the exercise area will be accomplished at the completion of the exercise to ensure the removal of any unexploded items or munitions residue that could be harmful to the public or used in an unauthorized manner. The clean-up effort will consist of the following, as a minimum:

11.1.1. A review of accounting and control records for accountability of munitions stocks transported to the exercise area.

11.1.2. Recovery of deployed simulators where no attempt to fire occurred.

11.1.3. Disposition of duds by EOD trained personnel.

11.1.4. Close-abreast sweeping and policing of the exercise area and removal of all expended munitions residue, packing material, and other litter to include expended brass. Any dud munitions discovered by these sweeps will be marked for later disposal by EOD trained personnel.

11.1.5. A responsible individual will validate the clean up of the exercise area. The individual must have first-hand knowledge of the clean-up efforts. The person responsible for validation will be identified in the exercise plan.

11.1.6. All expended munitions residue and packing material and munitions containers will be returned to 911 AW Munitions Management for inspection and disposition in accordance with T.O. 11A-1-60, **Inspection of Reusable Munitions Containers and Scrap Material Generated From Items Exposed to, or Containing Explosives**. User will inspect munitions residue, packing material and munitions containers for live rounds/ explosives before turn-in to Munitions.

11.1.7. Unused serviceable munitions that have been removed from their shipping/storage containers will be returned to its original shipping container before transporting it back to 911 AW Munitions Management.

### **12. Operational Risk Management (ORM).**

12.1 Risk management will be incorporated into all tasks. Use attachment **10** and **11** as a Guide.

### **13. Medical.**

13.1 A medical team that can provide first aid treatment to injured exercise participants will be on scene for the entire length of exercises. Explosive training classes using live training explosives will have a first aid kit available and at least one individual trained in first aid buddy care.

GORDON H. ELWELL JR., Col, USAFR  
Commander

**Attachment 1**  
**Glossary of References and Supporting Information**

***References***

AFPD 91-2, *Safety Programs*  
AFMAN 91-201AFRC Sup 1, *Explosives Safety Standards*  
AFI 31-207, *Arming and Use of Force by Air Force Personnel*  
AFMAN 31-229, *USAF Weapons Handling Procedures*  
PA Code 403 – *Hazardous Material Transportation*  
49 CFR 172.504 – *General Placarding*  
49 CFR 173.50 – *Class I Definitions*  
49 CFR 177.835 – *Class I (Explosives) Materials*  
49 CFR 177.848 - *Segregation of hazardous materials.*  
49 CFR 172.704 – *Training Required*  
49 CFR 397.5 – *Vehicle Attendant Surveillance*  
911 SFS/OI 21-201 – *Handling Procedures for Blank Ammunition*  
911 AWI 21-201- *Munitions Management*  
T.O.11A-1-60 – *Inspection of Reusable Munitions Containers and Scrap Material Generated From Items Exposed to, or Containing Explosives*  
T.O. 11A-1-46, *Fire Fighting Guidance, Transportation, and Storage*  
T.O. 11A10-27-7, *Storage and Maintenance Procedures for Simulators, Battlefield Effects*  
T. O. 11A13-10-7, *Specialized Storage and Maintenance Procedures Small Ammunitions*

## Attachment 2

## Sample Exercise Plan

(DATE)

MEMORANDUM FOR 911 MSG/CC

FROM: 911 CES/CC

SUBJECT: Combat Skills Training

1. Purpose: The 911th Civil Engineering Squadron will be conducting combat skills training to include airbase perimeter defense, work party security, individual / team movements and convoy operation exercises. Assistance will be provided by MSgt Craft, CATM and MSgt Johnson, base MASO for the transportation and handling of the blank ammunition, smoke grenades and ground burst simulators.

2. Exercise dates and times:

Date	Time
Start 21 April 07	0800
Finish 21 April 07	2300

3. Location:

Starvaggi Drop Zone Paris, PA

3.1 Employment method:

Thrown by hand, shot by weapon

4. Unit involved                      Unit No. Persons

911 CES                                      105

911 SFS                                      2

911 MXS                                      3

5. Munitions:

National Stock Number	Nomenclature	Hazard Class/Division	Quantity	Net Explosive Weight
1305-00-182-3217	5.56mm, Blank	1.4S	5,200	5.40 lbs.
1330-00-289-6851	Grenade, Smoke	1.4G	30	21.6 lbs.
1370-00-752-8126	Ground Burst Sim.	1.2.2G	15	15.1 lbs

6. Weapons:

Nomenclature	Quantity
M16 Rifle	84

7. Persons authorized/designed to draw

5.56 blank munitions: SMSgt xxxxxxxx 911 CES

Smoke Grenades: MSgt xxxxxxxx 911 SFS

Ground Burst Simulators: MSgt xxxxxxxx 911 SFS

8. Munitions pick-up time and date:

0900 / 21 April 2007 at the site

9. Transportation:

9.1. Government transportation will be used to transport munitions from the storage location to the exercise area. 911<sup>th</sup> MASO will transport munitions.

9.2. Munitions Transport Route (*If off Pittsburgh ARS*) – Take business Rt 60 East 2 mile;

Merge with Route 60 East go 2.3 mile; Take exit #1A onto US-22 West toward Weirton go 14.7 mile; Take the PA-18 exit toward Florence go 0.2 mile; Turn Left onto Route 18 go 0.4 mile;

Turn right onto old route 22 / Steubenville Pike go 2.3 mile; Turn left onto Hanlin Station Road go 500ft under US-22 to entrance of Starvaggi Drop Zone on the left.

- 10. Pre-Exercise Safety Training/Briefing: All participants
- 10.1. 0800 / 14 April 2007 / Bldg. 333.
- 10.2. Designated Trainers / Briefer: MSgt xxxxxxxx, 911 CES; MSgt xxxxxxxxt, 911 AW/SEW.
- 10.3. Date of Safety Briefing: \_\_\_\_\_
- 11. Person Authorized to Function / Deploy/ Expend Munitions: 911 CES exercise participants for blank ammunition only. MSgt xxxxxxxx and SMSgt xxxxxxxx for the Smoke simulators and ground burst simulators.
- 12. All unused munitions and munitions residue will be returned to 911 AW Munitions Management Section.
- 13. Person/agencies designated to accomplish post exercise clean up of the range/exercise area:  
 Person Agency Signature/Date  
 SMSgt xxxxxxxx CES \_\_\_\_\_
- 14. Coordination for notification of exercise and the use of the exercise area:
- 14.1. 911 MXS/MXMVM (Munitions) \_\_\_\_\_
- 14.2. 911 CES/CEF (Fire Chief) \_\_\_\_\_
- 14.3. 911 OSS/OSA (Airfield Management) \_\_\_\_\_
- 14.4. 911 SFS/CSC (Law Enforcement Desk) \_\_\_\_\_
- 14.5. 911 AW/SEW (Wing Safety) \_\_\_\_\_
- 14.6. 911 MSG/SGBP (Environmental Health) \_\_\_\_\_
- 15. Trained/qualified ammunition issue official \_\_\_\_\_
- 16. Communications Listing, Attached
- 17. A Specific Map of locations where munitions will be deployed, Attached

Designated Responsibilities Table		
NAME	TITLE	CALL SIGN
	Armory Attendant	
	Disinterested Munitions Official	
	EET Team Chief	
	Exercise Manager/ Team Chief	
	Fire Department Escort	
	Instructor, Movement techniques	
	Instructor, Base Defense	
	Instructor, Clear / establish perimeter	
	Instructor, Convoy security	
	Medical Team Members	
	Munitions Courier	
	Munitions Transporter	
	Safety Officer	
	Validates clean up of exercise area.	

**EMERGENCY TELEPHONE NUMBERS:**

- (\* ) 911 CES Control..... (412) 474-8580
- 911 AW Command Post..... (412) 474-8146
- Emergency ..... 911

- Hanover Twp Fire Dept..... (724) 947-3929
- Hanover Twp Police Dept..... (724) 947-4813
- Ambulance and Rescue..... (800) 633-3590
- Allegheny Co. EOD Team..... (412) 472-5513
- 911<sup>th</sup> AW Safety Office..... (412) 474-8015
- 911<sup>th</sup> AW Security forces desk.....(412) 474-8255
- Other.....

(\* ) Will make appropriate on-base notifications in the event of an emergency.

Section / Group Commander, LT Col, USAFR  
Commander

1st Ind, 911 MSG/CC

(DATE)

MEMORANDUM FOR 911 CES/CC

I approve/ do not approve this plan.

Wing Commander, Col, USAFR  
Commander

### Attachment 3

#### Fire Symbol Hazards, Actions and Emergency Withdrawal Distances

A3.1. Essential Personnel. The on-scene commander, or senior ranking individual, determines who is essential emergency personnel and what distances they should maintain.

A3.2. Non-Essential Personnel. For guidance on how far to withdraw non-essential personnel during fires involving explosives, use table below.

A3.3. When explosives are not involved in fire, such as dropped munitions or partially armed munitions, clear the area initially to a distance of 300 feet. After evaluation of the situation, the on-scene commander may adjust the withdrawal distance for non-essential personnel.

Fire Symbol	Materials	Hazard	Action/Remarks
<b>1</b>	1.1 Explosives and class IV liquid propellants and 1.5 munitions	Mass Detonation	1. Do not fight fire unless rescue attempt is planned. 2. If there is suitable separation to symbol 1 materials and fire chief approves, fire fighting forces may attempt to extinguish the fire. 3. If personal safety is in doubt, take cover. <b>Minimum Withdrawal Distances 4000'</b>
<b>2</b>	1.2. Ammunition and explosives and 1.6 extremely insensitive detonating substances	Explosion with Fragments	1. Give alarm; attempt to extinguish fire if in early stage. 2. Fire fighting forces should fight fire. If not possible, prevent spread of fire. 3. Detonation of items could occur. Provide protection from fragments. <b>Minimum Withdrawal Distances 2500'</b>
<b>3</b>	1.3 Ammunition and explosives	Mass Fire	1. May be fought if explosives not directly involved. 2. If WP munitions are involved, smoke is liberated. <ol style="list-style-type: none"> <li>a. WP munitions may explode.</li> <li>b. Immerse phosphorus in water or spray with water continuously.</li> </ol> 3. For fires involving HC and incendiaries, use dry sand or dry powder in early stage. 4. For fires involving pyrotechnics and magnesium incendiaries: <ol style="list-style-type: none"> <li>a. Protect adjacent facilities and equipment.</li> <li>b. Do not use carbon dioxide, Halon extinguishers or water on or near munitions.</li> <li>c. Allow magnesium to cool unless upon flammable material. In this case, use a 2-inch layer of dry sand or powder on the floor and rake the</li> </ol>

			burning material onto this layer and resmother. <b>Minimum Withdrawal Distances 600'</b>
<b>4</b>	1.4 Ammunition and explosives	Moderate Fire	1. Fight these fires. 2. Expect minor explosions and hot fragments. <b>Minimum Withdrawal Distances 300'</b>

**Attachment 4  
Exercise Safety Briefing**

**AMMUNITION SAFETY**

**LESSON PLAN  
PRESENTATION**

**INSTRUCTOR'S NOTES**

1. Classroom Procedures.
  - a. Class Hours.
    - (1) Classroom.
    - (2) Range.
  - b. Breaks.
  - c. Location of facilities.
    - (1) Latrines.
    - (2) Break area.
    - (3) Phones.
  - d. Documentation.
    - (1) Class Roster.
  - e. Give course overview – what will be covered in the training program.
  - f. Explain evaluation procedures and requirements.
2. Purpose.
  - a. Provides guidance to all personnel who use, handle and dispose of training munitions.
3. Procedures.
  - a. The following procedures will be followed whenever ammunitions will be used:
    - (1) A safety briefing must be given prior to conducting any training with munitions. Use attached step by step procedures.
    - (2) Brief personnel on their responsibilities for:
      - (a) Safety
        - Before exercise check for unauthorized munitions in:
          1. Ammunition pouches
          2. Magazines
          3. Rucksacks
          4. Backpacks
          5. All articles of clothing
          6. All containers
          7. Weapons (Clear weapons)
        - (b) Accountability
      - (3) Briefing must be documented.
      - (4) Record must be kept for a minimum of 90 days.
      - (5) Records must include:

- (a) Name of Trainee
  - (b) Date of Training
  - (c) A description, copy or location of briefing materials used to train personnel.
  - (d) Name of Trainer
4. Blank/training ammunitions will not be fired/discharged any closer to personnel than:
- a. M16/M16A2: 20 Feet
  - b. See section 7 for safe simulator distances
5. Assign personnel responsible for controlling ammunition / munitions used in the training. (Armorer)
- a. Follow the step-by-step instructions for issuing, turn-in and controlling blank and expended ammunition
  - b. The exact location of use to include method of employment
6. Actions to be taken during emergency or abnormal conditions:
- a. Out of balance or an unauthorized munitions item is identified, call an immediate **“CEASE FIRE”** and suspend the exercise.
  - b. When a real world injury is sustained by anyone in the exercise area, all activities will cease immediately and medical aid will be provided as needed. The following code words **will be used by anyone in the exercise area** to identify the need for medical assistance by any means of contact available:
    - Minor Injuries – call out “Band-Aid”
    - Major Injuries – call out “Lifesaver”
    - Fire (any size) – call out “Chicago”
  - c. Perform and document inventories of all exercise blank ammunition / munitions
    - (1) Control all munitions.
    - (2) Correct emergency or abnormal condition if possible. Halt exercise until emergency or abnormal condition is corrected.
    - (3) Resuming training.
7. Completion of Exercise
- a. A total inventory of blank ammunition and expended ammunition.
  - b. Turn-in in all ammunition and expended ammunition residue.
  - c. Check for unauthorized munitions in:
    1. Ammunition pouches
    2. Magazines
    3. Rucksacks
    4. Backpacks

5. All articles of clothing
  6. All containers
  7. Weapons (Clear weapons)
  - d. Turn in any munitions items found, to the Field Munitions Custodian at the conclusion of exercise/training.
8. Field Munitions Custodian
- a. Document all ammunition issued/turned in on AF IMT 1297 or local form. Track using NSN, Lot Number, and Conditions Code.
  - b. Record all ammunition inventories on appropriate forms.
  - c. Exercise Coordinator and Field Munitions Custodian will sign and date Inventory Forms.
  - d. All records will be maintained for 3 years.
9. Range/exercise area safety criteria. Ensure at least two suitable fire extinguishers are present and serviceable during explosive operations/ training. Ensure there is at least one fire extinguisher in each vehicle minimum during exercises and training.
10. Range/exercise area clean-up requirements and procedures. All expended munitions residue is accountable and must be returned to 911 LGMVM Munitions Management. All munitions packaging and containers will be returned to Munitions Management.
11. Weapons will be handle as if they were loaded at all times. Do not point your weapon at anything you do not intend to shoot. Keep you finger off the trigger and out of the trigger guard until ready to fire. Carry at port arms or sling your weapon when not engaged in an exercise scenario. Blank ammunitions will not be fired toward personnel within 20 feet or less from the muzzle in accordance with AFMAN 31-229.
12. No smoking within 50 Feet of explosives.
13. Personnel will use seatbelts while operating or riding in a vehicle during exercises.
14. Munitions will only be thrown into the designated areas on the exercise map. Brief these areas. Munitions will not be thrown at personnel, vehicles or equipment.
15. Brief the difference's between a blank round and a round with a projectile.
16. Brief hazards of the exercise area (e.g. Snakes, insects, poison plants, steep drop offs, sharp rocks)
17. Identify person with live ammunition (e.g. Guard) to all personnel.

**Attachment 5  
Safety Briefing Roster**

	NAME (Last, First MI)	RANK	DATE	SIGNATURE	SEARCHED for unauthorized items (Yes, No)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

I the exercise team chief certify the above personnel have received a blank munitions and or an exercise munitions safety briefing on the date indicated.

\_\_\_\_\_  
Name (Print or Type)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Attachment 6**

**Blank Munitions Step by Step**

<b>BLANK AMMUNITION STEP BY STEP</b>	
Review entire form before start of operation	
This form is in accordance with AFMAN 91-201 AFRC SUP 1 Explosives Safety Standards	1. Step by Step Number: AT 6
<b>Section I. General Information</b>	
2.Task to be performed: Issue/Use of Blank Ammo by participants	3. Nomenclature: See Block 4
4. National Stock Number (NSN): 1305-A080/ A075 CTG, 5.56MM, Bank, M200	5. Applicable Technical Data: <b>11A13-10-7</b> <i>Specialized Storage And Maintenance Procedures Small Arms Ammunition</i> <b>AFMAN 91-201AFRC Sup 1</b> <i>Explosive Safety Standards</i> <b>AWI 21-201</b> <i>Conventional Munitions Procedures</i> <b>AWI 91-203</b> <i>Explosive Safety Mishap Prevention Program</i>
<b>Section II. Sited/Licensed Facility Explosive Limits</b>	
6. Facility Identification: <input type="checkbox"/> Starvaggi Drop Zone, Paris Pa <input type="checkbox"/> Clinton Training Range	7. Enter building explosives limits: (            ) rounds of 5.56 blank ammo
8. Hazard Class Division (HC/D): 1.4	9. Storage Compatibility group (SCGP): S
<b>Section II.A. Operating Limits</b>	
10. Net Explosive Limits (N.E.W.) per item:  <b>NEW for 5.56 blank is .0011</b>  <b>Total:</b>	11. Total Operational Explosive Limits:  <b>Minimum Required Quantity</b> Qty:
<b>Section III. Personnel Limits</b>	
NOTE: All visitors (Casuals) must be briefed on tasks and hazards prior to entering the operational area	

12. Supervisors:	13. Workers:	14. Casuals:
<b>Section IV. Exact Locations</b>		
15. Location of operation: <input type="checkbox"/> Starvaggi Drop Zone, Paris Pa <input type="checkbox"/> Clinton Training Range		
<b>Section V. Safety Requirements</b>		
<input type="checkbox"/> 16. Brief all applicable <b><u>WARNING, CAUTIONS, and NOTES</u></b> from specific item T.O.'s.		
17. Fire Symbol: 4	18. Fire Symbol Hazard and Action: Mod Fire Evacuation distance is 300'	
<input type="checkbox"/> 19. Assure Fire and Hazard Symbols are posted and the appropriate control function center is notified.		
<input type="checkbox"/> 20. List and ensure required tools, equipment, personnel protective equipment, and Technical Data is available and is in serviceable condition. Eye Protection Gloves Steel toe boots (for moving munitions crates) Fire extinguishers		
<input type="checkbox"/> 21. Assure Vehicles and Munitions Handling Equipment/ Support Equipment (MHE/SE) are inspected/serviceable and appropriate forms are annotated.		
<input type="checkbox"/> 22. Assure two serviceable fire extinguishers are present and point out their locations.		
<input type="checkbox"/> 23. Remove all watches, rings, and jewelry.		
<input type="checkbox"/> 24. Assure that proper housekeeping standards are maintained throughout the operation		
<input type="checkbox"/> 25. Address any questions concerning the operation.		
<b>Section VI. Emergency Procedures</b>		
<input type="checkbox"/> 26. In the event of fire; munitions incident/mishap; and personal injury first observer of unsafe condition will sound the alarm and command that all operations are ceased. If an abnormal condition in noted stop the operation and seek proper guidance		
26.1. In the event of an accident/incident involving munitions, equipment or personnel, The appropriate Control Function will be notified.		
<input type="checkbox"/> 26.2. Anyone observing an emergency condition will sound the alarm. Notify the control function in the event of a fire/accident/incident or injury and relay to the control function; the location, type of munitions, personnel involved and type of injury.  Use the following emergency call outs: Minor Injuries – call out “Band-Aid” Major Injuries – call out “Lifesaver” Real World Fire – call out “Chicago”		

<input type="checkbox"/> 26.3. Activate the fire alarm in the event of a fire, via telephone to the local Fire Department at (724) 947-3929 for response as needed.
26.4. _____ and _____ will fight the fire {in accordance with Table 1-1 of T.O. 11A-1-46.}
<input type="checkbox"/> 26.5. Any personnel as needed will render first aid as required.
<input type="checkbox"/> 26.6. Withdraw from exercise area to _____ for assembly
26.7. _____ will direct evacuation of all nonessential personnel to appropriate location and account for personnel.
26.8. _____ will meet emergency personnel direct them to the scene and be prepared to brief them on the current situation.
<input type="checkbox"/> 26.9. _____ will assess the situation and determine if additional actions are required
<input type="checkbox"/> 27. The Exercise Team Chief will be required to brief emergency response team, safety and management on events leading up to the accident/incident.
<b>Section VII Step by Step Procedures</b>
28. Document ammo to be issued to include: NSN, Lot#, Qty, Person receiving signature and date. <ol style="list-style-type: none"> <li>1. Assure personnel receive, understand, and document, via sign-in roster, the use of blank ammo safety briefing.</li> <li>2. Assure all proper safety gear is issued to person drawing ammo to include blank adaptor for the barrel of the M-16A1/A2.</li> <li>3. Assure all magazines are empty and marked with blue tape before loading blank rounds</li> <li>4. Assure all weapons have blank adapters installed are on safe with no rounds in chamber</li> <li>5. Assure pre use inspection is completed by an disinterested party on all blanks before installing into issued magazines.</li> <li>6. Assure all personal items have been searched for unauthorized munitions (live Ammo)</li> <li>7. Issue _____ rounds and _____ magazine to person drawing blank ammo.</li> <li>8. Turn-in all unused blank ammunition and expended brass to designated turn-in area ( _____ ) at the completion of the exercise.</li> <li>9. _____ will inventory munitions and expended brass before turn-in to 911 AW/MASO.</li> <li>10. Load/ unload all weapons at a approve clearing barrel or designated clearing area.</li> </ol> <p>PHONE NUMBERS:            MOC 412 474 8177            COMMAND POST 412 474 8658            FIRE / SECURITY / AMBULANCE - 911</p>

SAFETY 412 474 8015 / 8403

SECURITY POLICE 412 474 8255

EOD (INDIAN TOWN GAP) 491-2811/2822 Com 717-861-2811/2822

EOD (MCGUIRE) 650-2205/3935 Com 609-754-2205

Attachment 7

Exercise/ Training Munitions Step by Step

<b>EXERCISE/ TRAINING MUNITIONS TASK SAFETY BRIEFING AND INSTRUCTIONS</b>	
<b>Step by Step</b>	
This form is in accordance with (IAW) AFMAN 91-201, para 2.3 - - 2.4, Explosive Safety Standards	Step By Step Number: AT 7
<b>Section 1. General Information</b>	
1.1 Task to be performed Conduct training with exercise/training munitions	1.2 Nomenclature Exercise/Training Munitions see next block
1.3 National Stock Number  1330-00-168-5502-G878 Fuze, Practice, Hand Grenade, M228  1330-00-289-6851-G940 Grenade, Hand, Colored Smoke, M18 (Green), w/Fuze M201A1  1370-00-028-5255-L600 Simulator, Booby Trap, Whistling, M119  1370-00-752-8126-L594 Simulator, Projectile, Ground Burst, M115A2  1370-00-490-7362 L119 Kit, Signal, Personnel Distress A/P25S-5A  1370-00-309-5028 L275 Signal, Smoke and Illumination MK13  1370-01-030-8330 L283 Signal, Smoke and Illumination MK124  1370-00-752-8124-L601 Simulator, Hand Grenade, M116A1	1.4 Applicable Tech Data / Directive  <b>11A10-27-7</b> <i>Simulators Specialized Storage And Maintenance Procedures (Ground Burst, M115A2 / Booby trap, Whistling, M119)</i> <b>11A8-2-1</b> <i>Operating Grenades</i> <b>11A8-5-7</b> <i>Specialized Storage And Maintenance Procedures Grenades Hand And Rifle (Colored Smoke, Practice Grenade)</i> <b>11A-1-60</b> <i>Inspection Of Reusable Munitions Containers And Scrap Material Generated From Items Exposed To Or Containing Explosives</i> <b>11A10-26-7</b> <i>Specialized Storage And Maintenance Procedures Pyrotechnic Signals</i> <b>11A-1-46</b> <i>Fire Fighting Guidance, Transportation, And Storage</i> <b>AFMAN 91-201AFRC Sup 1</b> <i>Explosive Safety Standards</i> <b>911 AWI 21-201</b> <i>Conventional Munitions Procedures</i> <b>911 AWI 91-203</b> <i>Explosive Safety Mishap Prevention Program</i>
<b>Section 2. Sited / Licensed Facility Explosive Limits</b>	
2.1 Facility Identification  <input type="checkbox"/> Clinton Training Range <input type="checkbox"/> Starvaggi Drop Zone <input type="checkbox"/> Other ( )	2.2 Building Explosive limits  Mission Essential Quantity Only

<b>Section 3. Operating Limits</b>		
3.1 Net Explosive Limits (NEW) per Item (per T.O. 11A-1-46)		3.2 Total Operational Explosive Limits
		Not to exceed minimum quantity required for training.
	Total NEW	Total Items
1330-00-168-5502-G878 .0030 1.4B ( )	( )	( )
1330-00-289-6851-G940 .7200 1.4G (D) ( )	( )	( )
1370-00-028-5255-L600 .0060 1.3G (E) ( )	( )	( )
1370-00-752-8126-L594 .1410 (04) 1.2.2G (E) ( )	( )	( )
1370-00-490-7362 L119 .0182 1.3G (DE) ( )	( )	( )
1370-00-309-5028 L275 .212 1.4G (DE) ( )	( )	( )
1370-01-030-8330 L283 .2 1.4G (DE) ( )	( )	( )
1370-00-752-8124-L601 .0183 1.3 (DE) ( )	( )	( )
3.3 Hazard Class Division (HC/D) See block 3.1		3.4 Storage Compatibility Group (SCGP) See block 3.1
<b>Section 4. Personnel Limits (Maximum per this operation)</b>		
4.1 Instructors	4.2 Students	4.3 Casuals
<b>Section 5. Exact Location</b>		
5.1 Location of Operation		
<input type="checkbox"/> Clinton Training Range		
<input type="checkbox"/> Starvaggi Drop Zone		
<input type="checkbox"/> Other ( )		
<b>Section 6. Safety Requirements</b>		
<input type="checkbox"/> 6.1 Brief all <b>Warnings, Cautions and Notes</b> from specific item T.O.		
<input type="checkbox"/> 6.2 Placard vehicle as required by CFR 49 and TABLE 3-1 OF 11A-1-46		
<input type="checkbox"/> 6.3 Fire Symbol Hazard and Action		
Fire Symbol ( ) See block 3.1 for HC/D		
Predominant Hazard:		
<input type="checkbox"/> Fire with intense heat.		
<input type="checkbox"/> Light Missile.		
<input type="checkbox"/> Mass Detonation.		
<input type="checkbox"/> Blast		
<input type="checkbox"/> Fragments		
<input type="checkbox"/> Irritation of eyes and skin		
Action / Remarks:		
Fight fire if munitions are NOT involved. If munitions are involved in a fire evacuate to 400' for the GBS's, 600' for the 1.3 and 300' for 1.4.		
<input type="checkbox"/> 6.4 Assure two forms of communication are available during transport and training. Assure appropriate control function center is notified of transported material and route to be taken		
<input type="checkbox"/> 6.5 Assure Vehicles and Munitions Handling Equipment / Support Equipment (MHE/SE) are inspected / serviceable and the appropriate forms are annotated. i.e.1800, DD IMT 626. Equipment needed: 2 cones, explosive operation signs Hammers, tool for opening containers,		

self adhesive tape, marking tape, M548 cans, and first aid kit.
<input type="checkbox"/> 6.6 Assure two serviceable 2A:10BC minimum fire extinguishers are present, secure and point out their locations. No smoking within 50' of explosives.
<input type="checkbox"/> 6.7 Remove all watches, rings and other jewelry.
<input type="checkbox"/> 6.8 Assure that proper housekeeping standards are maintained throughout the operation Keep all munitions dry.
<input type="checkbox"/> 6.9 Address any question concerning the operation.
<input type="checkbox"/> 6.10 Special requirements for Personal Protective Equipment (PPE). (as per the item T.O. or other AFOSH Standards) List of required PPE: Safety Glasses, Leather Gloves, Steel Toe Boots, Long Sleeve shirt and pants, Gas Mask, Hearing protection. Long sleeve pants and shirts. Some cases require helmet and protective vests. First aid kit and clean water for washing will also be available. Sand filled bucket for A/P 25S-5A training. Note: Solid tar-like substance on expended smoke grenades can cause chemical burns to exposed skin. Wear leather gloves when handling and do not allow exposed skin to come in contact with the substance. Do not deploy munitions into any enclosed areas.
<b>Section 7. Emergency Procedures</b>
<input type="checkbox"/> 7.1 In the event of fire/ munitions incident / mishap/ abnormal condition/ or personal injury, the first person to observe the unsafe condition will sound the alarm and command that all operations are ceased. Fight fire if munitions are NOT involved. If munitions are involved in a fire, evacuate to 400' for GBS's, 600' for 1.3 and 300' for 1.4.
<input type="checkbox"/> 7.2 _____ will sound the alarm; notify the control function in the event of a fire / accident / incident or injury. Brief the control function on the location, type of munitions, personnel involved and types of injuries.
<input type="checkbox"/> 7.3 Withdraw Distance _____ Exact Location for assembly _____
<input type="checkbox"/> 7.4 _____ will activate the alarm in the event of a fire (Call fire Department ext: 911)
<input type="checkbox"/> 7.5 _____ and _____ will fight the fire (in accordance with Table 1-1 of T.O. 11A-1-46)
<input type="checkbox"/> 7.6 _____ will evacuate all non-essential personnel to the appropriate location and account for all personnel.
<input type="checkbox"/> 7.7 In the event of an accident / incident, fire, dropped munitions or collision personnel shall notify local authorities by dialing 911 and notify appropriate Control Function at 412-474-8658 _____ or by radio channel _____ using call sign _____. Give exact details of the occurrences to include the type of explosives involved.
<input type="checkbox"/> 7.8 _____ will render first aid as required.
<input type="checkbox"/> 7.9 _____ will meet emergency personnel, direct them to the scene and be prepared to brief them on the current situation.
<input type="checkbox"/> 7.10 Crew Chief will be required to brief emergency response team, safety and management on events leading up to the accident / incident.
<input type="checkbox"/> 7.11 The Supervisor will assess the situation and determine if additional actions are required.

#### 8. Step by Step Procedures

1. Review this entire task briefing before Deploying training munitions.
2. Use the transport step by step procedures for transporting explosives in this regulation.
3. All personnel must be trained on the specific explosive safety procedures of each item before handling the explosives.
4. Assure all required tech data is available during training. (Block 1.4) Read and understand all applicable safety work packages and safety summaries for the training munitions to be used.
5. Place "Explosive Operation In Progress Do not Enter" Sign on road way to prevent unauthorized personnel from entering training area.
6. For GBS training, place cones 125' from initiation area to mark clear zone
7. Handle all munitions as directed by the instructors and item tech data.
8. Notify the command post prior to the deployment of munitions. Give them the following information;  
Type and quantity of munitions, Hazard/Class Division involved, Location, and number of people being trained.
9. Inspect and assemble (if required) all munitions in accordance with Item Tech Data before use. Any unserviceable assets will not be used. Returned unserviceable munitions to the munitions storage area.
10. Deploy all training munitions at the required safe distances; keep all personnel and equipment at safe distances. In accordance with AFMAN 91-201 AFRC Sup 1 Par 2.15.3, item tech data and the attached map when applicable.
11. Before deploying munitions consider winds and fire hazards such as dry grass. Stay up wind from deployed smoke producing munitions or use Gas mask.
12. When deploying training munitions do so in an area that is free from combustibles and fragment producing debris. The cleared area should be ten feet in radius. Use sand bags to prevent spread of fire.
13. If a munitions item fails to function stop all operations, cordon off the area to a minimum distance of 125' and call EOD for assistance.
14. M18 Smoke deployment procedures:
  1. Don PPE.
  2. Remove grenade from container as instructed in class.
  3. Inspect for defects.
  4. Hold grenade with spoon in palm and fingers around body.
  5. Move to the throwing area, upwind, and position yourself in a comfortable stance.
  6. Pull the safety pin with a twisting motion.
  7. Toss into designated open area and retire quickly to a safe distance.
  8. Wait 30 minutes after burn out for the item to cool.
  9. Place residue into a M548 can.
15. M228 fuze and practice grenade deployment procedures:
  1. Don PPE.
  2. Remove fuzes and grenade bodies from packing.
  3. Inspect fuzes and grenade bodies for defects.
  4. Assemble finger tight only.
  5. Hold grenade with spoon in palm and fingers around body.
  6. Move to the throwing area and position yourself in a comfortable stance.
  7. Remove spoon retaining clip.

8. Pull the safety pin using a twisting motion.
  9. Toss into designated open area and retire quickly to a safe distance.
  10. Wait 30 minutes after detonation for the item to cool.
  11. Place residue into a M548 can.
16. M115A2 Ground burst simulator ( GBS) / M116A1 hand grenade simulator (GS) deployment procedures:
1. Don PPE.
  2. Remove GBS/GS from packing.
  3. Inspect GBS/GS for defects and read instructions.
  4. Move to the throwing area and position yourself in a comfortable stance.
  5. Hold GBS/GS in throwing hand and remove safety clip, grasp plastic cap and gently extend cord from tube.
  6. When ready to throw pull cord straight back sharply with your non-throwing hand, immediately throw into designated area and turn away from the GBS/GS moving to the 125' line.
  7. The ideal outcome would be to have the safety clip, cap with the pull cord and coated ripple wire in your non-throwing hand as you swiftly retire to the safe area.
  8. After detonations collect all residue and place it into an M548 can.
17. M119 Simulator, Booby trap, Whistling deployment procedures:
1. Don PPE.
  2. Remove M119 from packing, carefully, so not to lose any parts.
  3. Inspect and inventory for missing parts and read instructions.
  4. Set up as instructed in directions.
  5. When set up and inspected by instructor you may initiate M119 when area is clear from personnel.
18. A/P 25S- 5A Signal Flare
1. Don PPE.
  2. Remove from packing.
  3. Inspect for serviceability.
  4. Move to initiation area.
  5. Hold signal in gloved hand and Insert signal firmly into firing device using thumb and index finger, do not use the palm of your hand.
  6. Hold at a 45 degree angle in the direction of the wind / safe direction.
  7. Use thumb to cock an then release spring activated firing pin.
  8. If it fails to fire, continue aiming the actuator in the air, then reseal the gyro into the sleeve using index finger and thumb until you feel it click then repeat step 7.
  9. If it fails again place leading edge into a sand filled bucket or as directed by instructor.
19. Mk 124 Signal
1. Don PPE.
  2. Remove from packing.
  3. Inspect for serviceability.
  4. Move to initiation area.
  5. Hold signal in gloved hand and remove end cap, position the activation lever on.
  6. Point signal down wind and away from body.
  7. Use thumb to press down on the activation lever to initiate.

8. If signal fails to ignite place failed ignition end down into sand bucket.

20. Mk 13 Signal

1. Don PPE.
2. Remove from packing.
3. Inspect for serviceability.
- 4 Move to initiation area.
5. Hold signal in gloved hand and remove end cap, open end carefully until seal is loose.
6. Sharply pull coated activation wire to ignite signal.
7. If signal fails to ignite place failed ignition end down into sand bucket.

21. When training is complete, allow munitions to cool before handling. Place all munitions residue in M548 cans and return to the munitions area for proper disposal by the MASO. Notify EOD on all failed to function explosives.

1.2.15 M18 COLORED SMOKE GRENADE.**WARNING**

Hand grenade duds will not be removed, handled or tampered with until EOD has been contacted for evaluation and instructions.

1.2.11.3 DISARMING. Once safety pin has been removed, the grenade is armed and must be thrown. Do not attempt to replace the pin in order to return grenade to a safe condition.

**WARNING**

Use M228 series practice fuzes only in M69 practice hand grenades.

## Drop Distances:

7 Packed and 3 unpacked Fuze, Practice, Hand Grenade, M228  
 7 Packed and 3 unpacked Grenade, Hand, Colored Smoke, M18 (Green), w/Fuze M201A1  
 5 Packed and 3 unpacked Simulator, Booby Trap, Whistling, M119  
 5 Packed and 3 unpacked Simulator, Projectile, Ground Burst, M115A2  
 10 Packed and 5 unpacked Pyrotechnics Mk13, Mk124, Signal kits

## Remarks:

## PHONE NUMBERS:

MOC 412-474-8177

COMMAND POST 412-474-8658

FIRE / SECURITY / AMBULANCE 911

SAFETY 412 474 8015 / 8403

SECURITY POLICE 412-474-8255

EOD (INDIAN TOWN GAP) 491-2811/2822 Com 717-861-2811/2822

EOD (MCGUIRE) 650-2205/3935 Com 609-754-2205

## Attachment 8

## Off Base Transport Munitions Step by Step

<b>OFF BASE TRANSPORT TASK SAFETY BRIEFING AND INSTRUCTIONS</b>		
This form is in accordance with AFMAN 91-201 AFRC SUP 1, para. 2.3 - - 2.4, Explosive Safety Standards		Step By Step Number: AT 8
<b>Section 1. General Information</b>		
Task to be performed Transporting Munitions / Weapons Off Base		Nomenclature
National Stock Number	Applicable Tech Data / Directive CFR 49 4500.9-R Part II 911 AWI 21-201	
<b>Section 2. Sited / Licensed Facility Explosive Limits</b>		
Facility Identification		Building Explosive limits
<b>Section 3. Operating Limits</b>		
Net Explosive Limits (NEW) per Item (per T.O. 11A-1-46)		Total Operational Explosive Limits
Hazard Class Division (HC/D)		Storage Compatibility Group (SCGP)
<b>Section 4. Personnel Limits (Maximum per this operation)</b>		
Supervisor 1	Workers 1	Casuals 1
<b>Section 5. Exact Location</b>		
Location of Operation Transport from Pittsburgh ARS PA to		
<b>Section 6. Safety Requirements</b>		
<input type="checkbox"/> 6.1 Brief all <b>Warnings, Cautions and Notes</b> from specific item T.O.		
<input type="checkbox"/> 6.2 Placard vehicle as required by CFR 49 and TABLE 3-1 OF 11A-1-46		
<input type="checkbox"/> 6.3 Fire Symbol Hazard and Action Fire Symbol HC/D and Predominant Hazard Action / Remarks		
<input type="checkbox"/> 6.4 Assure two forms of communication are available during transport and appropriate control function center is notified of transported material and route to be taken		
<input type="checkbox"/> 6.5 Assure Vehicles and Munitions Handling Equipment / Support Equipment (MHE/SE) are inspected / serviceable and the appropriate forms are annotated. i.e.1800, DD IMT 626		
<input type="checkbox"/> 6.6 Assure two serviceable 2A:10BC minimum fire extinguishers are present, secure and point out their locations. Also assure you have spare fuses and three bidirectional emergency reflective triangles.		

<input type="checkbox"/> 6.7 Remove all watches, rings and other jewelry.
<input type="checkbox"/> 6.8 Assure that proper housekeeping standards are maintained throughout the operation
<input type="checkbox"/> 6.9 Address any question concerning the operation
<input type="checkbox"/> 6.10 Special requirements for Personal Protective Equipment (PPE). (as per the item TO or other AFOSH Standards) <b>List of required PPE</b> Safety Glasses, Gloves, Steel toe boots, Reflective belt during hours of darkness
<b>Section 7. Emergency Procedures</b>
<input type="checkbox"/> 7.1 In the event of fire; munitions incident / mishap; abnormal condition; or personal injury, the first person to observe the unsafe condition will sound the alarm and command that all operations are ceased. Follow procedures in the Emergency Response Guide Book or back of DD IMT 836.
<input type="checkbox"/> 7.2 _____ will sound the alarm; notify the control function in the event of a fire / accident / incident or injury. Brief the control function on the location, type of munitions, personnel involved and types of injuries.
<input type="checkbox"/> 7.3 Withdraw Distance _____ Exact Location for assembly
<input type="checkbox"/> 7.4 _____ will activate the alarm in the event of a fire (Call fire Department ext: 911)
<input type="checkbox"/> 7.5 _____ and _____ will fight the fire (in accordance with Table 1-1 of TO 11A-1-46)
<input type="checkbox"/> 7.6 _____ will evacuate all non-essential personnel to the appropriate location and account for all personnel.
<input type="checkbox"/> 7.7 In the event of an accident / incident, fire, dropped munitions or collision personnel shall notify local authorities by dialing 911 and notify appropriate Control Function at 412-474-8658 _____ or by radio channel _____ using call sign _____. Give exact details of occurrences to include the type of explosives involved.
<input type="checkbox"/> 7.8 _____ will render first aid as required.
<input type="checkbox"/> 7.9 _____ will meet emergency personnel, direct them to the scene and be prepared to brief them on the current situation.
<input type="checkbox"/> 7.10 Crew Chief will be required to brief emergency response team, safety and management on events leading up to the accident / incident.
<input type="checkbox"/> 7.11 The Supervisor will assess the situation and determine if additional actions are required.
8. Step by Step Procedures 1. Review this entire task briefing before starting any operation. 2. Assure all required tech data and transport paperwork is available during transport and within reach of the driver at all times. 3. Assure all security requirements are commensurate to CIC code of material transported. in accordance with 4500.9-R PART II chapter 205 Table 205-1. Minimum Security Standards for AA&E Shipments (Motor) 4. Assure driver is in military status or has a CDL with a HAZMAT endorsement on his civilian driver's license. 5. Assure the military driver has been trained by Weapons Safety and has his AF IMT 2293, <i>Operator Identification Card</i> , civilian drivers license with a picture and is explosive transport qualified.

6. Prepare a written route plan that complies with CFR 49 part 397.
7. Inspect vehicle using DD IMT 626 and 1800 form also assure vehicle can be locked to prevent theft of munitions or weapons.
8. Fuel vehicle before loading munitions.
9. Assure driver has proper shipping documentation from TMO EXT 8198 and receives emergency response instructions from Emergency Response 2004 Guide Book or back of DD IMT 836.
10. Make sure all munitions are in their SPI approved shipping containers and have all required markings. Do not ship in operational configuration.
11. Chock vehicle when loading and unloading.
12. Load Munitions into bed of transport vehicle, never within the passenger compartment or with passengers.
13. Tie down all munitions/ weapons to prevent movement during transport
14. Load only compatible munitions together in accordance with CFR 49 177.848 during transport.
15. Use the primary or alternate explosive routes on base.
16. Notify Command Post of Start, approximate duration, and stop of explosive transport.

**Remarks:**

PHONE NUMBERS:

MOC 412 474 8177

COMMAND POST 412 474 8658

FIRE / SECURITY / AMBULANCE - 911

SAFETY 412 474 8015 / 8403

SECURITY POLICE 412 474 8255

EOD (INDIAN TOWN GAP) 491-2811/2822 Com 717-861-2811/2822

EOD (MCGUIRE) 650-2205/3935 Com 609-754-2205

DRIVING DIRECTIONS:

DRIVING AND PARKING IAW 49 CFR CHAPTER III PART 397

BLDG 221 TO THE 911<sup>TH</sup> FIRING RANGE

- Turn left on Carter Street
- Turn right on Defense Ave.
- Turn right onto PA 60 South
- Merge onto PA 60 North
- Take Clinton exit
- Turn left onto Clinton Road
- Turn right onto Route 30
- Turn right onto Crockbock Town Road
- Turn left onto 911 Air Wing Lane
- Turn right into firing range parking lot

**DRIVING AND PARKING in accordance with 49 CFR CHAPTER III PART 397**

Wright Patterson AFB to Clinton Range Independence Township, PA.

Proceed from Munitions Storage Area at Wright Patterson AFB to South gate exit on to West 235, travel to Route 4/235 go north. Travel to Interstate 70 go east. Travel to Columbus Ohio, exit off on to 270 South, follow it around the city and merge back on to Interstate 70 East. Follow the Interstate to Wheeling West Virginia exit on to Interstate 470 East travel on it until it merges back with Interstate 70 East. Travel on it until you come upon Interstate 79 North exit on to it follow it up to Highway 22/30 West, exit on to it travel on it until you see North 60 exit on to it and travel to Clinton exit. Travel west on Clinton Road to Pa. Route 30. Travel north on Pa. Route 30 to Bocktown Road, travel east on Bocktown Road to 911 Air Wing Road. Travel northeast on 911<sup>th</sup> Air Wing Road to the 911<sup>th</sup> SFS/SFTC Clinton Firing Range.

**DRIVING AND PARKING in accordance with 49 CFR CHAPTER III PART 397**

Route Plan For Leaving Youngstown ARS to Pittsburgh ARS

After leaving Youngstown, ARS turn right on to Kings Graves Rd. Travel to Hwy 193. Turn right on to Hwy 193, Travel on Hwy 193 until you get to Interstate 80. Exit on to Interstate 80 East. Travel on Interstate 80 east to Hwy 60, exit on to Hwy 60 South. Travel on Hwy 60 south until you get to Business 60 South, exit on to Business 60 South, travel South on it until you get to Thorn Run Rd. Exit on to Thorn Run Rd ramp. At Stop sign turn Right then get in to left lane and enter Pittsburgh ARS. Follow base explosive route. Defense Ave to Carter St. to building 301.

**DRIVING AND PARKING in accordance with 49 CFR CHAPTER III PART 397**

Pittsburgh ARS to Wright Patterson AFB.

Motor carrier routing for transportation of munitions from Pittsburgh ARS to Wright Patterson AFB. Take Airport PKWY. / Bus 60 East to Interstate 79 South to Interstate 70 West travel to Wheeling West Virginia exit Interstate 70 West to Interstate 470 West; follow to where it merges back on to Interstate 70 West. Travel west on Interstate 70 to Columbus Ohio exit off to Interstate 270 West follow it to where it merges back on to Interstate 70 West. Travel to Dayton Ohio exit off on Route 4 /235 go South to 235 east travel to first Air Force gate. Then proceed to Munitions storage area.

**DRIVING AND PARKING in accordance with 49 CFR CHAPTER III PART 397**

From Pittsburgh ARS to Youngstown ARS

After leaving Pittsburgh ARS, exit on to Business 60 East travel on it to Highway 60 North. Travel on it to Interstate 80 exit on to Interstate 80 West. Travel on Interstate 80 west to HWY 193, exit on to Hwy 193 and go North on it to Kings Graves Rd. Turn Left on to Kings Graves rd. Travel on it till you reach the Main gate of Youngstown ARS enter the base and finish your travels to the designated area.



<input type="checkbox"/> 6.7 Remove all watches, rings and other jewelry.
<input type="checkbox"/> 6.8 Assure that proper housekeeping standards are maintained throughout the operation
<input type="checkbox"/> 6.9 Address any question concerning the operation
<input type="checkbox"/> 6.10 Special requirements for Personal Protective Equipment (PPE). (as per the item T.O. or other AFOSH Standards) List of required PPE : Safety Glasses, Gloves, Steel toe boots, Reflective belt during hours of darkness
7. Emergency Procedures
<input type="checkbox"/> 7.1 In the event of fire; munitions incident / mishap; abnormal condition; or personal injury, the first person to observe the unsafe condition will sound the alarm and command that all operations are ceased.
<input type="checkbox"/> 7.2 _____ will sound the alarm; notify the control function in the event of a fire / accident / incident or injury. Brief the control function on the location, type of munitions, personnel involved and types of injuries.
<input type="checkbox"/> 7.3 Withdraw Distance _____ Exact Location for assembly
<input type="checkbox"/> 7.4 _____ will activate the alarm in the event of a fire (Call fire Department ext: 911)
<input type="checkbox"/> 7.5 _____ and _____ will fight the fire (in accordance with Table 1-1 of TO 11A-1-46)
<input type="checkbox"/> 7.6 _____ will evacuate all non-essential personnel to the appropriate location and account for all personnel.
<input type="checkbox"/> 7.7 In the event of an accident/incident involving munitions, equipment or personnel, the appropriate Control Function will be notified at extension 911 or by radio using call sign: Ammo1
<input type="checkbox"/> 7.8 In the event of an accident/incident, fire, drop or collision the appropriate Control Function or designated individual _____ will notify Explosives Ordinance Disposal (EOD) through control function and give exact details of the occurrences to include the type of explosives involved.
<input type="checkbox"/> 7.9 _____ will render first aid as required.
<input type="checkbox"/> 7.10 _____ will meet emergency personnel, direct them to the scene and be prepared to brief them on the situation.
<input type="checkbox"/> 7.11 Crew Chief will be required to brief emergency response team, safety and management on events leading up to the accident / incident.
<input type="checkbox"/> 7.12 The Supervisor will assess the situation and determine if additional actions are required.

**8. Step by Step Procedures**

Read this complete briefing and fill in required data before starting transport. Ensure personnel are qualified and current to transport explosives.

1. Review T.O. s and assure all equipment and supplies are available.
2. Inspect transport truck using the 1800 form, and annotate.
3. Give MOC 8177 information on hazard class/division, hazard symbols, NEW, explosives route to be used, from and to locations and start/stop time. Number of personnel.
4. Assure munitions are properly packaged for transport.
5. Chock and apply emergency brakes while loading, unloading and parking munitions.
6. Load transport vehicle and secure munitions with tie down straps.
7. Assure you have all your safety gear, T.O. s and paper work.
8. Transport following base posted speed limits.

**Remarks:****PHONE NUMBERS:**

MOC 412 474 8177

COMMAND POST 412 474 8658

FIRE / SECURITY / AMBULANCE - 911

SAFETY 412 474 8015 / 8403

SECURITY POLICE 412 474 8255

EOD (INDIAN TOWN GAP) 491-2811/2822 Com 717-861-2811/2822

EOD (MCGUIRE) 650-2205/3935 Com 609-754-2205

Radio call Signs and channel:

Desk Sergeant-----SFCC, channel 1

Ground safety -----Safety 2 channel 5

Weapons safety-----Safety 3 channel 5

MOC-----MOC, channel 4

Command Post-----Screamer, channel 5

Drop Distance for Loaded Magazine is 3 feet.

Attachment 10  
ORM Work Sheet  
Training Munitions

**Use AFI 90-901 and AFPAM 90-902 when completing this worksheet**

**OPERATIONAL RISK MANAGEMENT (ORM) WORKSHEET**

Mission / Task: Exercise munitions training

Date:

Poc Name/Grade:

**STEP 1: Identify the Hazard (Enter only one hazard in the space below)**

<b>Cause(s):</b>	Man <input type="checkbox"/>	Media/Environment <input type="checkbox"/>	Machine <input type="checkbox"/>	Management <input type="checkbox"/>
	Mission <input checked="" type="checkbox"/>			
<b>Effect of hazard:</b>	Mission Degradation <input type="checkbox"/>	Injury <input type="checkbox"/>	Illness <input type="checkbox"/>	Death <input checked="" type="checkbox"/>
<b>Property Damage</b>	<input type="checkbox"/>			
	Equipment Damage <input type="checkbox"/>			

**STEP 2: Assess the Risk using the below matrix**

**Severity:** I  II  III  IV   
**Probability:** A  B  C  D  E   
**Risk Level:** EH  H  M  L

		Probability				
		<i>Mishap</i>				
		Frequent A	Likely B	Occasional C	Seldom D	Unlikely E
S E V E R E I T Y	Catastrophic I	EXTREMELY	HIGH	MEDIUM	LOW	LOW
	Critical II	HIGH	MEDIUM	LOW	Negligible	Negligible
	Moderate III	LOW	Negligible	Negligible	Negligible	Negligible
	Negligible IV	Negligible	Negligible	Negligible	Negligible	Negligible
		RISK LEVELS				

**SEVERITY DEFINITIONS:**

**I. CATASTROPHIC** Complete mission failure, death, loss of system, or severe environmental damage.

**II. CRITICAL** Major mission degradation, severe injury or occupational illness, major system damage, or environmental damage.

**III. MARGINAL** Minor mission degradation, injury, minor occupational illness, minor system damage, or minor environmental damage.

**IV. NEGLIGIBLE** Less than minor mission degradation, injury, occupational illness, system damage, or environmental damage.

**PROBABILITY DEFINITIONS:**

**A. FREQUENT** Occurs often in life of system, occurs often in career of individual, continuous exposure to all personnel as a group.

**B. LIKELY** Occurs several times in life of system, occurs several times in career of individual, frequent exposure to all personnel as a group.

**C. OCCASIONAL** Will occur in the life of system, will occur in career of individual, occurs sporadically to all personnel as a group.

**D. SELDOM** Unlikely but could occur in life of system, unlikely but could occur in a career, occurs seldom for all personnel as a group.

**E. UNLIKELY** So unlikely you can assume it will not occur in the life of a system, unlikely but could occur in a career, occurs rarely for all personnel as a group.

**STEP 3: Analyze Control Measures (Identify risk control option(s) you plan to use)**

Macro Risk Control Options:	Risk Control Options:
<input type="checkbox"/> Reject	<input type="checkbox"/> Engineer
<input type="checkbox"/> Avoid	<input type="checkbox"/> Guard
<input type="checkbox"/> Delay	<input type="checkbox"/> Improve Process
<input type="checkbox"/> Transfer	<input checked="" type="checkbox"/> Limit Exposure
<input checked="" type="checkbox"/> Spread	<input type="checkbox"/> Select Personnel
<input type="checkbox"/> Compensate	<input checked="" type="checkbox"/> Train
<input checked="" type="checkbox"/> Reduce	<input checked="" type="checkbox"/> Warn
	<input type="checkbox"/> Motivate
	<input type="checkbox"/> Reduce effects
	<input type="checkbox"/> Rehab

**STEP 4: Make Control Decision (Describe the control measures you plan to use and how you plan to implement them)**

**Describe Selected Control Measure(s)**

1. Emphasize safe distances when using training munitions, show distances, brief distances, mark distances.
2. Reduce exposure to personnel
3. Wear PPE, safetyglasses, leather gloves, steel toe boots and long sleeve shirts and pants
4. Provide explosive safety training before use of training munitions
5. Identify hazardous areas, with cones, placards and signs.
6. Explain and show past mishaps.
7. Inspection of assets for serviceability before use.
8. Use step by step procedures and all tech data.
9. Fire extinguishers on hand.

**For each selected control measure, briefly describe its planned implementation**

1. Pre task Safety briefings, class room instruction on safe distances before start
2. Pre task safety brief describing personnel limits
3. Pre task safety brief on proper use of PPE and required equipment
4. Pre task safety brief and class room instruction on proper use of exercise munitions.

5. Pre task safety brief on hazardous areas  
 6. Brief past mishaps, explain death or loss of limb can accure.  
 7. 100% inspection of all training munitions for sevicability.  
 8. Instruct class using tech data, step by step procedures and qualified instructors.  
 9. Pre task safety brief.

**Residual Severity:** I  II  III  IV   
**Residual Probability:** A  B  C  D  E   
**Residual Risk Level:** EH  H  M  L

**Decision Level Matrix (Ensure the decision to proceed is made commensurate with the risk)**

Residual Risk Level	Decision Level
Extremely High (EH)	Wing / CC
High (H)	Group / CC
Medium (M)	Squadron / CC
Low (L)	Flight/Section / CC

**STEP 5: Implement Risk Controls (Explain the approved implementation strategy for each control measure)**

1. Training will be conducted by certified instructors with approved lesson plans. Approved lesson plans are plans reviewed by the squadron commander, the Explosive Safety Office and the training manager. Instructors have full control of the class environment and full responsibility of the safety of all students. Instructors will insure all explosive safety procedures are followed. Students will follow all the instructions given by the instructor.

**STEP 6: Supervise and Review (Explain how supervision will be accomplished and identify what reviews are required)**

**Required Review(s):**  
 Pre-Implementation   
 Pre-Mission/Task   
 Mid-Mission/Task   
 Post-Mission/Task   
 After-Action Briefing

1. Lesson plans are reviewed by explosive safety initially and for each new task prior to implementation of class.
2. Instructor assures all locations, equipment items, PPE, and munitions are in serviceable condition prior to implementation of class.
3. Instructor ensures AFMAN 91-201 AFRC sup 1 par 2.16 instructions are completed prior to implementation of class.

Printed Name/Grade/Position \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

Attachment 11  
ORM Work Sheet

Blank Ammunitions

Use AFI 90-901 and AFPAM 90-902 when completing this worksheet

**OPERATIONAL RISK MANAGEMENT (ORM) WORKSHEET**

Mission / Task: Operation XXXXXXXXXXXX/Use of blanks

Date:

Poc Name/Grade:

**STEP 1: Identify the Hazard (Enter only one hazard in the space below)**

**Proper use of blank small arms ammunition.**

Cause(s): Man  Media/Environment  Machine  Management

Mission

Effect of hazard: Mission Degradation  Injury  Illness  Death

Property Damage  Equipment Damage

**STEP 2: Assess The Risk using the below matrix**

Severity: I  II  III  IV   
 Probability: A  B  C  D  E   
 Risk Level: EH  H  M  L

		Probability				
		Mishap				
		Frequent A	Likely B	Occasional C	Seldom D	Unlikely E
S E V E R I T Y	Catastrophic I	EXTREMELY	HIGH	HIGH	HIGH	LOW
	Critical II	HIGH	HIGH	HIGH	LOW	LOW
	Moderate III	HIGH	MEDIUM	MEDIUM	LOW	LOW
	Negligible IV	LOW	LOW	LOW	LOW	LOW
		RISK LEVELS				

SEVERITY DEFINITIONS:

**I. CATASTROPHIC** Complete mission failure, death, loss of system, or severe environmental damage.

**II. CRITICAL** Major mission degradation, severe injury or occupational illness, major system damage, or environmental damage.

**III. MARGINAL** Minor mission degradation, injury, minor occupational illness, minor system damage, or minor environmental damage.

**IV. NEGLIGIBLE** Less than minor mission degradation, injury, occupational illness, system

damage, or environmental damage.

**PROBABILITY DEFINITIONS:**

- A. FREQUENT** Occurs often in life of system, occurs often in career of individual, continuous exposure to all personnel as a group.
- B. LIKELY** Occurs several times in life of system, occurs several times in career of individual, frequent exposure to all personnel as a group.
- C. OCCASIONAL** Will occur in the life of system, will occur in career of individual, occurs sporadically to all personnel as a group.
- D. SELDOM** Unlikely but could occur in life of system, unlikely but could occur in a career, occurs seldom for all personnel as a group.
- E. UNLIKELY** So unlikely you can assume it will not occur in the life of a system, unlikely but could occur in a career, occurs rarely for all personnel as a group.

**STEP 3: Analyze Control Measures (Identify risk control option(s) you plan to use)**

Macro Risk Control Options:	Risk Control Options:
<input type="checkbox"/> Reject	<input type="checkbox"/> Engineer
<input type="checkbox"/> Avoid	<input type="checkbox"/> Guard
<input type="checkbox"/> Delay	<input type="checkbox"/> Improve Process
<input type="checkbox"/> Transfer	<input checked="" type="checkbox"/> Limit Exposure
<input checked="" type="checkbox"/> Spread	<input type="checkbox"/> Select Personnel
<input type="checkbox"/> Compensate	<input checked="" type="checkbox"/> Train
<input checked="" type="checkbox"/> Reduce	<input checked="" type="checkbox"/> Warn
	<input type="checkbox"/> Motivate
	<input type="checkbox"/> Reduce effects
	<input type="checkbox"/> Rehab

**STEP 4: Make Control Decision (Describe the control measures you plan to use and how you plan to implement them)**

- Describe Selected Control Measure(s)**
1. Emphasize safe distances for firing blank rounds, show distances, brief distances, mark distances
  2. Reduce exposure to personnel
  3. Wear PPE, helmets, safety glasses, gloves, flack vests, long sleeve shirts
  4. Provide training for proper use of blank rounds, identification of blank rounds, use of weapon
  5. Identify hazardous areas, identify magazines with blank/live rounds, placards and signs
  6. Explain and show past mishaps, explain disciplinary actions if rules are not followed
  7. Inspection of assets for unauthorized rounds
  8. Survey of individuals who last used live ammo, do they have any items with them when they last used live ammo. i.e field jacket, pouches, backpacks.

**For each selected control measure, briefly describe its planned implementation**

1. 100% documented Pretask Safety briefings, marking of distances before start
2. Pre task safety brief describing personnel limits.
3. Pre task safety brief on proper use of PPE and required equipment
4. Pre task safety brief on proper use of blank rounds, identification of blank rounds, use of weapon.
5. Pre task safety brief on hazardous areas
6. Brief past mishaps, explain disciplinary action if rules are not followed
7. Complete a 100% inspection for live rounds before start of exercise in : Clips, back packs, rifles, clothing or any carried item
8. Pull individual aside to do personal inspection of clips, back pack, clothing or any carried items.

**Residual Severity:** I  II  III  IV   
**Residual Probability:** A  B  C  D  E   
**Residual Risk Level:** EH  H  M  L

**Decision Level Matrix (Ensure the decision to proceed is commensurate with the risk)**

Residual Risk Level	Decision Level
Extremely High (EH)	Wing / CC
High (H)	Group / CC
Medium (M)	Squadron / CC
Low (L)	Flight/Section / CC

**STEP 5: Implement Risk Controls (Explain the approved implementation strategy for each control measure)**

1. Supervisors conduct safety briefings.
2. Supervisors periodically assure participants are following instructions.
3. Participants follow all instructions from supervisors.
4. Participants assist in identifying hazard and report findings to supervisor.

**STEP 6: Supervise and Review (Explain how supervision will be accomplished and identify what reviews are required)**

**Required Review(s):** Pre-Implementation  Pre-Mission/Task  Mid-Mission/Task   
 Post-Mission/Task  After-Action Briefing

Printed Name/Grade/Position \_\_\_\_\_  
 Signature \_\_\_\_\_ Date \_\_\_\_\_

## Attachment 12

## Equipment Reminder Listing

Equipment Reminder Listing	
2.5 Ton Truck	Smoking post
Batteries	Steel toe Boots
Blank adapters	Tape Blue
Buses	Tents
Cell phone	Tie down straps
Clearing Barrel with procedures	Tools
Do not enter signs	Water
Duct tape	Weapons
Fire extinguishers	Wheel chocks
Flack Vests	
Flashlights	
Gloves	
God gun	
God gun keys	
Ground burst simulators	
Hearing Protection	
Helmets	
HMMWV (Humvee)	
Knee and Elbow Pads	
M2a1 Ammo Can	
M548 Ammo Can	
Magazines	
Miles Gear	
Miles Gear Batteries	
MREs	
Parachute cord	
Placard / Fire symbols	
Porta Johns	
Radio	
Reflective Gear/ belt	
Safety Glasses	
Sling for Weapons	
Smoke grenades	

**Attachment 13**  
Checklist

911AWI91-204 Checklist	Yes	No	N/A
<b>1. General</b>			
1.1 Is there a copy of 911 AWI 91-204 available on site?			
1.2 Are the applicable step by step procedures used and on site?			
1.3 Are the applicable technical orders used and on site?			
<b>2. General Safety Requirements</b>			
2.1 Are all personnel trained on tasks to be performed?			
2.2 Are munitions handled carefully?			
2.3 Are munitions modified or used in a way other than intended purpose?			
2.4 Are only the minimum amount of explosives being drawn?			
2.5 Has a pre exercise/training safety briefing been conducted?			
2.6 Are two suitable fire extinguishers available in areas where grenades simulators and flares are used?			
2.7 Are all weapons loaded and unloaded at an approved clearing barrel or designated clearing area?			
2.8 Are Supervisors knowledgeable of emergency procedures and notification requirements?			
2.9 Is Smoking prohibited within 50' of explosives?			
2.10 Is live (projectile) ammunition kept separate from blank ammunition?			
2.11 Are exercise/training areas posted with do not enter explosive operation signs or guarded in some way to prevent unauthorized personnel from entering?			
<b>3. Planning</b>			
3.1 Has the exercise team chief developed an exercise plan? Attachment 2			
3.2 Has the Wing Commander or his designated representative approved the exercise/training plan?			
3.3 Is Safety involved in the exercise/training planning?			
3.4 Are explosive training lesson plans approved by the section Commander and routed through Weapons Safety?			
<b>4. Requisition of Munitions</b>			
4.1 Did the exercise/training team chief coordinate munitions availability with Munitions personnel?			
4.2 Are person who are tasked to pick up munitions items from the Munitions section authorized and qualified to handle munitions items?			

<b>5. Munitions Accounting and Control</b>	Yes	No	N/A
5.1 Are all munitions accounted for throughout the processes of issuing, and turn in?			
5.2 Are all munitions accounted for by NSN and Lot number?			
5.3 Is a 100% inspection done on all blank ammo to verify all are in fact blank?			
5.4 Has the MASO conducted a 100% inventory on all live (projectile) ammunition that could be substituted for blanks to assure there are no out of balance conditions prior to the exercise?			
5.6 Can issuing official discern between a live round (projectile) and a blank round?			
5.7 Are munitions stored in the munitions storage area or on an Authorized AF IMT 2047?			
<b>6. Training For Simulators and Smoke Producing Munitions</b>			
6.1 Are all personnel who will handle and deploy training munitions trained?			
6.2 Do they have a signed AF IMT 483?			
6.3 Are gas masks readily available when deploying smoke producing munitions?			
6.4 Are step by step procedures being used?			
6.5 During exercises/training are munitions being carried in proper meta ammo containers or approve shipping containers?			
6.6 Are containers properly labeled?			
6.7 Are munitions left unattended?			
<b>7. Minimum Distances for explosives Simulators</b>			
7.1 Are the minimum distances for deploying munitions being briefed?			
7.2 Are the minimum distances for deploying munitions being adhered to?			
<b>8. Exercise/training Locations</b>			
Are exercise/training sites surveyed by supervisors of the agency conducting the exercise, Wing Safety, Base Environmental, Fire Department, Security Forces, Munitions and Medical personnel prior to exercise?			
<b>9. Transportation</b>	Yes	No	N/A
9.1 Are personnel trained to transport explosives on base and off base as			

applicable?			
9.2 Is training documented on an AF IMT 483?			
9.3 Are step by step procedures used?			
9.4 Are only military vehicles used to transport explosives?			
9.5 Are vehicles inspected prior to loading explosives?			
9.6 Are two 2A:10BC fire extinguishers available and secured?			
9.7 Are explosives transported in their approved containers?			
9.8 Are drivers aware of emergency procedures and do they have proper transport documentation?			
9.9 Do all vehicles involved in exercise/training have at least one fire extinguisher?			
9.10 Are DOT placards used when transporting explosives?			
9.11 Are explosive being transported compatible?			
9.12 Are safety straps on door openings and tail gates used?			
9.13 Are seat belts used?			
<b>10. Weapons and ammunition Procedures</b>			
10.1 Are weapons and explosives properly carried?			
10.2 Are all weapons fitted with blank adapters prior to loading blank ammunition?			
10.3 Has a 100% search been conducted on all personnel, bags, magazines and equipment to ensure no live (projectile) ammunition is introduced into the exercise/training area?			
10.4 Is live (projectile) ammunition stored separately from blank ammunition?			
10.5 Is equipment, weapons, explosives and ammunition inspected for serviceability prior to use?			
10.6 Are "Safety Kill" procedures briefed?			
10.7 Are real world duress codes briefed?			
10.8 Are all weapons and explosives safed prior to leaving exercise/training area?			
10.9 Is there a clearing barrel or an approved area where weapons will be cleared?			
10.11 Are written weapons clearing procedures available on site and used?			
<b>11. Post exercise clean up</b>			
11.1 Has the exercise area been policed of all explosive residue, brass and packing?			
11.2 Is all packing material, brass and munitions residue turned into the Munitions Section?			
11.3 Are all serviceable, unserviceable and unused munitions turned back into the Munitions section?			
<b>12. Operational Risk Management</b>	Yes	No	N/A
12.1 Has risk management been incorporated into all tasks?			

<b>13. Medical</b>			
13.1 Is a medical team available during entire exercise?			
13.2 Is there a first aid kit and a person trained in first aid on hand during explosive training?			