

Fort Devens Regulation 350-3

**Training**

# **Ranges Training Areas**

Department of the Army  
US Army Garrison  
Fort Devens, MA 01434  
4 February 2013

**UNCLASSIFIED**

# ***SUMMARY of CHANGE***

Ft Devens Reg 350-3  
Training

This revision, dated 4 February 2013:

- Adds authority to withdraw or suspend installation training complex privileges to the Range Control Officer's responsibilities. (Para. 1-5c (17))
- Changes the Directorate of Plans and Training (DPT) to Directorate of Plans Training and Security (DPTS) throughout.
- Adds links to the Range Control website throughout.
- Adds the requirement for units to provide Range Control a copy of the unit's Request for Issue of Ammunition (DA 581). (Para.1-5f).
- Adds the requirement for units to accurately show the start and end times each day for all training being conducted. (Para. 2-3)
- Adds the note that the M69 CCO is not authorized as an assisted device for Night Fire Ranges. (Para. 2-3g).
- Adds requirement for Shot Plans and Record of Environmental Consideration (REC) 14 days prior to training when scheduling the use of the demolition range. (Para. 2-4a) and (Para.4-1b(3)).
- Adds new Range Control email address (Para 2-4b,(2)).
- Adds UXO marking and evacuation procedures (Para. 3-4d).
- Adds Record of Environmental Consideration (REC) processing prior to approval of Level 1 Responses (Para. 3-10e(2)).
- Adds that civilian police officers/bomb technicians will not be allowed on site during Explosive Ordnance Disposal operations.
- Adds when head protection will be worn in vehicles (Para. 3-13a).
- Adds the requirement for the Range Officer to approve civilians handling or firing weapons (Para. 3-15b).
- Adds requirement that civilian or family members under the age of 18 are prohibited from the use of firearms unless accompanied by a parent or legal guardian (Para. 3-15c).
- Adds requirement for dig permits when anything more than a hasty or individual fighting position is constructed (Para. 4-9e).
- Adds a required UXO briefing be given to all civilian contracts involved in excavations (Para. 4-9f).
- Adds units are prohibited from making repairs to ranges, roads, or facilities. All requests for repairs must be requested through Range Control (Para. 5-1k).
- Adds new Personal Protective Equipment (PPE) requirements throughout appendix C and K.
- Adds the pit-NCO on Golf and Golf 1 Ranges be certified as an RSO (Para. C-12,C-13).
- Restates the charge limits for demolition as 20lbs (above ground) and 40lbs (buried) (Para. C-28,2).
- Adds personnel requirements to operate Facility 7 (NBC Chamber) (Para. C-36,4).
- Adds Facility 13 Automated Live Fire Shootouse (Para. C-42).
- Adds unit Commanders must plan to secure weapons in cases where SM are injured and become unable to secure weapons (Appendix G-12).
- Adds reporting requirement of all actual or suspected losses of weapons to Range Control within 2 hours. That Range Control will secure the Range Complex and notify the DA Police (Para. G-13)
- Adds PPE required for IED Simulator (Non-Pyrotechnic) (Appendix K).

**Department of the Army  
US Army Garrison Fort Devens  
Devens, Massachusetts 01434-4424  
4 February 2013**

**Training (Ranges and Training Areas)**

---

**HISTORY.** This is the third publishing of this regulation. The portions affected by this revision are listed in the summary of change.

**SUMMARY.** This regulation establishes policies, procedures, and guidelines governing the use and operation of Fort Devens Ranges, Facilities and Training Areas.

**APPLICABILITY.** This publication applies to all users of Fort Devens to include all ranges, training facilities and training areas.

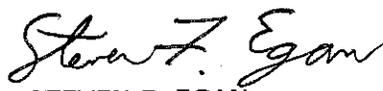
**PROPONENT AND EXCEPTION POLICY.** The Directorate of Plans Training and Security (DPTS) DPTS is the proponent of this regulation. The DPTS Chief has the authority to approve exceptions to this regulation that are consistent with safe training.

**ARMY MANAGEMENT CONTROL PROCESS.** This regulation contains management control provisions, but does not identify key management controls that must be evaluated.

**SUPPLEMENTATION.** Supplementation of this regulation is prohibited.

**SUGGESTED IMPROVEMENTS.** Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, Fort Devens, and ATTN: Directorate of Plans Training and Security (DPTS), Devens, MA 01434-5409.

OFFICIAL:

  
STEVEN F. EGAN  
LTC, MP  
Commanding

DISTRIBUTION:  
Electronic Media  
Ea. Unit training on Fort Devens

---

\*This regulation supersedes Ft Devens Reg 350-3, dated 25 May 2011.

**TABLE OF CONTENTS**

<b>CHAPTER</b>	<b>TITLE</b>	<b>PARA</b>	<b>PAGE</b>
<b>1</b>	<b>GENERAL</b>		1
	Purpose	1-1	1
	Forms	1-2	1
	Organization	1-3	1
	Definitions	1-4	1
	Responsibilities	1-5	1
	Unit Responsibilities	1-5f	4
<b>2</b>	<b>RANGE OPERATIONS</b>		5
	Range Control	2-1	5
	Fort Devens MAPS	2-2	6
	Unit Range Operations	2-3	6
	Scheduling	2-4	8
	Training Facility/Area Operation and Clearance	2-5	10
	Special Coordination	2-6	11
<b>3</b>	<b>SAFETY</b>		11
	General	3-1	11
	Risk Management	3-2	12
	Safety Certification Program	3-3	13
	OIC/RSO Appointment Requirements	Table 3-1	14
	Safety Briefing	3-4	14
	Duds	3-5	15
	Misfires	3-6	15
	Malfunctions	3-7	15
	Ammunition and Demolitions Restrictions	3-8	16
	Smoke Operations	3-9	16
	Ammunition Safety, Handling and Storage	3-10	17
	EOD Operations	3-10e	17
	Field Ammunitions Supply Points	3-10f	18
	Tracer Ammunition and Pyrotechnic Use	3-10g	18
	Ammunition Amnesty Program	3-10h	19
	Restricted Areas	3-11	19
	Communications	3-12	20
	Vehicle Safety	3-13	21
	Road Condition Classifications	3-13h	22
	Privately Owned Vehicles	3-13i	23
	Alcoholic Beverages	3-14	23
	Civilians	3-15	23
	Range Fire Prevention and Firefighting	3-16	24
	Aircraft	3-17	26
	Unsafe Acts of Conditions	3-18	26
	Water Training	3-19	26
	Tracked Vehicles	3-20	26
	Range Safety	3-21	27
	Opposing Forces (OPFOR Actions)	3-22	28
	Blank & CCMCK (UTM) Safety	3-22g	28
	Medical Support/MEDEVAC	3-23	29
	Basic Weapons Safety	3-24	29

<b>CHAPTER</b>	<b>TITLE</b>	<b>PARA</b>	<b>PAGE</b>
	Accident Reporting	3-25	29
	Unsafe Conditions and Incident Reporting	3-26	30
	Weather Warnings	3-27	30
<b>4</b>	<b>ENVIRONMENTAL ISSUES</b>		30
	Responsibilities	4-1	30
	Environmental Protection	4-2	30
	Refueling	4-3	31
	Maintenance Operations	4-4	32
	Spill Response Procedures	4-5	32
	Hazardous Waste	4-6	33
	Solid Waste	4-7	33
	Water Resources	4-8	33
	Landscape and Vegetation	4-9	34
	Fish and Wildlife	4-10	34
	Hunting and Fishing	4-11	35
<b>5</b>	<b>PROHIBITED ACTIVITIES</b>		35
	Prohibited activities	5-1	35
	<b>REFERENCES</b>		36
	Regulations		36
	Additional References		37
<b>APPENDICES</b>			
A	Basic Requirement for Opening a Small Arms Range		A1 – A5
B	Ranges, Facilities, and Training Areas		B1 – B5
C	Range and Training Facility Data Sheets		C1 – C55
D	Parachute and Air Operations		D1 – D4
E	Field/Tent Heaters Safety Guidelines		E1 - E2
F	Opening/Closing Procedures		F1 - F2
G	Physical Security of Arms, Ammunition, and Explosives		G1 - G2
H	Range Forms and Maps		H1 – H9
I	Rappel/Fast Rope Operations		I1 - I14
J	Rotary Wing Operation / Helo Routes Map		J1 – J4
K	Personal Protective Equipment		K1
L	Portable Toilet Coordination		L-1

Glossary

GL1 – GL4

## CHAPTER 1. GENERAL

**1-1. Purpose.** The purpose of this regulation is to provide guidance and direction for the safe use of the Fort Devens training facilities by:

- a. Prescribing the procedures for scheduling use of ranges, facilities, and training areas.
- b. Prescribing responsibilities and procedures for the safe and environmentally sound use of the training facilities.
- c. Listing the capabilities, limitations, and any special requirements of available training facilities

**1-2. Forms and Maps.** See appendix H.

**1-3. Organization.** The Directorate of Plans Training and Security (DPTS) is responsible for providing administrative, logistical, training support guidance, and all coordination relating to training at Fort Devens.

**1-4. Definitions.** Special terms used in this regulation are explained in the Glossary.

### **1-5. Responsibilities.**

a. The **Fort Devens Commander** has responsibility for the overall operation of Fort Devens, to include the immediate supervision, control, coordination and safety of all Fort Devens facilities.

b. **The Directorate of Plans Training and Security** coordinates matters concerning the safe, efficient utilization of Fort Devens training facilities. Specific responsibilities include:

- (1) Publication of the weekly Projected Training Report.
- (2) Maintenance of training files and overlays.
- (3) Overall responsibility for Range Control operations, to include scheduling of units, utilization of training facilities, maintenance of training facilities and range development.
- (4) Provides billeting support, administrative, operational, and logistical support for units and individuals training at this installation.
- (5) Provides portable toilets for reserve component units training at the Fort Devens Range Complex. Unit will request this support through the Billeting office using the memorandum format provided in Appendix L.

c. **Range Control Officer (RCO):** The Range Control Officer has overall responsibility for the safe conduct of training on the installation's ranges and training areas. The Range Control Officer will:

- (1) Ensure that specific standard operating procedures are established, published, disseminated, and used by occupying units for each range and firing point designated for the conduct of live-fire training.

- (2) Ensure Range Control Operations will brief each occupying unit's designated officer in charge (OIC) and range safety officer (RSO) prior to the unit's use of the range or training area. The briefing will consist, but is not limited to: Range operations, environmental concerns, and Post safety requirements.
- (3) Verify that each individual unit has its own emergency medical support available. This support will be as a minimum, one soldier per active range who is certified as a "combat lifesaver". Each soldier acting as a "combat lifesaver" will have their own medical aid bag, litter, and radio communications. .
- (4) Coordinate and obtain use of Restricted Area, R-4102, from the Federal Aviation Administration (FAA) (Boston TRACON) in accordance with (IAW) AR 95-2 current Joint Use Letter of Agreement.
- (5) Ensure the current range safety fans are prepared IAW AR 385-63 and maintained in Range Control for each range used for live-fire training.
- (6) Ensure that proper signs are posted for all impact areas and dud areas IAW AR 385-63.
- (7) Coordinate and function as the team leader of the installation investigation team for investigating malfunctions and accidents that occur on the ranges and training areas.
- (8) Arrange for the maintenance, operation, coordination, and safe use of training areas and ranges on this installation. Perform operator maintenance beyond the capability of the occupying unit. Review, forward, and continue follow-up action on all work orders.
- (9) Designate danger areas, and where/when roadblocks need to be manned by units using ranges and training areas.
- (10) Coordinate placement and manning of roadblocks with Directorate of Public Safety (DPS).
- (11) Ensure that all airborne operations are IAW procedures listed in Fort Devens Reg 95-1 and Appendix D and J of this regulation.
- (12) Coordinate with Environmental Branch, DPW concerning compliance with Federal, State, and local regulatory requirements. Immediately report all failures to comply with regulatory requirements by Range and Training Area users to ENRMO, DPW.
- (13) Report all accidents caused by firing of any weapon system(s) to the DPS representative immediately.
- (14) Provide access to ranges to accomplish environmental missions.
- (15) Monitoring units on the ranges and the training areas to ensure compliance with this regulation.
- (16) Monitoring the effectiveness of Safety Programs for the Officer-in-Charge (OIC) and the Range Safety Officer (RSO) in accordance with (IAW) DA PAM 385-63.

- (17) Withdraw or suspend installation training complex privileges from any person, organization, agency, or club that willfully violates the policies in this publication or Army range regulations and procedures; or from any person whose ability or conduct is incompatible with the safe use of Government range structures and facilities.
- (18) Direct support and maintenance of all weapons ranges.
- (19) Providing range and road right-of-way, and vegetation maintenance support, within the constraints of base support contract requirements, funds and equipment availability.
- (20) Providing for seasonal controlled burns or prescription burning, as needed.
- (21) Maintaining Turner Drop Zone (DZ), to include cutting of trees, brushes, and grass.
- (22) Repair electrical and pneumatic target devices.
- (23) Manages the Fort Devens Wildland Fire Brigade including equipment and training of personnel.
- (24) Providing snow removal for ranges, facilities and training areas.

**d. Fort Devens Safety Management Office** is responsible for:

- (1) Assisting commanders by reviewing field training exercise (FTX) plans, documents and operating procedures.
- (2) Providing inspection services during training.
- (3) Monitoring training to ensure safe practices are followed.
- (4) Providing assistance in the completion of DA Form 285-AB-R, Abbreviated Ground Accident Report.
- (5) Assisting commanders in preparing risk assessments.

**e. Directorate of Public Works (DPW).** The DPW is responsible for:

- (1) Grading and maintenance of all roads within the training area complex (Real Property).
- (2) Providing snow removal of all roads and parking lots within the Range Complex, (Jackson Rd, Dixie Rd, Trainfire Rd, Ponakin Rd, Shoefelt Rd, Ligget Rd, Bivouac Rd, Shirley Rd, Turnpike Rd, Attu Rd.)
- (3) Maintenance and/or installation of electric power to ranges, installation of electric power sources will be approved by DPW.
- (4) Provide maintenance for all facilities and Real Property within the Range Complex (Real Property).

(5) Provide environmental and natural resources management support, recommendations, and approvals concerning compliance, impact, mitigation, report and documentation under statutory requirements of Federal, State, and local regulation.

**f. Unit responsibilities.**

1) Training is the responsibility of the unit commander. Planning for support and utilization of resources at Fort Devens should, at a minimum, comprise the following:

a. Phase I. Planning Training should include initial planning meetings or conferences at unit level. Planning should include a review of all existing unit reservations in the RFMSS database, equipment preparation, determining equipment shortfalls, obtaining required equipment, organizing and developing operation orders.

b. Phase II. Requesting training support from Fort Devens, for a given training period is accomplished through the Range Facility Management Support System (RFMSS). Requests are submitted directly to Fort Devens Range Control by electronic means. Initial contact with Range Control for unit setup is necessary to establish the unit in the RFMSS database. A maximum of three unit personnel will be allowed to have a RFMSS User Account. RFMSS User Accounts are setup from the Fort Devens website at: <https://www.devens.army.mil> and go to the RFMSS link at the lower portion of the screen. Once a User Account is approved by Range Control units can download the RFMSS Scheduling Handbook from the same site. Assistance in start-up procedures and training for computer hookup via Range Facility Management Support System (RFMSS) is obtained by calling Range Control at commercial (978) 796-2723/2155 or DSN 256-2723/2155.

2) Correspondence. All correspondence for Range Control at Fort Devens will be addressed as follows:

Commander  
USAG Fort Devens  
ATTN- DPTS-Range Control  
57 Queenstown Street Box 9  
Devens, MA 01434-5409

3) The Directorate of Plans Training Security (DPTS) can be contacted at (978) 796-3951/3952 or DSN 256-3951/3952. Please visit our web site at <https://www.devens.army.mil> for additional information.

4) Correspondence. All correspondence for DPTS at Fort Devens will be addressed as follows:

Commander  
USAG Fort Devens  
Attn: Directorate of Plans Training and Security  
57 Queenstown Street Box 9  
Devens, MA 01434-5409

5) **Battalion/Squadron Commanders** of using units will:

- a) Comply with the installation procedures for the certification of OIC / RSOs.
  1. Establish and maintain a certification program to train and qualify personnel in safety procedures for their specific areas of responsibility. Personnel who have not completed annual training will not be appointed as OIC or RSO. Battalion Commanders will submit a roster of certified personnel annually not later than 1 October and update it as necessary. (Format is provided in Appendix H of this regulation )
  2. An OIC or RSO must meet the qualifications in Table 1-1, DA PAM 385-63 and Fort Devens Reg 350-3, Chapter 3-3 Table 3-1, these personnel must:
    - a. Have satisfactorily completed a standard program of instruction in the duties of an OIC / RSO. Commanders may develop their POI to suit their needs or go to the Range Control tab at the Fort Devens website (<https://www.devens.army.mil>) for a sample POI.
    - b. Be competent and properly instructed in the performance of their duties
    - c. Be qualified and knowledgeable in the weapons systems involved and the OIC / RSO duties required.
    - d. Able to coordinate plans for firing exercises and maneuvers with Range Control.
    - e. Civilians may act as the OIC and RSO of a firing range if they are qualified and approved to perform such duties by the Fort Devens RCO, i.e. weapons testing and competitive shooting, law enforcement ranges. Under no circumstances will contractors be allowed to be an OIC/RSO of a military training event.
- b) Conduct risk management for all range operations.

6) **Unit Commanders** will:

- a) Ensure that all personnel are familiar with local range procedures and safety requirements.
- b) Designate in writing, an OIC/RSO as specified from the battalion certified list.
- c) Ensure a Command approved Composite Risk Management Worksheet (DA Form 7566) is provided to Range Control for all training.
- d) Ensure physical security requirements are met. See Appendix G.
- e) The unit OIC / RSO will sign for the range(s), training area(s) and training facilities at Range Control before the unit occupies the area.

- f) Ensure that a copy of the unit's DA Form 581 (Request for Issue and Turn-In of Ammunition) or DA Form 5515 (Training Ammunition Control Document) is provided to Range Control.

## **CHAPTER 2. RANGE OPERATIONS**

### **2-1. Range Control:**

- a. Range Control is operated from the range control building 4217A on Jackson Road, Lancaster, MA. Telephone number (978)796-2723/2155 or DSN 256-2723/2155.
- b. Range Control is staffed from 0630-1600 hours daily and anytime ranges are firing, rappelling or Air Operations are being conducted. All units must stop at Range Control for check-in; all nongovernmental vehicles must be signed in and issued a vehicle pass, (see 3-13i for vehicle passes).
- c. Radio frequencies. The Range Safety Net operates on a commercial radio and repeater system which provides range communications with all units. This safety net is not accessible by SINCGARS radios, hand held (BK) radios are available at Range Control for issue to units.

### **2-2. Fort Devens MAPS:**

- a. Fort Devens Installation Map Series V7144S, 1:50,000 scale
  1. This maps is **NOT** available at Range Control for issue.
  2. This map is stocked at NGA / DLA under NSN 7643014043493.
- b. Fort Devens Installation Map Series V814S, 1:25,000 scale. (See Appendix H)
  1. This map is currently available at the Fort Devens website <http://www.devens.army.mil>, or <https://www.srp.army.mil>. This map is published as a GeoPDF which allows the user to attach GeoTools to the PDF and utilize many computerized mapping tools, display of grid coordinates, measuring, and links to Google™ Map a point. These tools are available for free downloading at <http://www.terragotech.com>.
  2. This map is also available from NGA/DLA and is stocked under NSN 7643015691030 Edition Number 001, V814SFTDEVENMIM.

**2-3. Unit Range Operations.** All range firing will be IAW DA PAM 385-63, FMs and TMs for the weapons systems and this regulation. Unit requests must accurately show the start and end times each day for all training being conducted.

- a. Small arms firing may be conducted from:
  - 0730-2300 Sunday through Saturday.

b. Mortar firing may be conducted from:

- 0800-2200 Monday through Saturday.
- 0900-2200 Sunday.
- Firing may be curtailed due to adverse weather conditions.

c. Demolition charge and Hand Grenade firing may be conducted from:

- 0800-Dusk Monday through Saturday.
- 0900-1700 (or Dusk) Sunday.
- Firing may be curtailed due to adverse weather conditions.

e. Advanced Rifle Marksmanship: Reflexive fire, short range marksmanship, advanced firing positions, combat firing techniques, (automatic or burst fire, quick fire, rapid semi-automatic fire or suppressive fire), unassisted night firing, moving target engagements, and squad designated marksman training may be conducted only after special coordination with Range Control for range selection has been accomplished by the unit desiring to conduct this training. Requests will include a detailed POI and Risk Assessment, submitted at least 30 days in advance of the date of training and will only be approved after a review by the Range Control Officer and the Range Safety Officer.

f. Unassisted Night Fire Ranges. The following applies to all night fire ranges with tracer ammunition:

(1) Left and right limits will be marked with red flashing lights or red chem lights. If there is no red light on the tower, the flagpole will be marked with a red flashing light.

(2) Targets will be illuminated with shielded chem lights (not red). BRAVO, ECHO and VICTOR ranges have illuminated targets. Pyrotechnics will not be used without permission from Range Control. Permission must be granted on a daily basis.

(3) Use fighting or prone supported, prone unsupported, and kneeling positions only.

(4) Three vehicles may be parked on the range in positions so as to allow use of their headlights for emergency illumination. All other vehicles will be parked off the range. Ranges A, B, C, E, P and V have emergency lights.

(5) All range safety personnel will have flashlights and be identified with white armbands or white helmet bands.

g. Assisted Night Fire Ranges. The following applies to all night fire ranges employing night observation devices (NODS), aiming lasers, or thermal weapons sights, without tracer ammunition. (Note: the M68 CCO is not authorized as an assisted device.)

(1) Left and right limits will be marked with red flashing lights or red chem lights. If there is no red light on the tower, the flagpole will be marked with a red flashing light.

(2) Targets may be illuminated with shielded chem lights (not red). BRAVO, ECHO and VICTOR ranges have illuminated targets. Pyrotechnics will not be used without permission from Range Control.

(3) Use fighting or prone supported, prone unsupported, and kneeling positions only.

(4) All range safety personnel will have NODS to be able to observe any unsafe firing conditions on the range, and be identified with white armbands or white helmet bands. The coaches and shooters will also have NODS and the ratio of lane safety personnel will be one to every two shooters.

h. Night Fire on Pistol Ranges. The following procedures apply to both the Alternate Pistol Qualification Course and the Combat Pistol Qualification Course (CPQC).

(1) Left and right limits will be marked with red flashing lights or red chem lights. If there is no red light on the tower, the flagpole will be marked with a red flashing light.

(2) Targets may be illuminated with shielded chem lights (not red), Bravo Range (CPQC) has illuminated targets. Pyrotechnics will not be used without permission from Range Control.

(3) The only firing positions required are standing (CPQC) and crouching for the Alt Pistol Course. There is no movement authorized, while conducting night fire.

(4) If firing is conducted during hours of low visibility (twilight at dawn and dusk or full moonlight) the Range Safety Personnel must be capable of viewing the firers. If the firing is conducted in total darkness all Range Safety Personnel will be equipped with Night Vision Goggles.

#### **2-4. Scheduling.**

a. Requests for ranges, training areas, facilities and airspace.

(1) All units, regardless of branch of service, will submit requests for ranges/training facilities/areas directly to Range Control through the computerized Range Facility Management Support System (RFMSS), (Note: NLT 30 days prior to the start of training.). These requests must accurately show the start and end times for all training being conducted. This must include any overnight bivouacking on the range/training area or the storage of ammunition on the range overnight.

(2) Submission of requests does not constitute approval. Approval authority for all requests for ranges, training areas, facilities on South Post and airspace resides solely with Range Control. Approval should be verified using the RFMSS scheduling system, by phone, or facsimile. Units are required to verify their scheduled training 14 days in advance.

(3) Requests for military demolition training must be submitted through the Fort Devens Directorate of Plans Training and Security, Range Control Officer with concurrence of the installation Safety Director prior to conducting activities employing field expedient procedures or explosives.(See DA PAM 385-63, para 15-1.f.(1).

(4) Requests for demolition training both military and civilian will require a shot plan and a Record of Environmental Consideration (REC) be submitted to the Range

Safety Officer a minimum of fourteen (14) days prior to the training event for processing. The shot plan will require the approval of the Range Officer and the REC will require the approval of the DPW Environmental Chief. Range Control will not approve any demolition training until an approved REC is received in writing from DPW Environmental.

b. Addresses for submission of requests are:

(1) Range Control address:

Commander  
USAG Fort Devens  
Attn:DPTS – Range Control  
57 Queenstown Street, Box 9  
Devens, MA 01434-5409

(2) Range Control email address

**[usarmy.devens.93-sig-bde.list.fort-devens-range-control@mail.mil](mailto:usarmy.devens.93-sig-bde.list.fort-devens-range-control@mail.mil)**

(3) Directorate of Public Works (DPW), Environmental Protection Specialist address:

Commander  
USAG Fort Devens  
ATTN: DPW Environmental Protection Specialist  
30 Quebec Street, Box 10  
Devens, MA 01434-4479

c. Units will submit requests NLT 30 days prior to the start of training.

d. Airspace requests will be submitted using RFMSS to Range Control not later than (NLT) 14 working days prior to the date required.

e. Units will coordinate all target and range support NLT 14 days prior to the event.

f. Units will coordinate for all TASC items NLT 30 days prior to the event.

g. Requests received by Range Control less than 30 days prior to event will be approved based on availability and other factors that may affect training, i.e. Range Control staffing, planned construction, etc.

h. Notify the Range Control of any cancelled training immediately. Failure to cancel could result in a suspension of training privileges.

i. Units that fail to cancel requests and result in being a NOSHOW will receive one warning notice, any subsequent NOSHOWS will result in all future reservations being cancelled and made available to all other units to schedule. NOSHOW units will have RFMSS privileges suspended until the unit Commander replies in writing demonstrating the corrective action being taken to avoid reoccurrences.

j. Unit reconnaissance of scheduled area may be conducted at any time after coordination

with Range Control. Units are encouraged to do so.

k. Physical training may be conducted on South Post by small units on a case-by-case basis. Such training must be coordinated with Range Control.

l. Drivers training may be conducted on the South Post road network after coordination with Range Control.

m. Units that fail to sign for their requested area within two hours of the scheduled time or fail to notify Range Control that they will be late, will be cancelled and reported as a "no-show."

n. Most training facilities are located within training areas. Example: Facility 7, the Nuclear, Biological, Chemical (NBC) chamber is located in Training Area 14A. Scheduling the NBC chamber does not convey ownership of the entire training area to the using unit. If a unit wants to use a facility within a training area that is occupied by another unit, the unit is responsible for obtaining a co-use agreement from the unit owning the training area before Range Control will schedule the facility. Point of contact (POC) for scheduled units may be obtained from Range Control. Each unit will provide the POC telephone numbers and addresses for such coordination.

o. "Blanket" requests will not be honored. All requests will specify the unit to use the area, not just the higher headquarters. Requests will be made for the unit / company (UIC) using the range. Battalions conducting scheduling will schedule a company for each range, requests in the name of a battalion will be denied.

#### **2-5. Training Facility/Area Occupation and Clearance (See Appendix F).**

a. General. There are approximately 3,600 acres available for bivouacs and maneuvers on South Post. A list and description of the areas are included in this regulation (see Appendix B). Most areas are suitable for combat support, combat service support and infantry operations. Training areas are identified by number and sub-divided alphabetically such as 13A, 13B, 13C (See Appendix C).

b. Once the unit has signed for the area, it is considered occupied and use by others is denied. If a unit does not intend to use an area scheduled, it must be released for use by others.

c. Once a unit accepts an area, it is responsible for the condition of the area upon clearing. Units using areas they do not schedule or sign for will be responsible for clearing those areas also.

d. The entire area will be cleared whether used or not. A clearing time and location to meet with a unit representative will be coordinated with Range Control. Allow at least two hours prior to desired departure time. Be ready when the range inspector arrives because the inspector will not wait. A checklist to facilitate clearing is contained in this regulation.

e. Permanent barricades will not be constructed. All temporary barricades, wire or other obstructions will be removed when training is completed and before the area will be cleared. Common use roads or trails will not be blocked.

f. All wire of any type will be removed. Installation of wire communications lines will be IAW TC 24-20 Tactical Wire and Cable Techniques, 3 Oct 1988. No attempt will be made to tap

existing telephone lines or other utilities. CLIMBING UTILITY POLES IS STRICTLY PROHIBITED.

g. Equipment needed to operate a range such as paddles, flags, targets, public address sets or microphones, etc. is either located on the range or will be issued at Range Control headquarters. Range Control will issue staple guns and staples.

h. Damage, loss, or theft of range equipment or facilities. Restitution for any damage, loss, theft of range equipment or facilities is the responsibility of the unit occupying the range or range facility. The occupying unit will make restitution, as required, by immediately repairing any damage, replacing any lost or stolen equipment, or by completing appropriate cash collection arrangements with Directorate of Resource Management (DRM). Arrangements for appropriate restitution must be made before the occupying unit will be cleared from the range by Range Control. Units are responsible for the area until all equipment is turned-in and a range inspector has inspected and cleared the area/range/facility.

i. Access to Facilities: RANGE CONTROL, SAFETY PERSONNEL, MILITARY POLICE, DOD POLICE, PHYSICAL SECURITY AND ENVIRONMENTAL PERSONNEL WILL NOT BE DENIED ACCESS TO ANY RANGE, TRAINING AREA, OR TRAINING FACILITY AND ARE NOT TO BE CHALLENGED BY USE OF PASSWORDS.

## **2-6. Special Coordination.**

a. Special coordination with Range Control is required for:

(1) Targetry not normally supplied by Range Control. Coordinate at least 30 days prior to need. If required material must be ordered, sufficient lead time must be allowed for the supply system to work and Range Control must have available funds; otherwise, the unit must supply special targets with Range Control concurrence. Range Control supplies targetry required for small arms qualification for M16A1/A2/A4, M-4, machine guns, handguns, E and F silhouettes and paper silhouette skins. Range Control cannot supply targetry for use other than on the Fort Devens Range Complex.

(2) Any use of a range or facility for other than its primary intended use. Requests for immediate action drills (IADs) must be accompanied by a written plan with sketch showing weapon firing points. Advanced Rifle Marksmanship (FM 3-22.9 Chapter 7) training must be coordinated with Range Control.

b. Night road marches under blackout conditions require an overlay with checkpoints, route, times and controls and risk assessment. Dismounted night foot marches require the same, if conducted along traveled roads.

c. Training involving excavating, clearing or construction.

d. Fire and Maneuver Exercises:

(1) Live fire combined arms exercises are authorized within the limits of this regulation, AR 385-63, DA Pam 385-63 and the restrictions of the weapons ammunition employed.

(2) Because of the inherent complexity of this type exercise, it is necessary that comprehensive, detailed planning be accomplished between the OIC and the Range Control Officer. This planning should include, but not limited to the following:

- a) Scheme of maneuver and fire support plans.
- b) Weapons, ammunition and pyrotechnics to be fired.
- c) Control of weapons and maneuvering elements.
- d) Survey and safety card requirements.
- e) Terrain and facilities desired.
- f) Draft Risk Assessments should be submitted 30 days prior to desired date of use and the final signed Composite Risk Management Worksheet turned into Range Control the day of the exercise.

### **CHAPTER 3. SAFETY**

**3-1. General.** Safety is the primary concern when conducting any training at Fort Devens. SAFETY WILL NOT BE SACRIFICED FOR THE SAKE OF REALISM. Safety is the first consideration of every soldier and civilian using Fort Devens facilities. Safety is the primary responsibility of every leader down to the smallest element. Reference AR 385-10, DA PAM 385-10, AR 385-63, and DA PAM 385-63.

a. Safety Management Office is located in building 680, and can be contacted at telephone (978) 796-2441, DSN 256-2441, Monday through Friday, 0730-1600.

b. Units are required to appoint a Safety Officer, down to and including company, troop, or battery level. One copy of the duty appointment will be furnished this headquarters, ATTN: IMNE-DEV-SO, 47 Quebec Street, Devens, MA 01434.

c. Safety Officers will:

- (1) Be familiar with DA, FORSCOM and Fort Devens Safety Regulations.
- (2) Establish and maintain an accident prevention program for their unit.
- (3) Ensure the immediate reporting of accidents and injuries as follows:
  - a) Accident Reporting Requirements. Accident reports will be prepared IAW AR 385-40. An information copy of each report will be forwarded to Commander, Fort Devens, ATTN: Installation Safety Office.
  - b) Serious or fatal accidents will be reported by the most expeditious means, through command channels, to the Fort Devens Safety Management Office and Range Control during normal duty hours or DOD Police during off duty hours. Format is as follows: (Refer to AR 385-40, Accident Reporting and Records).  
Initial notification requirements:

Type of Accident.

Time, Date and Location of Occurrence.

Name, Grade, SSN and Unit of Person(s) Involved.  
Nature and Extent of Injury.  
Property Involved and Extent of Damage.

- c) See paragraph 3-6, Casualties, this regulation, for further guidance.
- (4) Supervise the preparation and review of safety reports submitted for accuracy and corrective action.

### **3-2. Composite Risk Management.**

- a. Battalion Commanders are required by DA Pam 385-63 to conduct risk management for all range operations.
- b. Risk decision authority will be based on the overall risk of an activity after application of control measures. The Chief , Army Reserve has established risk acceptance authority as follows:
  - (1) Extremely High risk – First general officer in the chain of command.
  - (2) High risk – Brigade commander or first COL in the chain of command.
  - (3) Moderate risk – Battalion commander or first LTC in the chain of command.
  - (4) Low risk – Company commander or leader (OIC/NCOIC) at execution level.

### **3-3. Safety Certification Program.**

- a. Battalion Commanders are required by DA PAM 385-63, to certify unit range personnel. Commanders may develop their POI to suit their needs or go to the Range Control tab at the Fort Devens website (<https://www.devens.army.mil>) for a sample POI. Battalion commanders will submit a list of certified personnel and the weapon systems they are certified for to Range Control annually NLT 1 October and update it as necessary. Format is contained in Fort Devens Reg 350-3, App. H pg 4. PERSONS NOT CERTIFIED AS OICs/RSOs WILL NOT SIGN FOR RANGES.
- b. Persons in violation of safety procedures may be decertified and the training suspended until the unit appoints another qualified individual. If evidence of unsafe practices is found after a unit has cleared and before another unit uses the area, a letter decertifying the OIC and RSO may be issued by the Range Control Officer.

**Table 3-1  
OIC / RSO appointment requirements (DA PAM 385-63 table 1-1)**

Weapon System	OIC <sup>1</sup>			RSO <sup>1</sup>		
	OFF	WO	NCO	OFF	WO	NCO
Practice hand grenades, subcaliber Training devices; laser devices; firing Devices; simulators and trip flares; small Arms and machineguns	X	X	E6	X	X	E5
Chemical Agents and smokes <sup>2,3</sup>	X	X	E6	X	X	E5
Aerial Gunnery, and air defense weapons; Flamethrowers; live grenades, grenade Launchers; and grenade machineguns; live Mines and demolitions; tank and fighting vehicle cannons; recoilless rifles	X	X	E7	X	X	E6
Field Artillery <sup>4</sup>	X	X	E7	X	X	E6
Mortars	X	X	E6	X	X	E6 <sup>5</sup>
Direct-fire antitank rockets and missiles	X	X	E7	X	X	E6
Live-fire exercises using organic weapons, Squad through company, battery, troop	X	X	E7	X	X	E6
Combined arms live-fire exercises using Outside fire support, troop, battery, squad Platoon, company; or battalion and larger <sup>6</sup>	X	X	E7	X	X	E6

Notes:

<sup>1</sup> Civilians in the grade of GS-07 or above may act as OIC and GS-05 or above, or equivalent for RSO. Civilian contractors may act as OIC/RSO when approved by the installation commander.

<sup>2</sup> OIC and RSO must be nuclear, biological, and chemical (NBC) qualified when conducting NBC or smoke training.

<sup>3</sup> RSO for Marine Corps will be E6 or above for practice hand grenades, Chemical Agents and Smokes. The installation commander may allow E5 to act as RSO for practice hand grenades, Chemical Agents and Smokes.

<sup>4</sup> Use of E7 as OIC is authorized only when approved by the installation commander. Duties of the RSO are normally performed by either the battery executive officer or platoon leader.

<sup>5</sup> RSO for Marine Corps can be E5 for mortar training activities.

<sup>6</sup> OIC will be a field grade officer for battalion or larger CALFEX

**3-4. Safety Briefing:** Commanders will ensure that the OIC and safety personnel receive a safety briefing from Range Control prior to assuming duties. This applies to training exercises and ranges. The OIC will ensure all personnel receive an unexploded ordnance (UXO) and ammunition amnesty program briefing. All late arrivals will be briefed.

### 3-5. Duds / Unexploded Ordnance (UXO).

a. A dud is defined as a failure to function as designed after firing or launching. Example: A 40mm high explosive (HE) round that does not explode on impact is a dud. A 40mm HE round that does not fire is NOT a dud, it is a misfire.

b. DO NOT PICKUP, MOVE, OR IN ANY WAY DISTURB ARTILLERY OR MORTAR PROJECTILES, ROCKETS, GRENADES, FLARES, PYROTECHNIC DEVICES, COMBUSTIBLE DEVICES, BLASTING CAPS, OR FUSE DEVICES. ANY OBJECT NOT READILY IDENTIFIABLE IS TO BE CONSIDERED AND TREATED AS A DUD.

c. Duds will be disposed of only by qualified military explosive ordnance disposal personnel.

d. **Unexploded Ordnance (UXO)** will be marked at a safe distance in a readily identifiable manner and Range Control notified. Mark a UXO hazard area so that other personnel will stay away from it. Proper marking also helps EOD find the area when they respond to your report. Evacuate all nonessential personnel and equipment from a UXO hazard area. A unit representative will remain on-site until a range inspector arrives or other instructions are given by Range Control.

e. Under no circumstances will personnel enter the impact area or go forward of a firing position to locate and mark a dud. A sketch map showing the approximate location of explosive duds will be prepared and given to Range Control.

**3-6. Misfires.** A misfire is a complete failure to fire. It is not a dud. Misfire procedures contained in the publications for the particular weapon system will be followed. The misfire will be returned to the Ammunition Supply Point (ASP). Misfires will not be returned to the guard at the front gate. If ammunition personnel are not on duty, the misfire(s) will be kept at the range and under guard until proper personnel are available to accept the turn-in at the ASP.

### 3-7. Malfunctions.

a. In the event of a weapon or ammunition malfunction other than routine cases, such as misfires, hang fires, and duds, the OIC will:

(1) Suspend firing.

(2) Ensure that the weapon and ammunition involved are retained intact.

(3) Make a report to Range Control. Range Control personnel will then immediately notify the Range Control Officer, the Post Ammunition Officer and the Range Safety Officer.

(4) Continue with the exercise only after release authority has been granted by the Range Control Officer or his designated representative.

b. The Range Control Officer, unit representative, and the Post Safety Officer, will conduct a technical investigation of the incident, and will:

(1) Inform the Range Control Officer, of the incident, findings, actions taken and recommendations.

(2) Request through Command channels the submission of a detailed report if appropriate, from the OIC. This report will be submitted IAW AR 15-6 within 10 days, through channels to Headquarters USAG, Fort Devens MA, ATTN: IMNE-DEV-PLT.

c. The Range Control Officer or his designated representative will:

(1) Notify the Director, Plans, Operations Training and Security, DPTS.

(2) Notify the Post Ammunition Officer, and Post Safety Officer.

(3) Notify the Deputy to the Commander.

(4) Take the necessary action to advise all subordinate commands if the incident involved suspended ammunition.

(5) Authorize continuance of the exercise if circumstances indicate such action is appropriate.

### **3-8. Ammunition and Demolition Restrictions.**

a. Any weapon system, ammunition, or a course of fire not listed on range data sheets in this regulation or approved on a case-by-case basis by Range Control. Members of training units will not bring privately-owned weapons or ammunition to ranges or training areas. Persons found with such items will be removed from South Post.

b. No .50 caliber ammunition, other than SRTA plastic reduced range ammunition and .50 caliber blank ammunition may be fired on South Post ranges.

c. No mortar ammunition larger than 81mm.

d. Facility 7 is the only authorized location for training with chemical agents. No chemical (gas) rounds of any type, chemical suppressant (CS) or other gases, or any riot control agent will be used in any other training area or on any range.

e. No pyrotechnics will be used without daily approval from Range Control, including smoke grenades and trip flares.

f. Lasers. Lasers will not be used on Fort Devens without prior approval of the Safety Office and the Range Control Officer.

**3-9. Smoke Operations.** Smoke will not be employed if the location and wind direction is such that the smoke may drift off the reservation. Personnel will carry protective masks when participating in exercises using smoke. Personnel will mask before:

a. Exposure to any concentration of smoke produced by white smoke grenades or smoke pots (HC smoke) or metallic powder obscurants.

b. When operating in or passing through a smoke haze (visibility greater than 50 meters) and the duration of exposure will exceed 4 hours.

c. When operating in or passing through dense (visibility less than 50 meters) smoke

concentrations, such as smoke blankets or curtains.

- d. Any time exposure to smoke produces breathing difficulties, eye irritation, or discomfort. Such effects on one person may signal the need for all exposed persons to mask.
- e. Using smoke in confined or enclosed areas, such as urban operations (MOUT training). Smoke in confined areas may cause oxygen depletion. Care must be taken to prevent entry into an oxygen deficient area. The protective mask is no protection against oxygen depletion.
- f. Restrictions listed in paragraph 3-9 g for pyrotechnics apply. Used and unused smoke pots and grenades will be turned in to the ASP upon completion of training for disposal.

**3-10. Ammunition Safety, Handling and Storage.** All munitions will be handled and stored IAW DA PAM 385-63;AR 75-15,AR 385-64, DA PAM 385-64, FM 3-34.214 and specific publications pertaining to the ammunition or weapon system.

- a. No ammunition other than blanks will be fired at any location other than a range.

- b. FIRING 40mm SMOKE, GAS ROUNDS, OR FLARES IS STRICTLY PROHIBITED IN ANY TRAINING AREA.

- c. All spent brass will be policed from ranges. Brass and unfired live rounds will be returned to the ASP. Misfires will be returned to the ASP.

- d. Small arms ammunition may be stored on the range overnight. It must be guarded and the guards must have radio communication with Range Control. Demolitions and high-explosive ammunition may not be kept on the range overnight. Ammunition other than blanks will not be kept in training areas, except by an exception to policy.

**e. Explosive Ordnance Disposal Operations:**

- (1) DOD policy is that only military EOD (Explosive Ordnance Disposal) and TEU (Technical Escort Unit) conduct Level 1 responses.

- (2) Requests for disposal (Level 1 Response) will require a Record of Environmental Consideration (REC) be submitted to Range Control and the DPW Environmental Chief. Range Control will not approve any disposal operations until an approved REC is received in writing from DPW Environmental.

- (3) During the conduct of ordnance disposal operations, the number of people in the exclusion zone (EOD Disposal site) must be restricted to the minimum number consistent with safe and efficient operations and include only those personnel directly engaged in the tasks being performed.

- (4) Military EOD personnel within the exclusion zone will receive a safety briefing from the unit RSO. In addition to the briefing requirements of 29CFR 1910.120, the following topics will be included during the briefing:

- a) The measures to be taken in the event of an accident and the location and route to the nearest hospital (call Range Control)

- b) The hazards associated with the site( e.g. UXO, safety, health, etc.)

c) Authorized areas to eat, drink, or smoke.

d) Required PPE (Safety Boots, Ballistic Eyewear, Interceptor Body Armor, Hearing Protection, Kevlar Helmets)

(5) Civilian police officers/bomb technicians will not be allowed on site.

f. **Field Ammunition Supply Points** will only be authorized by the Range Safety Officer and Range Control Officer. Units that have a mission and are staffed by MOS Qualified personnel to operate a Field Ammunition Storage Point may request an area to conduct this operation. The using units must coordinate with the Range Control Officer, prior to storing ammunition on a field site. A written request must be submitted to Range Control to establish a field ASP. Units will be required to comply with all the requirements listed in AR 190-11, AR385-64, DA PAM 385-64 and DA PAM 385-63. The minimum requirements for establishing a field ASP are as follows:

(1) Ammunition must be stacked on pallets or dunnage and separated by type and lot number. Ammunition will be covered by tarps.

(2) Two strands of concertina wire must surround the ASP. The wire will be outlined with engineer tape or white reflective tape.

(3) Security lighting during hours of darkness or reduced visibility.

(4) At least two class 2A (10BC) rated portable fire extinguishers will be provided at the field ASP.

(5) Two roving guards with weapons and loaded magazines (NOT IN THE WEAPON) will conduct continuous patrolling of the ammunition supply point. Guards will have operable flashlights, an access roster, two means of communication to summon assistance.

(6) The location of any field ASP will be determined by the Range Control Officer.

(7) Distances between explosives, roads, buildings, and troops in the open will be computed with cooperation from the Safety Office, ASP and Range Control Officer.

(8) The using unit Commander is responsible for safety, security, communications and posting access at the field ASP, see AR 190-11 for further guidance.

**g. Tracer Ammunition and Pyrotechnic Use.** Pyrotechnics and explosive training simulators will be maintained under positive control at all times. Numerous fires are caused annually due to mishandling of pyrotechnic and disregard of subparagraphs 1-3 below.

(1) Approval must be granted by Range Control prior to the use of any pyrotechnic devices. Permission to use pyrotechnics must be requested daily through Range Control. Permission is granted based on the current fire danger category.

(2) Use of pyrotechnics is prohibited during periods when the fire danger is at category 4 or 5. Permission to use pyrotechnics may be granted during category 3 fire danger classification only with detailed coordination with Range Control. Use will be determined by the fire index for the day and is subject to change as the conditions develop through the day.

(3) OIC and RSO requirements will be maintained while training with pyrotechnics. Units are required to request a training status change to TRAINING WITH PYRO. Range Control will in turn make a RFMSS Firing Desk status change to Training with Pyro. This allows Range Control to positively monitor training activities which are dangerous.

(4) All explosive simulators (e.g., booby traps, smoke grenades, etc.) will be removed from the training areas upon termination of training.

(5) Unexploded pyrotechnics will be handled in accordance with DA Pam 385-63 chapter 3-7.

(6) Units using pyrotechnics without permission will be reported to the Range Control Officer and training utilizing pyrotechnics will cease. The OIC of the unit will be decertified.

**h. Ammunition Amnesty Program** The ammunition amnesty program is necessary to ensure maximum recovery of military ammunition, explosives, and residue items. The program is established to provide an opportunity for individuals to return ammunition, which has been stolen, misplaced, or erroneously left in the possession of a unit after turn-in and reconciliation has been finalized. These returns can be made without fear of prosecution.(see DA Pam 710-2-1 Chapter 11-19).

- 1) During normal operating hours, Fort Devens ASP personnel will accept delivery of all items turned in under the Amnesty Program. Ammunition items must be handed directly to an ASP operator at the ASP. No paperwork is required.
- 2) During non-duty hours contact the DOD Police at 978-796-3333.
- 3) The Amnesty Program is not a substitute for normal turn-in procedures and will not be used to avoid standard supply procedures. Units discovering ammunition on hand after having reconciled their account are authorized to make an amended turn-in to the ASP.
- 4) EOD personnel will handle suspect and/or unidentified ammunition / explosives found on post.
- 5) Unit commanders should perform quarterly briefings on the Amnesty Program procedures. A refresher should be given during pre-firing briefings.

### **3-11. Restricted Areas.**

a. Forward of the target line on all 25-meter ranges.

b. Forward of the firing line on all other ranges.

c. The impact area is defined by Harvard Road on the south, Firebreak Road on the west, Shoefelt Road on the east and beyond the 300-meter target line on ECHO Range, the target pits on GOLF Range and Turnpike Road to Firebreak Road on the north. NO PERSON WILL ENTER THE IMPACT AREA WITHOUT RANGE CONTROL AUTHORIZATION AND/OR ESCORT.

- d. DELTA Range, forward of the firing line, is absolutely off limits to unauthorized personnel.
- e. Any road, trail, or area beyond closed range gates or other Range Control barricades.
- f. Archaeological sites and environmental cleanup sites. Sites will be physically marked or briefed to the user.
- g. Contractor sites unless authorized by the contractor and Range Control. Such sites will be physically marked or briefed to the user.
- h. The Oxbow Wildlife Refuge.
- i. Tracked vehicles in any training areas other than TA6 and TA7 unless specifically authorized by Range Control and the ITAMS Coordinator.
- j. Vehicle use on Turner DZ may be restricted due to weather conditions. Tracked vehicles will not operate on the grassy surfaces at any time. Tracked vehicles may use Shoefelt Road across the DZ and operate along the tree line south of the DZ. No other roads or trails on the DZ are to be used by tracked vehicles. Other vehicle operations are authorized with specific coordination with Range Control or the ITAMS Coordinator.
- k. Any structure, range, facility, or training area not signed for or otherwise authorized for use. Violators will be required to clear the area, in addition to those scheduled and signed for.
- l. Ground water monitoring wells located around South Post, to include ranges and the impact area, are off limits to unauthorized personnel. Units will not conduct any activities in the immediate location of the wells. All wells are painted bright orange and have protective barriers around them.

### **3-12. Communications**

- a. Range Control is the net control station (NCS) for the range communication network. The range net is a clear text, directed safety net. Units will use the area, range, or facility they are occupying as their call sign. If two or more units are using the same area, they will use their unit designation and area as their call sign. Internal communications will not be conducted on the range net. All communications directed to, or originating from, Range Control will be on the BK Radio Net.
- b. Military units are responsible for providing their own communications equipment. Failure to do so may result in denial of requested facilities. Range Control may provide commercial hand held radios to non-military organizations, if sufficient commercial BK Radios are on-hand. The first priority for Range Control radios is Range Control use.
- c. All units using any range, training area, or facility are required to maintain continuous communications with Range Control. Radio checks will be made with Range Control hourly. A unit headquarters or tactical operations center (TOC) may make the hourly radio checks for subordinate units, if they maintain internal communications with the units.
- d. All units will give Range Control the eight-digit grid coordinate of their command post within one hour of occupation.

e. Units will have enough radios to conduct internal communications and monitor the range net. An operator will be assigned to monitor the range net at all times. Cease-fires, notice of emergency messages and other traffic for units are passed by radio. The OIC / RSO will impose an immediate cease – fire on their unit if communication with Range Control is lost. Units that consistently fail to respond will have training suspended until communications are established and maintained.

f. There are no mag drops down range on South Post. Telephone service is provided at Echo Range Tower, Echo Classroom, Hotel Range Tower and the F-11 Classroom / AAR Facility.

g. **After hours communication.** Before Range Control personnel go off duty, the range technician will notify the DOD Police and inform the training units in the field to communicate directly with the DOD police. Units will monitor the radio at all times and perform Radio Checks every “four (4) hours” with the DOD Police when in non live-fire Status. Upon range personnel returning to duty, in the morning, the range technician will contact the DOD Police to assume control of South Post unit activities.

**h. Emergency communications after hours.**

(1) Call the DOD Police on the BK Radio Net. If radio contact can not be established perform the following:

a) Call the DOD Police on a cell phone, (978) 796-3333.

b) Send a runner to Range Control to call the DOD police from the phone located outside of Range Control, this phone call box uses only the last 4 digits (3333).

(2) If the DOD Police **cannot** be contacted call 9-911 from outside of building 4217A (Range Control Office) or Devens Dispatch at (978) 772-7200, or as a last resort 911 from your cell phone. A 911 call should never be made from a down range location as the responding agency will not know your location within the Range Complex.

**3-13. Vehicle Safety.**

a. Seatbelts will be worn by all occupants. Head protection (combat vehicle crewman-approved ballistic helmet or flight helmet as appropriate) will be worn by all personnel operating or riding as a passenger in Army tactical vehicles in the field.

b. All vehicles entering or moving in a bivouac area after dusk will have a flashlight-equipped ground guide. Vehicles larger than 1 ½ tons will have a front and rear ground guide.

c. A rear ground guide is required for any tactical vehicle when backing up.

d. Speed limits on South Post are:

(1) 25 mph on paved roads.

(2) 10 mph on gravel or improved hard-packed roads; in congested areas when

passing vehicles are parked close to the traveled way; when passing marching troops or troops dismounting from vehicles.

(3) 10 mph on trails and in training areas.

e. Vehicles that become stuck or otherwise inoperable are the driver's/unit's responsibility. Range Control will not tow any vehicle.

f. Night Vision Devices.

(1) Commanders will manage NVD training programs according to AR 600-55 and other applicable publications and determine what type of night training program best supports the unit mission.

(2) Qualification training will include sequential instruction in both academic and night driving tasks. A qualified NVD instructor must supervise all instruction and an NVD-equipped instructor will be in the vehicle during night driver training.

(3) Units will provide Range Control with a copy of the Commanders approved Risk Assessment of this training prior to conducting the training.

g. The driver or vehicle commander of all vehicles entering South Post will report to Range Control before proceeding onto South Post.

h. **Road Condition Classifications.** Road classifications provide information on general road conditions and inform Fort Devens garrison and tenant organizations on government vehicle operating restrictions. These conditions are posted at the entry control point for the Range Complex. Range Control will inform units when these conditions change over the Range Safety Net. The process for classification and further guidance is contained in Fort Devens Circular 115-1. The road classification conditions are as follows:

(1) **GREEN:** No safety threat due to weather conditions. Proceed with normal operations.

(2) **AMBER:** Difficult to hazardous road conditions. Drivers must decrease speed and increase stopping and following distances for safe operations. Although roads are icy or snow packed, road-clearing operations are making roads passable. On post, speed limits reduced to 20 MPH, or as posted if already lower than 20 MPH. All operators of military vehicles must receive approval by their commander prior to driving on USAG Ft. Devens during amber conditions.

(3) **RED:** Road conditions are extremely hazardous, often presenting vehicle operators with difficult or no stopping conditions. Road clearing operations are not able to keep Priority 1 through Priority 3 roads easily passable. Only mission essential vehicle operations permitted. During RED conditions, all on post driving speeds are limited to 10 MPH. All military vehicle operators must have written, signed permission by the first LTC in their chain of command in order to drive on USAG Ft. Devens. Detachments or other organizations without a LTC on duty may receive written approval from the Garrison Commander on a case-by-case basis. In the event the Garrison Commander is unavailable, the Garrison Executive Officer (XO) has delegation authority for this action. Failure to have written authorization on hand while operating a military vehicle during RED conditions is a traffic offense and the Fort Devens Commander will inform the offender's Chain of Command. Repeat offenders may lose all civilian and military driving privileges on USAG Ft.

Devens.

(4) **BLACK:** Despite road clearing operations, roads are nearly impassable. Often a local state of emergency exists and road-clearing operations may have ceased. Only DPW road crews and USAG Ft. Devens Police Services may operate a military vehicle on USAG Ft. Devens during BLACK conditions. Any exceptions must receive written approval from the Garrison Commander. In the event the Garrison Commander is unavailable, the Garrison XO has delegation authority for this action. Failure to have written authorization is a traffic offense and the USAG Ft. Devens Commander will inform the offender's chain of command. Unauthorized operations of a military vehicle during BLACK conditions will result in automatic suspension of all civilian and military privileges on USAG Ft. Devens.

i. **Privately Owned Vehicles:** Exceptions will be made on a case-by-case basis by Range Control for privately-owned vehicles (POVs) in training areas and ranges. No POV's will be authorized down Range after noontime on Friday through 0630 hours Monday. POVs driven by law enforcement personnel are considered to be government vehicles (Monday through 1200 hours on Friday). Off duty law enforcement officers will not be allowed to bring their civilian police vehicles into the Range Complex while acting as members of the Army Reserve or National Guard. All POVs authorized on South Post will have a pass issued by Range Control. Training units will not park POVs in front of Range Control headquarters. Unauthorized POVs parked on South Post, including at Range Control headquarters, are subject to ticketing and towing at the owner's expense. Privately owned vehicles may be operated and parked on range roads, during hunting season. These authorized hunters will display their hunter registration letter on the dashboard of the vehicle. No privately owned motorcycles, dirt bikes, three-or four wheeled all terrain vehicles (ATV), bicycles, or other off-road vehicles are authorized in the Fort Devens Training Complex, on any range or in any training area.

j. Climbing telephone or electric poles is expressly prohibited. Signs will not be posted on utility poles. Any unit having a mission requiring climbing utility poles, carrying live wires, will have written approval from the Installation Safety Officer and DPW before doing so.

**3-14. Alcoholic Beverages.** ALCOHOLIC BEVERAGES ARE EXPRESSLY PROHIBITED ON ALL RANGES, TRAINING AREAS, AND FACILITIES. ALL USERS OF RANGES AND TRAINING FACILITIES, REGARDLESS OF THEIR STATUS, MAY NOT POSSESS, TRANSPORT, OR CONSUME ALCOHOLIC BEVERAGES WHILE THEY ARE ON ANY RANGES AND TRAINING AREAS. (See Fort Devens Reg 215-1, 17 Sep 2007)

**3-15. Civilians.** Civilians will not be allowed onto the South Post tactical training areas unless specifically authorized by Range Control.

a. Units that intend to bring civilians onto the Range Complex must request permission in writing from the Range Control Officer at least 2 weeks in advance. This policy is also applicable to any civilian law enforcement agency that has been issued a license to utilize range facilities, in which case the term civilian would be any person not employed by that department as a civilian police official.

b. At no time will civilians be allowed to handle or fire weapons, without approval by the

Range Officer.

c. Any civilian or family member under the age of 18 is prohibited from the use of firearms, unless accompanied and supervised by a parent or legal guardian over the age of 18. Minors will be accompanied by their parent or legal guardian at all times.

d. Units that have contract instructors must also comply with the above requirements to allow these personnel into the Range Complex.

**3-16. Range fire prevention and firefighting.**

a. Applicability. These measures are applicable to all portions of the Fort Devens Range Complex.

b. The Range Control Officer, is the Wildland Fire Officer.

c. Fire prevention and protection.

(1) All units conducting operations on the installation will maintain continuing programs in fire prevention, prompt reporting of fires, and fire fighting. The following points are to be emphasized:

a) All flammable debris must be scraped away from demolition pits. A distance of 10 meters from the edge of the pit or fire will be maintained.

b) No open fires are permitted on the installation.

c) Operate tent stoves IAW applicable TMs and the unit SOP. Clear grass and flammable materials away from the stove by at least 1 meter. A 10-lb ABC fire extinguisher must be available in the tent, see Appendix E.

d) Lighted smoking materials and matches will not be discarded from vehicles.

e) No smoking is allowed within 50 meters of ammunition or petroleum products.

(2) The position commander (OIC) of mortar firing points will ensure proper disposition (burning) of all excess powder charges or propellant. The burning of excess powder charges at each firing point is authorized. When a burning area has been designated by the unit, transport charges or increments to the burning area in a metal container in a cargo type vehicle, which has a metal cargo bed, the required explosive signs, and the required operational fire extinguishers. No, other material, equipment, or passengers will be transported in the cargo bed during such movements. (THE ONLY AREAS AUTHORIZED FOR POWDER BURNING ARE MORTAR FIRING POINTS.) Powder burning will be accomplished as follows:

a) Contact Range Control to determine fire danger category.

b) All personnel and equipment (except a five-man burning detail) will be at least 50 feet from the burning site.

c) Only those powder-burning areas indicated above may be used to burn excess powder. (Burning must be done in short strings in the center of the area

and string will not exceed 50 feet in length, 12 inches wide, and be only a single layer deep). This will allow the explosive material to be gradually exposed to the flame to prevent sudden, uncontrolled flare-ups of burning explosives.

d) Ignite the exposed explosive from the windward (downwind) side. Causing the excess powder to burn against the wind direction helps keep the fire burning slowly and under control.

e) Sufficient fire fighting equipment and unit personnel will be present in the vicinity of the burning site to control the fire. In any case, have at least 10 gallons of water, one shovel, nearby and one operable fire extinguisher.

f) Excess powder increments will be burned only during fire code 1 and 2 (see paragraph 3-15E). Unused powder increments will be packed in metal containers and returned to the ammunition supply point. Vehicle requirements for transporting unused powder increments will be packed in metal containers and returned to the ammunition supply point. Vehicle requirements for transporting unused powder increments are the same as outlined in paragraph 15C(2), above.

d. Fires.

(1) Because fire potential is so great at Fort Devens, all field units will be prepared to assist in fighting any fire, which might occur. The OIC of firing issues an order to "cease fire", and notifies Range Control, (978) 796-2723/2155, giving name, range, and unit. OIC of Firing Ranges will have at minimum a 5-man detail standing by to assist Range Control. At no time, will personnel enter the impact area to fight the fire, unless under the supervision of Range Control fire fighting personnel. This is a year-round requirement.

(2) Upon discovering a fire outside the impact area, contact Range Control or after duty hours, contact the DOD Police at (978) 796-3333. The unit commander/OIC of an exercise will move personnel and equipment away from the fire maintaining accountability of personnel. Unit will not attempt to extinguish fire unless directed by Range Control.

(3) Anyone observing a fire will report it immediately to Range Control (978) 796-2723/2155 or after duty hours to the DOD Police, (978) 796-3333.

(4) Personnel of Range Control will report Range/Training Area fires to the Devens Fire Department.

(5) The Range Control staff of trained wildland firefighters will take the necessary actions to extinguish the fire. Responsibility for coordinating the alert or ordering into action standby or supplemental fire fighting forces and/or equipment is assigned to the Fort Devens Range Complex Wildland Fire Officer or his representative at the scene of the fire.

e. Range fire conditions.

(1) The condition will be posted on the fire danger sign at the entrance to Range Control.

CODE

POSSIBILITY OF FIRES

RED 5	EXTREME - No firing of any weapon or pyrotechnical device
ORANGE 4	CRITICAL - No high explosives, tracer. Burn barrel for pyrotechnics
YELLOW 3	HIGH - Range Control discretion
BLUE 2	MEDIUM - No restrictions
GREEN 1	LOW - No restrictions

(2) Range Control will coordinate with the Massachusetts State Fire Warden at 0730 daily to obtain current fire conditions.

**3-17. Aircraft.** Military aircraft with FM capability will call Range Control on FM frequency (FM 38.850Mhz) before entering South Post airspace. Pilots will call Range Control telephonically before takeoff to schedule training missions and receive a range briefing. For aircraft conducting cargo or personnel drops at Turner DZ, the DZSO will maintain communications with Range Control. Any person observing aircraft, apparently in the SDZ for a range, will immediately call a cease-fire and contact Range Control. Firing will not resume until Range Control gives permission. Airspace is denied when mortar fire is being conducted. Helicopters and any other non-participating aircraft will remain one-half nautical mile from the perimeter of the DZ when cargo or personnel drops are in progress. See Appendix D.

**3-18. Unsafe Acts or Conditions.** Anyone observing an unsafe act or condition has the authority and obligation to call for an immediate "CEASE-FIRE" or halt training being conducted. If correctable on-the-spot, training may resume after the unsafe condition no longer exists. If the condition cannot be rectified, Range Control should be notified immediately. Firing may not resume without permission from Range Control.

**3-19. Water Training.** Any training in or over water will be in strict accordance with Army Regulation 385-10, The Army Safety Program and DA Pamphlet 385-10, The Army Safety Program. Training involving water activities may be conducted at Slaterock Pond, Clear Pond and Spectacle Pond. Water training activities will require the following, as a minimum:

- a. All personnel will be categorized and distinctively marked as swimmers or non-swimmers.
- b. U.S. Coast Guard approved life jackets/belts will be worn.
- c. The unit OIC will ensure all personnel receive a water safety briefing.
- d. Helmets will not have the chinstrap fastened.
- e. A safety line will be used and will extend the full distance to be traversed. Gear will be secured to the line and not personnel.
- f. A flat-bottomed boat will be on-site and equipped with life rings and a safety pole. A qualified lifeguard will man the boat.

g. At least two physically fit, Red Cross certified lifeguards with lifesaving equipment, will be present during training. They will be appropriately clothed for immediate rescue.

**3-20. Tracked Vehicles.** THE ONLY AREAS AUTHORIZED FOR TRACKED VEHICLE TRAINING OR USE ARE TRAINING AREAS 6 AND 7.

a. All tracked vehicle entry and exit for South Post will be through the Entry Control Point entrance to the Range Complex and must be transported on removable gooseneck trailers. Speed limit is not to exceed 15 mph. All turns on paved surfaces will be gradual and fully controlled. Extreme caution will be used on hot days when the pavement is soft. Tracked vehicles will not ride the shoulders of roads. The Still River Bridge, entering South Post, has a vehicle weight classification of 20 tons. When crossing this bridge:

- (1) Ground guides will be used.
- (2) All crew members except the driver will dismount.
- (3) Stay astride the center line.
- (4) One vehicle at a time on the bridge. No personnel on the bridge at the same time.
- (5) Do not exceed 5 mph. Do not accelerate or brake while on the bridge.
- (6) If it is necessary to tow a tracked vehicle across the bridge, the towed vehicle will have to be winched across.

b. Tracked vehicles will be escorted by a wheeled vehicle leading the column from the Route 2 underpass to the training area. Speed limit will not exceed 10 mph when passing troops, parked vehicles along the road, or congested areas.

c. Ground guides will be used when moving within a bivouac or assembly area.

d. Tracked vehicles will not operate on the grassy surfaces of Turner DZ at any time. The trails on the DZ will not be used if soft or muddy enough that ruts occur.

e. Units are responsible for repairing damage caused by tracked vehicles to roads or training areas before the unit departs. If repairs are beyond the unit's capability, the unit may be billed for restoration costs as determined by the ITAMS coordinator.

f. To preclude excessive damage to terrain during periods when the ground may be abnormally soft, tracked vehicle training may be limited or cancelled. Range Control and/or the ITAMS coordinator will make determination.

**3-21. Range Safety.** All safety requirements contained in this regulation, in DA PAM 385-63 and the safety guidelines or warnings in the weapon FMs/TMs will be complied with. Safety equipment is the responsibility of the user unit, see Appendix K for required PPE.

a. Blank adapters and MILES equipment will be removed from all weapons on the range.

b. No running or horseplay on ranges.

c. Personal weapons and ammunition will not be fired or brought to the range by unit

personnel.

- d. Live ammunition will not be present at any location where blank ammunition is to be fired, except for the UAC and Automated Live Fire Shoot House.
- e. All persons on the range, including visitors will have hearing protection.
- f. Helmets are required in the pits on any known distance range.
- g. The appropriate FMs/TMs for the weapons being fired and the range book issued by Range Control must be present on the range.
- h. A ten pound B-C fire extinguisher must be present. Dry chemical or CO<sub>2</sub> are the only types authorized.
- i. Constant radio communication with Range Control must be maintained.

**3-22. Opposing Forces (OPFOR) / Aggressor actions.** Any unit or testing team using aggressor personnel for a field training exercise will have a training plan briefed to Range Control which covers communications, pyrotechnics, heat and cold. The unit will comply with the following:

- a. Aggressors will be dressed distinctively, to be easily recognized as aggressor.
- b. All aggressor activity will be coordinated with OIC of the exercise/problem. Aggressor will not undertake any operation which may create an unsafe situation.
- c. Aggressor attacks will be executed according to a definite coordinated, planned schedule.
- d. There will be an OC(Observer Controller) of aggressors who shall be present at aggressor actions. His primary duty is to ensure each is conducted safely. Each safety representative is responsible for proper care and handling of ammunition issued within his assigned unit of responsibility. An inspection will be conducted to ensure that all cartridges are blank ammunition. The safety representative will ensure that no live ammunition is presented within area/unit of responsibility.

The OC:

- (1) Will carry no weapon and will not actively participate in aggressor actions. He will ensure no actions are undertaken which are prejudicial to safety.
- (2) Will ensure that blank adapters are securely fitted to individual weapons.
- (3) Must have continuous radio contact with the exercise/problem director.

- e. Actual body contact between aggressors and opposing unit personnel is prohibited. Such unsafe acts as actual fighting, rock throwing, using rifle butts, etc. will not be tolerated. A distance of 10 meters will be maintained between the exercise unit and aggressors.
- f. No aggressor action will be undertaken in an area where live ammunition is being fired.
- g. Blank cartridges will not be fired at individuals. CCMCK (UTM) cartridges may be used, all safety equipment and procedures require by TM 9-6920-3700-10 and outlined in Appendix K of this regulation will be followed. Units planning to train with this ammunition

will coordinate with Range Control for an area that can facilitate the training and it's SDZ (Surface Danger Zone).

h. All aggressor personnel will be accounted for by name at termination of an exercise.

**3-23. Medical Support.** Ambulances or emergency medical vehicles are not required to standby at every range, weapons training facility, or training area. Each unit should have at a minimum, one soldier per active range who is certified as a "combat lifesaver". Each soldier acting as a "combat lifesaver" will have their own medical aid bag, litter, and radio communications. Commanders who opt to not have this minimum met must clearly identify this in the Composite Risk Management Worksheet for this training event. All requests for medical evacuation (Ambulance) will be made to Range Control using the Range Safety net or call (978)-796-2723/2155. Units should never call 911 as this will go into a civilian call center that could be unfamiliar with Fort Devens and be unable to find the units location.

**3-24. Basic Weapons Safety.** The following safety initiatives will be complied with:

a. M16A1/A2/A4/M4 rifles will have the magazines removed, bolt to the rear and dust cover open, and mechanical safety on.

b. Pistols will have the magazines removed and slide locked to the rear. The slide may be forward on holstered weapons.

c. M240 machine guns and squad automatic weapons (M249s) will have the feed cover open, bolt forward and mechanical safety on.

d. Shotguns will have the bolt open and magazine empty.

e. Blank firing adapters and MILES equipment will be removed from all weapons on live fire ranges.

f. All weapons will have a one-piece clearing rod passed through the barrel before removal from the firing line and before removal from the range.

g. No one will go forward of the firing line until all weapons are grounded, cleared and no person is handling a weapon.

h. Weapons will be pointed up and downrange at all times.

**3-25. Accident Reporting.**

a. Any training or firing accident will be reported to Range Control immediately. If medical evacuation is required, Range Control will call for an ambulance. If possible, the unit requiring an ambulance will have an escort vehicle at Range Control to meet the ambulance. If an escort is not possible, a guide will meet the ambulance on the nearest main road closest to the accident site. The unit will complete DA Form 285 and send it to the installation Safety Officer IAW DA Pamphlet 385-40, or leave form with Range Control prior to clearing the facility.

b. Ambulance support is provided by civilian sources and should be called for in emergency situations only. Units with organic transportation should consider utilizing their own assets before calling for ambulance assistance.

**3-26. Unsafe Conditions and Incident Reporting.** Any unsafe condition of ranges, training areas, or facilities should be reported to Range Control for correction. An incident is a violation of regulations or act that could result in an accident, but does not. Units should take immediate action to correct incidents, if possible. If the unit cannot correct the problem, report it to Range Control.

**3-27. Weather Warnings.** Severe weather warnings will be broadcast over the Range Control net as they are received during normal hours of operations. The Wet Bulb Globe Temperature (WGBT) readings will be broadcast hourly when temperature reaches 78 degrees Fahrenheit or above. It is the training unit commander's responsibility to take whatever action is required to protect the soldier. Range Control does not cancel or modify training due to weather, except when snow/ice makes roads impassable or ranges unusable.

## **CHAPTER 4. ENVIRONMENTAL ISSUES**

### **4-1. Responsibilities.**

a. Users of the Fort Devens must follow the Fort Devens Environmental Standing Operating Procedures. This SOP may be obtained from the DPW, Environmental Division, 30 Quebec Street, Devens, MA. That information provides units with guidance and documentation required for environmental compliance while using the Fort Devens.

b. Units must appoint an Environmental Coordinator and alternate, who will be responsible for coordinating environmental affairs for each training event. The Environmental Coordinator will:

(1) Ensure the Fort Devens Environmental Documentation Form is properly completed and on file at the Environmental Division, Box 10, Devens, MA, 01434, prior to the start of the training year and when information changes.

(2) Submit a Record of Environmental Consideration (REC) (see Appendix H) to Environmental Division 30 days prior to any field training exercise (FTX).

(3) Requests for demolition training will require a shot plan and a Record of Environmental Consideration (REC) be submitted to the Range Safety Officer a minimum of fourteen (14) days prior to the training event for processing.

(4) Ensure environmental preparedness of the unit, using the commander's Environmental Checklist for guidance.

(5) Be familiar with AR 200-1, Environmental Protection and Enhancement.

(6) Ensure the environmental protection of all training areas through good management practices, proper containment of equipment, and the prevention of and reporting of all spills of oil and hazardous materials. All spills will immediately be reported to Range Control. Proper reports will be filed IAW the Environmental SOP.

(7) Units will properly clear their training area/ranges through Range Control.

**4-2. Environmental Protection.** All training will be conducted in compliance with federal, state and local environmental laws, regulations and directives. Every individual is responsible for prevention of damage or pollution. UNITS WILL BE HELD ACCOUNTABLE FOR REMOVAL AND DISPOSAL OF HAZARDOUS WASTE CREATED OR CAUSED BY THE UNIT.

UNITS WILL BE HELD RESPONSIBLE FOR MANEUVER/ENVIRONMENTAL DAMAGE. Units must file environmental documentation with the DPW Environmental Officer before scheduling training.

**4-3. Refueling.** There are three refueling points constructed specifically for vehicle refueling. They are located in training areas 9A, 10B and 14A. Each refueling point is large enough to contain two 5,000-gallon tankers. Schedule refueling points as any other training facility. A unit using a refueling point must have a co-use agreement with any other unit in the training area, unless the refueling unit owns the area.

a. Every precaution will be taken not to contaminate the refueling points since accumulated water must be pumped out (14A) or drained (9A/10B) periodically. THESE REFUELING POINTS DO NOT HAVE OIL/WATER SEPARATION CAPABILITIES. Vehicles will park on heavy plastic sheeting, use drip pans when refueling and place nozzles in drip pans when not in use. Any drips or spills will be immediately cleaned up and disposed of in a container supplied by the unit for that purpose.

b. Units will inform Range Control of their intent to conduct any refueling operations. Range Control will ensure that the drains on the refuel points (9A/10B) are closed prior to any use of these facilities.

c. Fuel vehicles will report to Range Control before entering South Post for inspection. All fuel vehicles will have:

- (1) An operator certified to dispense Petroleum, Oil and Lubricant (POL) products.
- (2) Ground rods, plastic sheeting, absorbent materials, drip pans, a shovel, sandbags, a fire extinguisher and a nozzle drip container.
- (3) No leaks. Leaking vehicles will be denied entry to South Post.

NOTE: If the above requirements are not met, refueling will not be conducted.

d. Refueling vehicles or Portable Fuel Pods (PFPs) parked any place other than a specially constructed refuel point will be parked in a plastic lined, sandbagged depression large enough to contain 110% of the contents. Accumulated water will be removed periodically. Any POL sheen or contamination must be removed using sorbent pads or oil removers before the water is drained to the ground.

e. Use and Storage of Portable Fuel Pods Procedures. All fuel tankers, fuel trailers, 5-gallon cans of fuel, generators and heaters are designated as a PFP for the purposes of this regulation and the following applies:

- (1) Fuel pods shall not be filled more than 95% full to prevent "burping."
- (2) A licensed fuel handler shall be present at all times during fuel transfer operations.
- (3) Vehicle refueling will only take place in the refueling points in areas 9A, 10B and 14A. Refueling vehicles at any other location on South Post is strictly prohibited.
- (4) A secondary containment shall be provided around any PFP parked or stored outside the refueling points and containing fuel. Secondary containment must be

constructed of material impervious to the fuel being stored. This spill containment area shall be of sufficient volume to contain 100% of PFP contents plus six inches of freeboard for precipitation. Secondary containment shall be inspected daily and accumulated precipitation drained to ground. IF THERE IS NO SHEEN ON THE WATER. Any sheen or contamination must be removed using sorbent pads or oil removers before draining. A LOG MUST BE KEPT OF ALL INSPECTIONS AND DISCHARGES.

(5) When a PFP contains fuel, specific procedures will be implemented by the unit to ensure that the status of the PFP and spill containment is checked daily, that all precipitation is inspected before discharge and that no liquid containing a sheen of oil is allowed to be discharged. Records of such inspections shall be maintained showing the inspector's name, the date, time, findings and signature.

(6) A spill response kit, as described in the unit Spill Prevention, Control and Countermeasures Plan (SPCCP) shall be present during all fuel transfer operations.

(7) All PFPs should be stored empty. If not stored empty, they must have spill containment.

(8) All valves shall be capped, locked, or lock wired shut during transport and prolonged periods of non-use if the PFP contains fuel.

**4-4. Maintenance Operations.** Normally, vehicle maintenance beyond operator level will not be performed in the field on South Post. Maintenance operations requiring fluid changes, removal/replacement of major components (engines, transmissions, etc.) require a Record of Environmental Consideration (REC) approval by the Directorate of Public Works (DPW), Environmental Officer and Range Control to ensure proper spill prevention measures, handling and disposal of waste.

**4-5. Spill Response Procedures.** If a spill occurs, the following actions will be taken:

a. Contain the spill. Cover all drains in the path of the spilled liquid. Use sorbent pads, sorbent material, or containment booms to divert the liquid away from drains, culverts, drainage ditches, bodies of water and to stop the spill from spreading.

b. On South Post, notify Range Control at (978) 796-2723/2155; on main post, notify DOD Police (978) 796-3333, or during normal business hours, notify Directorate of Public Works (DPW), Environmental Officer (EO) at (978) 796-2565. Follow "Use Immediate Action Drill" procedures. Be prepared to give the following information:

- (1) The amount of material spilled.
- (2) The name of the material spilled.
- (3) Where the spill is located.
- (4) Time and date of the spill.
- (5) Whether or not the spill is contained.
- (6) Your name and title.

(7) Your telephone number.

c. Spill cleanup will be accomplished by using proper protective equipment for the specific spilled material. If material is POL or solvents, clean the area with sorbent pads and material. All contaminated soil will be shoveled into a UN-approved, open top, 55-gallon Department of Transportation (DOT) drum and covered securely. If the amount of soil is too much to be put in drums, shovel all contaminated soil onto a plastic tarp and cover with plastic. All containers and piles will be labeled with the date of the spill, the substance spilled and the hazard associated with the material. Labels must include the words "Hazardous Waste."

#### **4-6. Hazardous Waste.**

a. All spills of fuel, oil, solvents, etc., must be cleaned up immediately, regardless of how small they may be. Spills will be reported to Range Control as they occur.

b. The unit is responsible for digging up and disposing of all soil contaminated by POL products. The DPW, EO will normally be the person who determines when the cleanup is complete. Contaminated soil and waste will be deposited in a hazardous waste drum provided by the unit. Drums must be labeled IAW State and Federal environmental regulations. The unit may transport drums to Range Control for temporary storage in a hazardous material storage shed. If there is no room in the shed, the unit must make other arrangements for storage or disposal. Hazardous waste will not be transported off South Post by units. Holes will be refilled with clean fill.

c. Drip pans with sorbent material will be placed under all tent heaters, heater fuel cans, fuel relay pumps, cook stoves and all 5-gallon refueling cans. Oil-soaked sorbent pads and rags must be treated separately as if hazardous waste. Such oil-impacted material should be containerized separately, dated and labeled as spill clean-up material. Sorbent material not contaminated will be stored by the unit for re-use.

#### **4-7. Solid Waste.** Units are responsible for disposal of all trash.

a. Dumpsters located at Range Control or other locations on South Post may be used for trash disposal. No wood, metal, tires, or hazardous materials will be placed in the dumpsters. If the dumpsters are full, the unit must take the trash with them. Trash and garbage will not be placed in containers designated for recycled cardboard.

b. Food products, trash, garbage and grease from mess operations will not be burned or buried. Soakage pits may be dug for disposal of gray water only. Soakage pits will be constructed IAW field sanitation publications. A soakage pit four feet square and four feet deep will handle 200 gallons of liquid per day in well-drained soil.

c. Field latrines of any type will not be used on South Post. **Units will arrange for sufficient portable latrines through the DPTS Billeting Office (978) 796-3155, See Appendix L.** There are portable latrines located permanently on each range and facility. They will be moved by the contractor only. **THERE ARE NO PORTABLE LATRINES IN THE TRAINING AREAS.**

**4-8. Water Resources.** The Massachusetts Wetlands Protection Act decrees that no construction or training shall take place that would cause, directly or indirectly, alteration from erosion or pollution of streams, ponds, rivers, lakes, or any other wetland on the installation, or within 100 feet of such areas.

a. Water Purification Operations: Water will not be taken or drained from any body of water without DPW, EO or Natural Resources Manager's approval and Range Control concurrence. Decontamination sites, showers and mess operations should use water tankers. The only sites authorized for water purification operations are in Training Area 9A and Training Area 14.

b. Potable Water Source: The only potable water source on South Post is the water point located on Dixie Road opposite ECHO Range. You may sign for the hydrant wrench at Range Control. Let the water run for three minutes to flush the hoses before filling containers. No washing of vehicles will be done at any water point or any other location on South Post.

#### **4-9. Landscape and Vegetation.**

a. Live vegetation will not be cut for any reason unless marked for removal by the Natural Resources Manager. Cutting wood is by permit only. Permits are available from the Natural Resources Manager. Persons wishing to cut wood on South Post will coordinate with Range Control prior to entering the training areas.

b. Trees or plants will not be taken for transplanting.

c. Existing trails and roads will be used to the maximum extent possible to minimize erosion and terrain damage. Vehicles, especially tracked vehicles, will avoid road shoulders and ditches.

d. Fighting positions and other dug emplacements will be filled and mounded to allow for settling. They will not be filled with logs, trash, rocks, or unsuitable debris. Above ground emplacements will be dismantled and the area returned to its original natural state when clearing training areas. Track vehicles are not authorized on Turner Drop Zone (DZ) at any time. Wheeled vehicles are authorized on Turner DZ with the authorization from Range Control.

e. Digging of anything more than hasty or individual fighting positions cover in d. above will require a dig permit. Dig permits will be accompanied with a REC (Appendix H) and be submitted to Range Control 30 days prior to the training event to allow adequate time for processing

f. All persons intending to "dig" or excavate within the boundaries of the Range Complex are required to obtain a Digging Permit before commencing work. Civilian contractors must request a UXO briefing from Range Control to ensure all personnel involved in excavations are trained in the UXO 3-R's (Recognize, Retreat, and Report). Digging refers to any process or activity involving the disturbance of soil, regardless of size, depth or nature of excavation. This includes (but is not limited to) the following:

- Planting trees and shrubs
- Grounding rods in developed areas
- Trenches, Bunkers, Berms, Tank traps
- New trails, roads, or crossing sites
- Fire breaks

**4-10. Fish and Wildlife.**

- a. Do not chase, capture, shoot, or in any way, harass wildlife. It is illegal to remove wildlife from its habitat. Report vehicle collisions with large animals or birds to Range Control.
- b. Known Poisonous Snakes: There are no known poisonous snakes in the training area. Report any animal bites or diagnosis of any animal or environmentally transmitted disease to Range Control, in addition to standard medical reporting procedures.
- c. Ticks: There are many ticks in the area during warm weather. Ticks are carriers of Lyme Disease and Rocky Mountain Spotted Fever. Granulocytic Ehrlichiosis is being attributed to ticks. The disease has influenza like symptoms and is potentially fatal. All precautions must be taken against ticks.
- d. Survival Training: Units conducting survival training must obtain written permission from the Natural Resources Manager at the DPW to catch fish or wildlife for this type of training.

**4-11. Hunting and Fishing.** Hunting and fishing is allowed on South Post under certain conditions. All state, federal and installation regulations will apply. The Natural Resources Manager and Range Control will control all hunting and fishing. Hunting and fishing will not interfere with training activities. To prevent scheduling conflicts, Range Control will be the final approving authority. Hunters and fishermen will take all trash with them when they leave. Persons caught littering may lose their privileges and littered areas may be closed.

**CHAPTER 5. PROHIBITED ACTIVITIES**

**5-1. Prohibited Activities.** The following activities are prohibited anywhere within the Fort Devens except when conducted as scheduled military training IAW AR 350-19:

- a. Swimming, ice fishing or ice-skating.
- b. Souvenir hunting or use of metal detectors.
- c. Hunting, except during the installation hunting seasons and as prescribed by installation regulations.
- d. Cutting wood without a permit.
- e. Recreational camping.
- f. Use of any off road recreational vehicle, jet skis, motorboats, or any gas engine on any body of water.
- g. Open fires unless authorized for survival training or other approved activity.
- h. Cutting or removal of any plants, mushroom hunting, berry picking, dandelion or herb picking.
- i. Sightseeing, horseback riding.

- j. Firing of privately-owned weapons unless conducted IAW DA PAM 385-63.
- k. Units making repairs to ranges, roads, or facilities. All requests for repairs must be requested through Range Control.

**References.**

**Regulations:**

- a. AR 75-1 Malfunctions Involving Ammunition and Explosives, RCS AMC 132 (Min).
- b. AR 190-11 Physical Security of Arms, Ammunition and Explosives.
- c. AR 190-13 Army Physical Security Program.
- d. AR 190-14 Carrying of Firearms.
- e. AR 200-1 Environmental Protection and Enhancement.
- f. AR 350-19 Army Sustainable Range Program
- g. AR 385-10 Army Safety Program.
- h. AR 385-55 Prevention of Motor Vehicle Accidents.
- i. AR 385-63 Range Safety.
- j. AR 385-64 Army Explosives Safety Procedures.
- k. AR 710-2 Supply Policy Below the Wholesale Level .
- l. AR 735-5 Basic Policies and Procedures for Property Accounting.
- m. USAR 385-2 US Army Reserve (USAR) Safety Program
- n. DA PAM 385-40 Army Accident Investigation and Reporting.
- o. DA PAM 385-63 Range Safety.
- p. DA PAM 385-64 Ammunition and Explosives Safety Standards.
- q. DA PAM 710-2-1 Unit Supply System.
- r. FM 3-22-9 M16A1/A2/A3/A4/M4 Rifle and Marksmanship.
- s. FM 3-22.27 MK 19 Mod 3,40-mm Grenade Machine Gun.
- t. FM 3-22.65 Browning Machine Gun .50 HB M-2.
- U .FM 3-22.68 Crew Served Weapons.
- v. FM 3-22.90 Mortars.

- w. FM 3-23.30 Grenades and Pyrotechnic Signals.
- x. FM 3-23.35 Combat Training with Pistols, M9 and M-11
- aa. FM 3-34.214 Explosives and Demolitions.
- bb. FM 4-30.51 Unexploded Ordnance (UXO) Procedures.
- cc. FM 7-10 Training the Force.
- dd. TM 3-22.31 Grenade Launchers
- ee. TM 3-23.25 Shoulder-Launched Munitions.
- ff. TM 9-6920-3700-10 Close Combat Mission Capability Kit.
- gg. TM 10-4500-200-13 Heaters, Space: Radiant type Portable.
- hh. FORSCOM REG 385-1 Forces Command Safety Program.
- ii. FORSCOM REG 700-4 Ammunition.
- jj. Fort Devens REG 385-10 Army Safety Program
- kk. Fort Devens Cir 115-1, Severe Weather Plan
- ll. Devens RFTA Reg. 95-1 Army Aviation Procedures.
- mm. Fort Devens Reg. 95-23 Unmanned Aircraft Systems Local Flying Rules.

**Additional References:**

- a. 14 CFR Part 73 Amendment to Times of Designation for Restricted Areas R-4102A & R-4102B.
- b. 29 CFR 1910-120 Occupational Safety and Health Standards (Hazardous waste operations and emergency response).
- c. Fort Devens Military Installation Map, series V7144S, 1:50,000 scale.
- d. Fort Devens Military Installation Map, series V814S, 1:25,000 scale dated 5-2009.

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

**APPENDIX A**

**Basic Requirement for Operating a Small Arms Range.**

**A-1. Officer in Charge/Range Safety Officer (OIC/RSO) Requirements:**

- a. The OIC/RSO will meet the grade requirements as outlined in DA PAM 385-63 and paragraph 3-2 of this regulation.
- b. The OIC and RSO will be present on the range during firing and have no other duties.
- c. The OIC and RSO may be relieved by other certified persons for the purpose of firing. Range Control must be notified and will verify certification of the replacement personnel.
- d. The OIC and RSO will have read and be familiar with:
  - (1) DA PAM 385-63, Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat.
  - (2) Fort Devens Regulation 350-3, Range Regulation.
  - (3) The TMs and FMs for the weapons systems being fired.
- e. The RSO will enforce weapons safety standards as outlined in paragraph 3-23 of this regulation as a minimum and will assign an assistant RSO as needed.
- f. A dud briefing and ammunition amnesty briefing will be given to all personnel on the range, to include late arrivals.

**A-2. Equipment Requirements.** The following must be present on the range before Range Control will grant permission to fire:

- a. A ten pound B-C fire extinguisher.
- b. TMs and FMs for the weapons systems.
- c. Radio communications with Range Control.
- d. Medical support, if required.
- e. Hearing protection for all persons on the range.

**A-3. The Range OIC will:**

- a. Provide Range Control with a copy of the CRM Worksheet, DA Form 581 or DA Form 5515, sign for equipment, range or facility at Range Control and read the range packet.
- b. Occupy the range, establish communications with Range Control and request a range inspector.
- c. Brief the RSO/assistant RSO on safety standards to be maintained; give a dud briefing.
- d. After the range inspector is satisfied the range is ready, call Range Control and request a hot time, raise the red flag and begin firing.
- e. Be responsible for the overall safe conduct of training and proper use of facilities.
- f. Be present when individuals on range are firing.
- g. Be of the required rank and certified for the weapon system being fired as referenced in Chapter 3-2 of this regulation.
- h. Appoint an RSO as required.
- i. Determine when it is safe to fire.
- j. Supervise the procedures for misfires, hang fires and cook offs.
- k. Ensure required communications are established and maintained with Range Control.
- l. Prior to firing, the Range OIC will ensure that (See Appendix A):
  - (1) The correct range or firing position is occupied.
  - (2) The impact area/surface danger zone (SDZ) is clear of personnel and, if required, see that measures are taken to deny entry.
  - (3) Communications with Range Control are established and operative.
  - (4) Only authorized ammunition, charges and fuses are used.
  - (5) Ammunition to be fired is within prescribed temperature limits (keep it in the shade).
  - (6) All firing precautions, including bore sighting, have been taken.
  - (7) CLEARANCE TO FIRE HAS BEEN GIVEN BY RANGE CONTROL.
- m. During firing, the OIC will ensure that:
  - (1) Personnel do not move to or leave the firing line without permission of the OIC or RSO.
  - (2) Material is not removed from the firing line without permission of the OIC or RSO.
  - (3) The SDZ is monitored to ensure it remains clear.
  - (4) Impacts are observed to ensure projectiles impact within the prescribed impact areas.

(5) Misfires are removed from the weapon only on command of the OIC in accordance with procedures established for the weapon.

(6) Weapons are cleared and checked during temporary suspensions of firing. DO NOT USE SECTIONED CLEANING RODS TO CLEAR WEAPONS. Clearing rods are the responsibility of the user unit.

(7) Records are maintained on the type of ammunition fired, number of rounds fired, number of duds and their approximate location.

(8) Firing is stopped promptly when any unsafe act is observed.

n. After firing, the OIC will ensure that:

(1) All weapons are cleared.

(2) The number of duds and approximate location are reported to Range Control (explosive projectiles only, including pyrotechnics).

(3) Firing status of range is properly designated by flags or lights.

(4) Area is properly policed.

**A-4. The Range Safety Officer will:** Be responsible for the final determination before firing, ensuring that:

a. Weapons are properly positioned.

b. Only authorized ammunition, to include proper charge, fuse and fuse settings is used.

c. Firing settings and weapons are within prescribed safety limits and verified.

d. Appropriate safety measures are taken and the SDZ is clear of personnel. (This includes closing of barriers, denying entry into the impact area and posting road guards, if required.)

e. Proper hearing protection is worn by all personnel on the range, and helmets and eye protection will be worn IAW DA PAM 385-63, para 6-1, see appendix K to this regulation.

f. Order an immediate cease-fire or check-fire when any unsafe condition is observed.

g. On completion of firing, verify weapons are clear to the OIC and record duds and their approximate location

**A-5. Range Inspectors will:**

a. Make periodic safety checks and correct deficiencies if necessary.

b. Issue targets and equipment from range sheds. Sheds will not be left open for units.

c. Give a safety briefing to the OIC/RSO and instruct tower operators in the use of electrical targetry.

d. Notify Range Control when the range is cleared to go hot. The OIC must call Range Control for a hot time.

e. Inspect the range for clearance of the unit.

**A-6. Unit Natural Resource Manager will:** Ensure live vegetation will not be cut for any reason unless marked for removal by the Fort Devens ITAMS Coordinator.

---

*DA Pam 385-63 provides comprehensive guidance on range safety. Other guidance in weapons FMs appendixes (Range Safety) or (Risk Management) should be used to manage the risks associated with range operations.*

1. Has a risk assessment been done?
2. Has an officer in charge (OIC) been designated to be responsible for the safe conduct of training for each unit using a range training facility?
3. Has a range safety officer (RSO) been appointed to assist the OIC during live fire?
4. Have the range OIC and RSO received a range safety briefing and clearance to fire from range control?
5. Are range safety officers assigned no additional duties or responsibilities other than supervision of weapons?
6. Are the designated safety officers thoroughly knowledgeable of the weapons systems being fired and the safety requirements associated with it?
7. Before occupying any range, does the OIC ensure that—
  - a. A current copy of the technical manual for the weapon(s) being fired is on hand.
  - b. Radio (FM band) and telephone communication have been established with Range Control?
  - c. All personnel on the range are briefed on medical emergency/MEDEVAC procedures, cease-fire procedures, course of fire, range specific environmental policies and issues, local safety brief (installation), duds, prohibited downrange areas, and adjoining ranges and facilities?
  - d. All vehicle operators (tracked and wheeled) are trained to standard to operate radios and call for help in the event of emergencies to contact range control?
  - e. Medical personnel with vehicle and equipment (aid bag, litter) are present and briefed as to the best route to the nearest hospital?
  - f. A red range flag (day) or a red blinking light (night) is attached to the top of the range flagpole/tower and a red light is hung on the left and right range limit markers at night?
8. While using/firing any range, does the OIC ensure that—
  - a. The OIC/RSO is present and has been briefed?
  - b. Permission to fire has been received from Range Control?
  - c. Radio communications are maintained at all times and checked hourly with Range Control?
  - d. No personnel are allowed forward of the firing line?
  - e. Required safety measures are observed, and effective firing control is maintained?
  - f. Soldiers are using proper hearing protection, (wearing eye protection when applicable) and wearing Kevlar helmets?
  - g. A cease-fire is ordered whenever—
    - i. Communication with range control is lost.
    - ii. A weapon or ammunition malfunction occurs.
    - iii. A safety violation, accident, or incident occurs.
    - iv. A fire is started.
    - v. Rounds land or detonate or are suspected of landing or detonating outside the impact area of safety limits.
    - vi. When range control directs a cease-fire.
9. After using any range facility, do the OIC and safety officers ensure that—
  - a. Weapons are cleared of ammunition?
  - b. Individuals turn in ammunition and explosives?
  - c. Ammunition, simulators, explosives, and pyrotechnics are not abandoned on the range?
  - d. Inspection and clearance are requested and received from range control before departing the range?
  - e. The inspection checklist for ranges is completed?

**Figure A-1. Range Safety Checklist**

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

**APPENDIX B**  
**Ranges, Facilities, and Training Areas**

**B-1. Ranges, Training Facilities and Training Areas.**

<b>RANGE</b>	<b>PRIMARY USE</b>	<b>TARGETRY</b>	<b>FIRING POINTS</b>
ALFA	Pistol, SMG, Shotgun	Paper, E-type Silhouettes	20
BRAVO	Combat Pistol Qual (CPQC)	Air powered pop-up	8
CHARLIE I	Pistol, Shotgun	Paper, E-type Silhouettes	15
CHARLIE II	10 meter MG Qual	M240/M249 MG targets	6
DELTA	Anti-tank, Mk 19	Vehicles, paper pistol	3
	60mm mortar , M203GL,pistol	Pistol targets	15
ECHO	M16 ARF/NBC/Nightfire	Electric-TRACR	16
GOLF	KD Qualification (600YD)	Paper	40
GOLF 1	KD Qualification (600YD)	Paper	15
GOLF ALPHA	M203TP Qual	M203 per TC 25-8	1
GOLF BRAVO	25 Meter Zero/Alt C ,10 meter MG	Paper Pistol / Zero / Alt C 1	48
HOTEL	M240/M249 Transition Fire	ERETS-TRACR	4
KILO	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	35
OSCAR	60mm/81mm Mortar	Vehicles	4
PAPA	Pistol, Shotgun, SMG (MP Qual)	Paper 9mm	15
PAPA ALPHA	Pistol, Shotgun, SMG (MP Qual)	Paper 9mm	15
CURRY	Sniper Qualification	Steel Silhouettes	5
TANGO	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	23
UNIFORM I	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	50
UNIFORM II	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	50
VICTOR	M16 ARF/NBC/Nightfire	Air powered pop-up	16
X-RAY I	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	50
X-RAY II	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	50
YANKEE	25 Meter Zero/Alt C	Paper Pistol / Zero / Alt C	28
ZULU I	Light Demolition	Requires RC /DPW-ED approval	N/A
ZULU II	Hand Grenades	N/A	2

**B-2. Training Area Data.**

ALL COORDINATES USE NORTH AMERICAN DATUM (NAD)1983

a. Area Number: 6 (subdivided into 6A, B, C, D, E)

- (1) Coordinate: BH 810065
- (2) Acreage: 475 (6A-166:6B-108:6C-73:6D-70:6E- 56)
- (3) Capacity: Company
- (4) Usage: Tactical - Tracked vehicles authorized.  
6E is admin only; no pyrotechnics, blank firing or prolonged generator/engine running.
- (5) Boundaries: North - Shoefelt Road  
South - Reservation boundary  
East - Harvard Road  
West - Lancaster Road, Shirley

b. Area Number: 7 (subdivided into 7A, B & C)

- (1) Coordinate: BH 800070
- (2) Acreage: 568 (7A-166:7B-180: 7C-221)
- (3) Capacity: Company
- (4) Usage: Tactical - Tracked vehicles authorized.  
Advanced Land Navigation Course.
- (5) Boundaries: North - Tree line south of Shoefelt Road.  
(Does not include any portion of Turner DZ.)  
South - Reservation boundary  
East - Lancaster Road, Shirley  
West - Reservation boundary

c. Area Number: 8 (subdivided into 8A & B)

- (1) Coordinate: BH 805085
- (2) Acreage: 185 (8A - 101: 8B - 84)
- (3) Capacity: Company
- (4) Usage: Tactical
- (5) Boundaries: North - Bivouac Road

South - Tree line along northern edge of  
Turner DZ. Does not include any portion of  
Turner DZ  
East - Lancaster Road, Shirley  
West - Bivouac Road

(6) (8B is the area south of trail running east/west from BH 799087 to BH 807086 to  
edge of wood line north of the Turner DZ.)

d. Area Number: 9 (subdivided into 9A, B, C)

(1) Coordinate: BH 800090  
(2) Acreage: 609 (9A - 273:9B - 268: 9C - 67)  
(3) Capacity: Company  
(4) Usage: Tactical  
(5) Boundaries: North - Reservation boundary  
South - Bivouac Road  
East - Lancaster Road, Shirley  
West - Reservation boundary

e. Area Number: 10 (subdivided into 10A, B)

(1) Coordinate: BH 813085  
(2) Acreage: 279 (10A - 181: 10B - 97)  
(3) Capacity: Company  
(4) Usage: Tactical (10A contains POL storage site)  
(5) Boundaries: North - Combat Road  
South - Shoefelt Road  
East - Firebreak Road  
West - Lancaster Road, Shirley

f. Area Number: 12 (subdivided into 12A, B, C)

(1) Coordinate: BH 816102  
(2) Acreage: 99 (12A - 36: 12B - 40: 12C - 23)  
(3) Capacity: Company  
(4) Usage: Tactical  
(5) Boundaries: North - Reservation boundary  
South - Turnpike Road  
East - Attu Road  
West - Reservation boundary (Civilian  
Cemetery is OFF LIMITS)

g. Area Number: 13 (subdivided into 13A, B, C)

- (1) Coordinate: BH 835091
- (2) Acreage: 348 (13A – 183: 13B – 115: 13C – 50)
- (3) Capacity: Company
- (4) Usage: Tactical
- (5) Boundaries: North - Reservation boundary  
South - Reservation boundary  
East - Nashua River  
West - Jackson and Dixie Roads

h. Area Number: 14 (subdivided into 14A, B)

- (1) Coordinate: BH 826100
- (2) Acreage: 282 ( 14A - 222: 14B – 60)
- (3) Capacity: Company
- (4) Usage: Tactical
- (5) Boundaries: North - Reservation boundary  
South - Turnpike Road  
East - Jackson Road  
West - Attu Road

i. Area Number: 15 (subdivided into 15A, B)

- (1) Coordinate: BH 815095
- (2) Acreage: 154 ( 15A – 78: 15B – 76)
- (3) Capacity: Company
- (4) Usage: Tactical
- (5) Boundaries: North - Turnpike Road  
South - Combat Road  
East - Firebreak Road  
West - Lancaster Road, Shirley

**B-3. Conflict/Denial List.**

**HOT RANGE**

ALFA  
 BRAVO  
 CHARLIE I/II  
 CURRY  
 CURRY (downrange)  
 DELTA (mortars)  
 DELTA (AT weapons)  
 DELTA (MK19 40mm Machine Gun)  
  
 DELTA (all weapons)  
 DELTA (pistol)  
 ECHO  
  
 EOD  
 FBI  
 GOLF  
 GOLF ALFA (M203)  
 GOLF BRAVO  
 HOTEL (machine guns)  
  
 KILO  
 OSCAR  
 PAPA  
 TANGO  
 UNIFORM I  
 UNIFORM II  
 VICTOR

**DENIES**

none  
 none  
 none  
 none  
 V, XI/II, Y  
 EOD, ZI/II, Firebreak Road, all aircraft  
 EOD, ECHO lanes 1-5, TA 10b  
 EOD, TA 10B, Firebreak Road,  
 ECHO lane 1  
 downrange ECHO beyond the firing line  
 all other DELTA  
 EOD, ZI/II, Firebreak Road, lanes 1-5  
 deny DELTA forward berm  
 DELTA, ECHO, HOTEL, OSCAR  
 OSCAR  
 none  
 GOLF-1  
 NONE  
 CURRY (downrange), EOD, ZI/II, Firebreak  
 Road  
 ECHO downrange maintenance  
 all aircraft, EOD, ZI/II, TANGO, FBI  
 ECHO downrange maintenance  
 OSCAR  
 none  
 downrange VICTOR  
 downrange CURRY, downrange X-RAY I,  
 downrange UNIFORM II

**HOT RANGE**

X-RAY I  
 XRAY II  
 YANKEE  
  
 ZULU I  
 ZULU II  
  
 TA 10B

**DENIES**

downrange CURRY, downrange VICTOR,  
 downrange X-RAY II  
 downrange CURRY, downrange X-RAY I,  
 downrange YANKEE  
 downrange CURRY, use of the ROTC  
 training site on the former infiltration  
 course, downrange X-RAY II  
 ZULU II, HOTEL, OSCAR,  
 DELTA mortars, ECHO  
 ZULU I, HOTEL, , OSCAR,  
 DELTA mortars, ECHO  
 DELTA MK19 40mm Machine Gun

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

**APPENDIX C**  
**Range and Training Facility Data Sheets**

**C-1. ALFA Range**

1. Location: BH83680840 (NAD 1983 / WGS 84) - Entrance is off Dixie Road at water point across from ECHO Range.
2. Description: Multi-purpose pistol, SMG, shotgun, law enforcement weapons qualification.
3. Ammunition Authorized: All handgun ammunition, rifles not over 5.56mm, all shotguns except riot agents.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Paper only, no hard targets (Steel). Non-military may use Range Control target frames, but must provide their own targets. Nothing thrown in the air or lying on the ground will be shot.
6. Facilities: Target sheds, latrine, ammo table, tower.
7. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for the weapons, DA PAM 385-63, range packet from Range Control, scorecards, PPE as required by DA PAM 385-63 para 2-10 b, c.
8. Range Flagpole: At range entrance by water point.
9. Communications: BK Radio.
10. Firing Line: 20 points at distances from 5 to 35 meters.
11. Restrictions: Due to possibility of ricochets leaving the range floor, strict adherence to the ammo authorized is required. All targets must be properly frame mounted. Parking is very limited. Excess vehicles may park in the Observed Fire Trainer (OFT) parking lot across Dixie Road from entrance. Do not block the water point.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-2. BRAVO Range**

1. Location: Dixie Road at BH83370899 (NAD 1983 / WGS 84).
2. Description: Combat Pistol Qualification Course.
3. Ammunition Authorized: Handguns up to 9mm.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Air powered pop-up, computer scored.
6. Facilities: Latrine and bleachers, ammo breakdown building, emergency lighting, tower, public address system.
7. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for the weapons, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10 b, c.
8. Range Flagpole: Center rear of range.
9. Communications: BK Net / FM radio 38.85.
10. Firing Line: 8 firing points.
11. Restrictions: Pistol only. This range does not support the MP Firearms Qualification Course. All vehicles will park across Dixie Road. Communications vehicle may park by tower.
12. Remarks: May be used for night fire. Targets have muzzle flash devices.
13. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-3. CHARLIE I Range**

1. Location: Off Dixie Road at BH83700824 (NAD 1983 / WGS 84).
2. Description: Alternate pistol qualification, shotgun, and law enforcement.
3. Ammunition Authorized: Handguns up to .45 caliber, all shotguns except riot agents.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Paper only, no hard targets. Non-military may use Range Control frames, but must provide own targets. Nothing will be thrown in the air to shoot at.
6. Facilities: Target shed, bleachers, ammo table, tower, latrine.
7. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for the weapons, scorecards, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10 b, c.
8. Range Flagpole : At range entrance.
9. Communications: BK Radio / FM radio 38.85.
10. Firing Line: 15 firing points at distances from 3 to 25 meters.
11. Restrictions: No vehicles on the range floor. Communications vehicle may park by tower, all others to the left rear of range. All targets must be properly frame mounted. No shooting at anything lying on the ground.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-4. CHARLIE II Range**

1. Location: Off Dixie Road at BH83690829(NAD 1983 / WGS 84) between CHARLIE I and ALFA Ranges.
2. Description: SAW/M60/M240 machine gun 10-meter qualification.
3. Ammunition Authorized: 5.56 ball and 7.62 ball only, tracer can be fired but should be used on the transition range.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: 10 meter machine gun qualification.
6. Facilities: Tower, ammo table and latrines, target storage shed.
7. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for weapons, DA PAM 385-63, range packet from Range Control, scorecards, PPE as required by DA PAM 385-63 para 2-10 b, c.
8. Range Flagpole: At entrance to CHARLIE I Range by Dixie Road.
9. Communications: BK Radio / FM radio 38.85.
10. Firing Line: 6 firing points on 10 meter raised firing line.
11. Restrictions: Communications vehicle may park by tower, all others park to the left rear of CHARLIE I Range.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-5. CURRY Range**

1. Location: Knoll at BH81840680 (NAD 1983 / WGS 84).
2. Description: Special Operations Target Interdiction (SOTI) training facility. THIS RANGE OPERATES UNDER A SAFETY WAIVER, therefore, it is open only to qualified snipers, training of sniper candidates, law enforcement SWAT shooters and advanced marksmanship teams.
3. Ammunition Authorized: 9mm ball, .45 cal ball, 5.56/7.62 ball, M80/M118/M852 national match, .30 cal ball. Tracer with Range Control daily authorization only.
4. Hours of firing: 0730 – 2300 hours.
5. Known Distance: Five lanes with firing points at 100, 200, 300, 400, 500, 600, 700 and 830 meters.
6. Field Fire: 100 through 830 meters. Five open positions in front of the porch, three positions on the porch.
7. Moving Targets Trench: The KD target butts are used as a moving target trench. Three firing positions at 100, 200,300,400,500,600 meters.
8. Urban Obstacle Firing Positions: All positions are around the range maintenance building. Positions are a rock pile, roof of the maintenance building, wall/window, storage shed roof, tree platforms, two permanent hide sites in front of the building.
9. Stalk Range: One 800 meter oblique stalk, one 600 meter head-on stalk with observation tower.
10. Targets: Standard KD paper targets, M16 zero targets, steel silhouettes.
11. Facilities: Maintenance/storage building (not for unit use), portable latrine, target storage van.
12. Communications: FM radio 38.85. Loss of communications with Range Control will necessitate a cease-fire. Radio communication with the target pits requires use of a unit frequency.
13. Range Flags: Flagpoles are at the range entrance, mid-range and downrange along Harvard Road.
14. Range Gates: Located at BT81770697 (impact area gate 8), BT81960644 (CURRY Gate 1), BT81660666 (CURRY Gate 2), BT82480725 (CURRY Gate 3).
15. Road Guard Requirements: None
16. Restrictions and Limitations:
  - A. The KD range, the stalk range and the stalk observation tower will not be used when the following ranges are firing:

- (1) VICTOR Range
  - (2) X-RAY I Range
  - (3) X-RAY II Range
  - (4) YANKEE Range
  - (5) Status of these ranges will be verified with Range Control before anyone is allowed downrange. A checkfire of any of these ranges will be requested through Range Control, if necessary to go downrange.
- B. All the above listed gates will be closed and locked before firing and the OIC will verify that no one is downrange prior to requesting a hot status from Range Control.
- (1) EXCEPTION: When firing the KD range, CURRY Gate 1 may be left open.
  - (2) When firing from the range house area, all gates will be secured.
- C. Firing will be at a slow controlled rate.
- (1) NO AUTOMATIC FIRE OR MACHINE GUNS.
  - (2) Weapons will be fired from the prone supported/unsupported kneeling, sitting, standing, benchrest or sandbag positions.

17. Safety:

- A. The coach/student method will be used with a maximum ratio of 1:5 when using the KD range or firing from the baseline. All other firing will use a spotter/observer with each shooter.
- B. The standing (off-hand) position will be controlled on a 1:3 instructor student ratio. The instructor will not allow the student to place his finger in the trigger guard or on the trigger until the shooter is in position, the weapon on target and the shooter has good control of the weapon. The weapon will be loaded one round at a time for off-hand (standing) position shooting.
- C. Using the tree-mounted firing positions:
  - (1) THERE WILL BE NO RAPPELLING FROM THE TREE.
  - (2) The five platforms are the only authorized shooting positions. The weapon will be clear when moving between positions.
- D. All personnel will use hearing protection, eye protection is encouraged per DA PAM 385-63 2-10b,c. When shooting from the porch, personnel should wear both earplugs and aural muffs, due to the sound being confined and magnified by the roof.

- E. Communications will be maintained at all times between the target pits and the firing line. The OIC will call a cease-fire if communications are lost. All pit personnel will wear helmets.
  - F. Stalk lane tower personnel will wear Kevlar helmets and flak vests at all times and maintain communications with Range Control and the lane walker.
  - G. There will be a four-wheel drive vehicle on-site for medical evacuation.
  - H. Range flags will be up at the 100, 500 and 700 meter flagpoles when firing on the range floor (KD, Snaps and Movers, Field Firing).
    - (1) When firing from the area of the building, the 100-meter flag and the flag at CURRY Gate 1 must be up.
    - (2) At night, chemical lights or flashing red lights will be used in place of flags. In addition, all gates will be marked with chemical lights.
  - I. All persons firing will identify the left and right limit markers. Under no circumstances will rounds be fired that may go outside the markers. Every precaution will be taken to ensure that no rounds go over the hill mass behind the KD pits.
18. Remarks: All requests for this range will clearly state the type of training, type of weapons and ammunition, number of weapons, quantities of ammunition and number of personnel. All sniper training will be conducted under the supervision of a qualified CAT I or CAT II sniper instructor. Marksmanship and SWAT training will be under the supervision of appropriately qualified and certified instructors. Training will be IAW standard programs of instruction, FMs, civilian publications and police manuals, Fort Devens Reg 350-3, DA PAM 385-63 and the FORSCOM waiver on this range.
19. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-6. DELTA Range (Anti-Tank Weapons)**

1. Location: Off Dixie Road at BH 83290821 (NAD 1983 / WGS 84).
2. Description: Anti-tank weapons to include LAW, SMAW, AT-4, 90mm recoilless rifle.
3. Ammunition Authorized: 66mm HEAT, 35mm LAW sub-cal, SMAW 83mm HE, practice and spotter cartridges. AT-4 HEAT and 9mm practice cartridges. 90mm HEAT and TP.
4. Hours of firing:                   0800 – 2200 Monday – Saturday  
  0900 - 2200 Sunday
5. Targets: Vehicles, water tanks located at various ranges out to 1300 meters.
6. Facilities: Latrine, bleachers, ammo shed.
7. Range Flagpole: At entrance to range.
8. Communications: BK Radio / FM radio 38.85.
9. Road Guard Requirement: One posted in a position that is safe from backblast and keeps others from entering the backblast area. Range Gate 3 (north end of Firebreak Road), 5 (south end of Firebreak Road), 6 (Shoefelt and Ponakin intersection) and 7 (south end of Harvard Road close to old water point) will be locked prior to firing AT-4 or 90mm recoilless rifle. Guards not required.
10. Equipment Required: PPE as required by DA PAM 385-63 Para 6-1, (5), two (2) ten pound B-C fire extinguishers.
11. Publications Required: Range packet issued by Range Control, TM 9-1315-886-12 (AT-4 Operators Manual), USMC TM 08673A-10/1 (SMAW Operators TM), TM 3-23.25 (Shoulder-Launched Munitions) DA PAM 385-63.
12. Restrictions: Firing will only be conducted from the forward firing berm. Backblast area will remain free of equipment and personnel at all times. Training Area 10B and EOD range may not be occupied when firing the AT-4 or 90mm recoilless rifle.  
FORWARD OF THE FIRING LINE IS OFF LIMITS TO ALL PERSONNEL. RIFLE PROJECTILE GRENADE WILL NOT BE FIRED.

**C-7. DELTA Range (40mm Grenade Launcher M203/M79)**

1. Location: Off Dixie Road at BH 83290821 (NAD 1983 / WGS 84).
2. Description: Introductory firing of M320/M320A1/M203/M79 grenade launchers. This is not a qualification range. This is the only range authorized for firing 40mm high explosive rounds.
3. Ammunition Authorized: All M320/M320A1/M203/M79 rounds with the exception of gas/riot control agents and Target Practice (TP).
4. Hour of firing: 0730 – 2300 hours.
5. Targets: Hard targets.
6. Facilities: Latrine, bleachers, ammo shed.
7. Range Flagpole: At range entrance off Dixie Road.
8. Communications: BK Net / FM radio 38.85.
9. Firing Line: Raised forward most firing line not laid out per TC 25-8.
10. Restrictions: Firing any smoke, flares, or star clusters requires daily approval from Range Control. FORWARD OF THE FIRING LINE IS OFF LIMITS TO ALL PERSONS.
11. Equipment Required: Two (2) ten pound B-C fire extinguishers, PPE as required by DA PAM 385-63 para.,5-2b.(3), radio, TM 3-22.31, TM 9-1010-221-10, DA PAM 385-63, range packet from Range Control.
12. Remarks:
  - a) All duds will be accurately plotted and reported to Range Control. All misfires will be returned to the ASP.
  - b) No HE rounds will be fired to impact closer than 165 meters.
  - c) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-8. DELTA Range (MK 19 40mm Grenade Machine Gun)**

1. Location: Off Dixie Road at BH8380820 (NAD 1983 / WGS 84).
2. Description: Introductory firing of the MK 19 40mm Machine Gun. Firing line is raised for tripod mounted evenly spaced weapons. Wheeled vehicles may fire mounted weapons. Vehicles must be parked side-by-side, facing downrange. Weapons must be evenly spaced, based on the middle tripod or vehicle mounted weapon (base gun). A maximum of three weapons may fire at one time, due to the limited impact area.
3. Ammunition Authorized: M385A1/M385E4 TP, M918 TP, M430 HEDP, M383 HE.
4. Hours of firing 0730 – 2300.
5. Targets: Hard targets. Engage at a minimum of 300 meters and a maximum of 1300 meters.
6. Facilities: Latrine, bleachers and ammo breakdown building.
7. Range Flagpole: At range entrance off Dixie Road.
8. Communications: BK / FM radio 38.85.
9. Equipment Required: Two (2) ten pound B-C fire extinguishers, radio, cleaning rod and round removal tool P/N 12926849, TM 9-1010-230-23&P, TM 9-1010-230-10, FM 3-22-27, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 5-2 b.
10. Restrictions: FIRING FREE GUN IS NOT AUTHORIZED. All firing will be conducted with the gun mount on either the M3 Tripod, M4 pedestal or the M66 ring and properly secured by the T&E mechanism, T&E must be in place and attached for tripod/vehicle mounting. No tracked vehicles will use the range. No target engagements beyond 1300 meters. Overhead firing is not authorized. The use of more than one firing line at a time is not authorized.
11. Remarks:
  - a) Maximum range is over 2200 meters, strict precautions will be taken to ensure no rounds go over the ridge line downrange. If any rounds do go over the ridge line, call an immediate cease-fire and notify Range Control. Rounds may exit the impact area at approximately 1600 meters.
  - b) Dud rounds, to include TP with a bursting charge, will be accurately plotted and reported to Range Control. Misfires will be returned to the ASP. Follow peacetime and training misfire procedures contained in TM 9-1010-230-10, and FM 3-22.27.
  - c) Training Area 10B may not be occupied when firing the MK 19. Safety gates 3 and 5 on the north and south ends of Firebreak Road, gate 6 at the Shoefelt and Ponakin Road and gate 7 at the intersection of Harvard and Ponakin Road must be locked. A road guard is required at the range entrance by the flagpole.

d) Gunners, crew members and other personnel at the firing position will wear protective helmet and body armor (Army) or PPE Level 1 (Marine Corps) at all times when firing HE ammunition. Eye protection is encouraged. Refer to DA PAM 385-63 table 2-2.

e) Approved single hearing protection is required for all personnel within the noise hazard contour of a 20m radius of the weapon system. Eye protection should be worn. Daily exposure limit within the noise hazard contour is 1,000 rounds per day.

f) All operating procedures in FM 3-22.27 will be followed, in the event of a runaway gun, lower one of the charging handles (FM 3-22.27 par.2-2).

g) CAUTION: Failure to completely pull the bolt to the rear may result in the misalignment of the M16A2 links on the round, which causes the round to feed improperly.

h) Warning: Do not relink or fire any ammunition that has been cycled through the weapon. All misfires, lose or damaged rounds will be turned in to the Ammunition Supply Point.

12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-9. DELTA Range (M224 60mm Mortar, M252/M29 81mm Mortar)**

1. Range general information:
  - a) Location: Off Dixie Road at BH83380820 (NAD 1983 / WGS 84).
  - b) Description: Direct lay of M252/M29 81mm Mortar as well as direct lay and hand-held M224 60mm Mortar fire. Firing line is raised, fire allowed from up to 3 evenly spaced, bi-pod mounted or hand-held mortar systems. The impact area is extremely small and small errors in gunnery can be very dangerous. It is very important that direction limits and range limits be strictly adhered to.
  - c) Ammunition Authorized: HE, WP, illumination.
  - d) Hours of firing: 0800 – 2200 hours Monday – Saturday  
0900 – 2200 hours Sunday
  - e) Ammunition Handling: Break down only the amount of ammunition needed to prevent problems with returning it to the ASP. All ammunition will be handled IAW DA PAM 385-64.
  - f) Firing Positions: 3
  - g) R-4102 Restricted Airspace: The airspace must be activated with the Federal Aviation Administration (FAA). Mortars cannot fire unless R4102A/B are activated.
2. Range Control will not accept requests for mortar fire less than 14 working days prior.
3. Airspace is controlled as follows:
  - a) R-4102A is from surface to 1999 feet above mean sea level (MSL). R-4102B is from 2000 feet to 3995 feet above MSL. Both must be activated for any projectile with a maximum ordinate of 45 meters or more.
  - b) Commercial and civilian air traffic will be routed 1000 feet above the activated airspace.
  - c) The maximum ordinate above rounds fired will not exceed 3995 feet above MSL. **NOTE: THIS ALLOWS FIRE ONLY TO A MAXIMUM ORDINATE OF 3740 FEET BECAUSE OF THE RANGE ALTITUDE.**
4. R-4102 covers most of South Post, to include the Oxbow Wildlife Refuge. All civilian aircraft are denied use of the airspace when mortar fire is scheduled. Military helicopters may have limited use of airspace - ONLY WITH PRIOR COORDINATION WITH RANGE CONTROL AND ONLY WEST OF SHIRLEY ROAD.
5. Range Control must notify the FAA one hour prior to the first round downrange. A voluntary checkfire of one hour or longer requires that the airspace be returned to the FAA. The airspace cannot be reactivated that day.

6. An air observer will be posted to watch for aircraft. If aircraft is observed in the airspace, cease-fire immediately and notify Range Control. Private civilian aircraft and pilots may not heed posted Notice to Airman (NOTAM). If possible, record registration number from plane fuselage and report it to Range Control.
7. Required Publications: As a minimum, copies of the following must be available on the range:
  - a) DA PAM 385-63, Range Safety.
  - b) FM 22-90, Mortars.
  - c) FM 23-91, Mortar Gunnery.
  - d) Firing Tables FT 60-P-1, Firing Tables FT 81-A1-3.
  - e) TM 9-1010-233-10.
  - f) DA PAM 385-64, Ammunition and Explosives Safety Standards.
  - g) Fort Devens Regulation 350-3, Training: Ranges, Training Facilities and Training Areas.
9. Minimum Equipment Required:
  - a) Two (2) ten pound B/C fire extinguishers.
  - b) Radios.
  - c) Map of range and impact area.
  - d) Mortar safety card.
  - e) Firing tables (tabular).
  - f) M45 boresight.
  - g) Ammunition repack cards (if used).
  - h) PPE; hearing, eye, helmet and body armor, as required by DA PAM 385-63 para 9-1.c.
10. Misfires:
  - a) Actions outlined in DA PAM 385-63, FM 23-90 and TM 9-1010-233-10 must be followed.
  - b) Misfires will be inspected for damage after removal from the cannon. If the round appears serviceable and the primer is not dented, attempt to fire it again. If it does not fire a second time, replace the safety wire and place the round in the misfire pit. If the primer is dented, replace the safety wire and immediately place the round in the misfire pit. **DO NOT ATTEMPT TO RE-FIRE ANY ROUND THAT APPEARS DAMAGED OR HAS A DENTED PRIMER.**

- c) Misfires will be re-packed and returned to the ASP without increments attached.
11. Explosive Ordnance Disposal (EOD) will be notified if there is a round lodged in the cannon that cannot be removed by prescribed methods.
  12. Short Rounds: If a short round occurs, firing will cease immediately and Range Control will be notified. Firing will not resume until the cause is determined and corrected. **IF A DUD SHORT ROUND IS IN CLOSE PROXIMTY TO THE RANGE, DO NOT GO FORWARD OF THE FIRING LINE TO LOOK FOR IT.**
  13. Duds: Using the firing data, plot the probable point of impact. If the location or cause cannot be determined, notify Range Control immediately.
  14. Burning Increments: All munitions will be a minimum of 100 meters from the burn site. **DO NOT INHALE FUMES OR ASH, OR ALLOW THEM TO COME IN CONTACT WITH EXPOSED SKIN. DO NOT LOOK DIRECTLY AT THE BURNING INCREMENTS.** Burn no more than 50 increments at one time.
  15. Ammunition Accountability: Provide Range Control will be provided with a copy of DA Form 581 (Ammunition Issue) when the OIC signs for the range. To clear the range, the OIC will give Range Control an Ammunition Consumption Certificate, an increment burn count and the location of any duds.
  16. OIC Responsibilities: In addition to the responsibilities outlined elsewhere in the regulation, ensure all mortar equipment is functioning properly, and establish and maintain radio communication with Range Control. Call an immediate cease-fire if communication is lost.
  17. RSO Responsibilities:
    - a) Check all rounds for the proper number of increments. The maximum charge is charge 2; the minimum charge is charge 1.
    - b) Record accurate count of increments prior to burning. Ensure proper and safe burning.
    - c) Ensure cannons are always aligned within the safety fan and that elevation is within the safety limits (see Survey and Safety Data in item q).
    - d) Ensure that all guns are boresighted; all gunners and assistant gunners know the left and right boundaries and the minimum and maximum ranges and elevations. The first round(s) should be fired center of sector to settle the baseplate or assault plate.
  18. Actions Before Firing:
    - a) Verify that the safety card applies to the exercise.
    - b) Verify that the firing position is the same as shown on the safety card.

- c) Verify the lay of the guns.
- d) Verify the left and right limits, data for minimum and maximum elevation (range).
- e) Inform all personnel of the left and right limits, the minimum and maximum ranges and the minimum and maximum charges.
- f) Check overhead clearance and mask. Make safety checks on all gun systems and ensure sights are properly seated.
- g) Protect ammunition from sunlight and/or moisture and ensure that it is stored IAW DA PAM 385-64.
- h) VERIFY THAT THE FIRING TABLES AND AMMUNITION MATCH.
- i) Survey and Safety Data:
  - (1) Location: BH 83400821 (NAD 1983 / WGS 84).
  - (2) Altitude: 255 feet (78 meters).
  - (3) Maximum range: 1050 meters. LEFT/RIGHT LIMITS: Marked by red and white limit markers, approximately 100m downrange.
  - (4) Minimum range: 600 meters
  - (5) Maximum charge: 2 (60mm).
  - (6) Minimum charge: 1(60mm).
  - (7) Maximum ordinate: 3995 feet above MSL 3740 feet (1140 meters) above the range.
  - (8) Minimum cloud base altitude: N/A
  - (9) Authorized ammunition: HE M720, fuse, MO M734; HE M49A4, fuse, PD M52; WP M302A1, fuse, PD M527; IL M83A3, fuse, time M65A1.

**C-10. DELTA Range (Pistol)**

1. Location: BH 83320819 (NAD 1983 / WGS 84).
2. Description: Pistol, shotgun, SMG, law enforcement weapons qualification.
3. Ammunition authorized: All handgun ammunition, rifles not over 5.56 mm and all shotguns except riot agents.
4. Hours of firing: 0730 – 2300 hours.
5. Target Paper: Non-military may use Range Control frames but supply their own targets. Nothing thrown in the air or lying on the ground will be shot.
6. Facilities: Ammo breakdown point, portable latrine.
7. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for weapons, DA PAM 385-63, scorecards, PPE as required by DA PAM 385-63 para 2-10, range packet from Range Control.
8. Range Flagpole: At range entrance.
9. Communications: BK Radio / FM radio 38.85.
10. Firing Line: 15 target frames. TARGET FRAMES WILL NOT BE REMOVED OR ADDED WITHOUT PERMISSION FROM RANGE CONTROL. Targets will only be stapled to the backer board, not to the frames.
11. Restrictions: No rifle fire at hard targets in the impact area.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-11. ECHO Range**

1. Location: Off Dixie Road at BH 83250849 (NAD 1983 / WGS 84).
2. Description: Automated electric record fire range, sixteen fighting positions/prone supported positions. Targets at 50, 100, 150, 200, 250 and 300 meters.
3. Ammunition Authorized: 5.56, 5.56 tracer.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Electric powered pop-up, TRACR computer scored. Target boots (16ea) at 25 meters for zeroing.
6. Facilities: Tower with public address system, covered bleachers, classroom, covered mess, latrine, ammo building. Bivouac is authorized with Range Control approval.
7. Range Flagpole: Rear of range, beside Dixie Road.
8. Communications: Telephone Tower (x2317), Classroom (x2316), BK / FM radio 38.85.
9. Equipment Required: Ten pound B-C fire extinguisher, radio(s), FM 3.22-9, technical manuals on weapons, safety paddles, range packet issued by Range Control, PPE as required by DA PAM 385-63 para 2-10.
10. Personnel Requirements: OIC, RSO, one safety NCO per four firing points at minimum, tower operator, radio operator, ammo NCO.
11. Restrictions:
  - a) Unit personnel will not touch target machines or wiring.
  - b) Unit personnel are not to go forward of the firing line, except to utilize 25 meter zero targets.
  - c) No automatic or burst firing.
  - d) Pyrotechnics will not be used without permission from Range Control on a daily basis. Tracers may be denied according to the fire index.
  - e) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

## C-12. GOLF Range

1. Location: Off Dixie Road at BH 83310940 (NAD 1983 / WGS 84).
2. Description: Known distance range with 38 firing points. Firing lines are located at 100, 200, 300 meters and 100 through 600 yards. Target carriages are the cantilever type.
3. Ammunition Authorized: 5.56, 7.62, .30 cal ball.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Army and Marine Corps KD qualification type, NRA competition.
6. Facilities: Target sheds, portable latrine, cantilevered target carriers.
7. Range Flagpole: At the right rear of the range.
8. Communications: BK Net / FM radio 38.85.
9. Personnel Requirements: OIC, RSO, Pit NCO (must be RSO certified), radio operator, firing line safety NCOs.
10. Equipment Required: Wire or radio communication between firing line and pits, (radio communication will not be on a Range Control frequency), safety paddles, ten pound B-C fire extinguisher, PPE as required by DA PAM 385-63 para 2-10, FMs and TMs for weapons.
11. Restrictions:
  - a) Vehicles will not drive on or across firing lines. Communications vehicle, if needed, may park to the rear of the active firing line; ammo and weapons vehicles will remain on the trail to the right or left of the firing lines. All others will park to the rear of the range next to Dixie Road.
  - b) Pit personnel will wear helmets and body armor (Flak Jacket).
  - c) Pit personnel **WILL NOT BE OFF THE WALKWAY** while rounds are being fired. If Golf-1 range is firing Golf Range pit personnel will stay clear of the Golf-1 pit area.
  - d) Personnel or vehicle movement to the pits must be coordinated with adjacent ranges. Personnel will not walk over the side berms without coordination (Check fire) from the adjacent ranges. Road barriers (chains) will be secured at the end of Jackson Road (right side of Golf Range) and the access road to the left of Golf 1 Range. These barriers are intended to limit vehicles from driving into the pits.
  - e) No automatic or burst fire.
  - f) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-13. GOLF-1 (G-1) Range**

1. Location: Off Dixie Road at BH 83400955 (NAD 1983 / WGS 84).
2. Description: Known distance range with 15 firing points. Firing lines are located at 100, 200, 300 400, 500 and 600 yards. Target carriages are the cantilever type. This range also has 15 Pistol Frames between the number boards for alternate course pistol qualification and M16 Advanced Marksmanship training.
3. Ammunition Authorized: 5.56, 7.62, .30 cal ball, and pistol up to .45 cal.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Army KD qualification type, M-9 pistol targets.
6. Facilities: Target shed, portable latrine, cantilevered target carriers.
7. Range Flagpole: At the rear of the range.
8. Communications: BK Net / FM radio 38.85.
9. Personnel Requirements: OIC, RSO, Pit NCO, (must be RSO certified), radio operator, firing line safety NCOs.
10. Equipment Required: Wire or radio communication between firing line and pits, (radio communication will not be on a Range Control frequency), safety paddles, ten pound B-C fire extinguisher, PPE as required by DA PAM 385-63 para 2-10, FMs and TMs for weapons.
11. Restrictions:
  - a) Vehicles will not drive on or across firing lines. Communications vehicle, if needed, may park to the rear of the active firing line; ammo and weapons vehicles will remain on the trail to the right or left of the firing lines. All others will park to the rear of the range next to Dixie Road.
  - b) Pit personnel will wear helmets and body armor (Flak Jacket).
  - c) Pit personnel **WILL NOT BE OFF THE WALKWAY** while rounds are being fired. If Golf range is firing Golf-1 Range pit personnel will stay clear of the Golf pit area.
  - d) Personnel or vehicle movement to the pits must be coordinated with adjacent ranges. Personnel will not walk over the side berms without coordination (Check fire) from the adjacent ranges. Road barriers (chains) will be secured at the end of Jackson Road (right side of Golf Range) and the access road to the left of Golf 1 Range. These barriers are intended to limit vehicles from driving into the pits.
  - e) No automatic or burst fire.

- f) No 25 meter line for M16 zero or alternate course C qualification.
- g) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-14. GOLF ALFA Range (GA) M203 TP Qualification**

1. Location: Off Dixie Road at BH 83400948.
2. Description: M320/M320A1/M203 TP 40mm qualification range (one lane).
3. Targets: As shown in TM 3-22.31 and TC 25-8.
4. Ammunition Authorized: THE ONLY AMMUNITION ALLOWED IS 40mm TP. NO OTHER 40mm AMMUNITION WILL BE FIRED ON THIS RANGE.
5. Hours of Firing: 0730-2300 hours.
6. Facilities: Portable Latrine, Flag Pole.
7. Firing Line: As shown in TM 3-22.31 and TC 25-8.
8. Communications: BK Radio / FM radio 38.85.
9. Equipment Required: Ten pound B-C fire extinguisher, radio, TM 3-22.31, TM 9-1010-221-10, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 5-2a.(3).
10. Parking: Rear of the range, and across from Golf 1 Range in TA13A. Ruts will be repaired before clearing.
11. Restrictions:
  - a) Range Gate at rear of range will be closed or a range guard posted at the gate to prevent personnel entering the downrange area. ANY UNIT OR PERSONS CAUGHT FIRING UNAUTHORIZED AMMUNITION WILL BE IMMEDIATELY REMOVED FROM THE RANGE AND THE RANGE CLOSED. OIC AND SAFETY OFFICER WILL BE DECERTIFIED. EVIDENCE OF SUCH ACTS FOUND AFTER CLEARING WILL BE GROUNDS FOR DECERTIFICATION.
  - b) Firing on this range denies the use of Golf -1 Range.

**C-15. GOLF BRAVO Range (GB) Rifle/Pistol/10Meter Machinegun**

1. Location: Off Jackson Road at BH 82940930.
2. Description: Primary use is for advanced marksmanship training for M16/M4 rifle(FM 3-22.9 chapter 7), 25 meter zero/alternate course C qualification and alternate pistol range, and 10 meter machinegun.
3. Targets: M16A1/A2 and M4 zero, alternate course C qualification and M9 Pistol targets, 10 meter machinegun.
4. Ammunition Authorized: 5.56mm, 7.62mm, and hand gun up to .45 cal, shotgun.
5. Hours of Firing: 0730-2300 hours.
6. Facilities: Target shed, Portable Latrine, Flag Pole (UAC).
7. Firing Line: 36 prone firing positions, no foxholes, 12 pistol firing positions, 4 machinegun firing positions (10 meter)
8. Communications: BK Radio / FM radio 38.85.
9. Equipment Required: Ten pound B-C fire extinguisher, radio, FM /TM for weapon, score cards, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10.
10. Parking: Rear of the range, and on Jackson Road.
11. Restrictions:
  - a) Firing on this range denies the use of the Urban Assault Course and the Shoothouse.
  - b) This range is primarily used with the UAC and Shoothouse. This range is downrange of these facilities and use will be denied if the UAC or Shoot house is scheduled.
  - c) Jackson Road gate at the pits of Golf Range will be secured when GB Range is firing.
  - d) Night fire is authorized. Units must provide target illumination. Pyrotechnics will not be used without permission from Range Control on a daily basis.
  - e) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire when aircraft is 5 minutes from TOT. The radio must be constantly monitored.

**C-16. HOTEL Range**

1. Location: BH 82650980 (NAD 1983 / WGS 84).
2. Description: SAW/M60/M240 Transition Range.
3. Ammunition Authorized: 5.56/7.62mm.
4. Hours of firing: 0730 – 2300 hours.
5. Targets: Enhanced Remote Target System using TRACER computer controlled and scored pop-up targets. Four lanes with 14 targets, each from 100 to 800 meters. Four foxhole machine gun positions.
6. Facilities: 50-foot tower with observation platform below the operations room, portable latrine, ammo breakdown building, PA system.
7. Range Flagpole: One at the range entrance and one on the range tower. Two flags are required.
8. Communications: BK Radio / FM radio 38.85. The unit may want to use extra radios on a unit frequency to communicate from the firing line to the OIC in the tower.
9. Restrictions: No night fire unless using NODS. No chemlights or anything else will be fastened to the targets, day or night. If using NODS, the unit will provide the tower operator with a set for safety. The operator must be able to see that rounds are staying in the target area or the range will not operate. THIS RANGE HAS A SAFETY WAIVER IN EFFECT. The range operating procedures will be followed for machine gun firing in order to comply with the waiver. M60s WILL NOT BE FIRED AT TARGETS CLOSER THAN 400 METERS. NO PYROTECHNICS WITHOUT RANGE CONTROL PERMISSION ON A DAILY BASIS. TRACER MAY BE DENIED ACCORDING TO FIRE CONDITIONS. NO TARGETS, OTHER THAN WHAT IS INSTALLED, WILL BE PLACED ON THE RANGE.
10. Parking: Parking area is to the rear of the range, across from the maintenance building. The ammo and weapons vehicles may drive up to the vicinity of the ammo table to unload, but will not remain parked there. DO NOT DRIVE VEHICLES UP THE EMBANKMENT TO THE FIRING LINE.
11. Operating Procedures for HOTEL Range
  - a) Purpose: To prescribe the policies and procedures governing the conduct of live fire on the SAW/M60/240 machine gun transition range.
  - b) Scope: This applies to all personnel firing on HOTEL Range.
  - c) Description: This is a four lane, live fire machine gun qualification/transition range. Each lane has 14 computer-controlled target machines with E-type silhouettes located from 100 to 800 meters. All are single targets, except the 800-meter line which has four targets per lane. Due to the lane configuration, targets are alternating colors to ensure lane identification (lane 1 may be black, lane 2 may be white, etc.).

d) Equipment Requirements: Except as indicated, all the following equipment will be supplied by the unit:

- (1) Fort Devens Reg 350-3.
- (2) Appropriate FMs and TMs for weapons systems and DA PAM 385-63.
- (3) Range flags (Range Control).
- (4) Safety paddles (Range Control).
- (5) Radios.
- (6) Weapon accessories as required by FMs and TMs.
- (7) Ten pound B-C fire extinguisher.
- (8) One clearing rod per lane. Single piece rod per AR 385-63
- (9) Four stakes and wire per weapon (to stake down bipod).
- (10) Range packet issued by Range Control.

e) Personnel Requirements:

- (1) Range Tower Operator (provided by unit).
- (2) OIC.
- (3) Safety Officer.
- (4) Lane Safety Officers (one per lane).
- (5) Unit armorer.
- (6) Ammo NCO and detail.

f) Uniform Requirements: As prescribed by the commander. PPE as required by DA PAM 385-63 para 2-10.

g) Responsibilities:

- (1) Range Inspector.
  - A. Ensure the range targetry and computer are operational and running prior to unit arrival.
  - B. Brief tower operator and coordinate with the OIC as to scenarios to be run.
  - C. Ensure that the OIC has briefed all personnel on safety and duties and that all safety requirements are complied with.

- D. Ensure that proper police and maintenance is performed before releasing the unit.
  - E. Ensure the left and right limit markers are visible and determine if weather conditions permit safe firing. IF THE 800-METER LIMIT MARKERS ARE NOT CLEARLY VISIBLE, FIRING WILL NOT BE PERMITTED.
- (2) Range OIC: Specific duties include, but are not limited to:
- A. Familiar with and responsible for compliance with all applicable FMs and TMs for the weapons systems, course of fire and Fort Devens Reg 350-3. Ensure all support personnel are familiar with the same.
  - B. Be physically present on the range when firing is being conducted; ensure all support personnel are also present during firing.
  - C. Ensure that safety gates 1, 2, 3, 4, 5, 6, & 7 are locked and verify with Range Control before firing commences.
  - D. Ensure all persons receive a safety and dud briefing, to include latecomers.
  - E. Establish and maintain communications with Range Control. Call an immediate cease-fire if communication is lost.
  - F. Ensure that downrange is clear of personnel and vehicles before firing. Turnpike Road runs through the range at the 400-meter line and a road through the impact area accesses the range at the 800-meter line. Maintain constant surveillance downrange.
  - G. Cease-fire for aircraft downrange and notify Range Control.
  - H. Report to Range Control any accidents or malfunctions involving weapons or ammunition immediately when they occur. In the event of an accident or injury involving a weapon or ammunition, the scene will be preserved "as is" until investigation by the appropriate personnel. Treatment and/or evacuation of injured personnel will always have first priority.
- (3) Range Safety Officer: Specific duties include, but are not limited to:
- A. Responsible for being familiar and complying with Fort Devens Reg 350-3, FMs and TMs for the weapons systems and course of fire.
  - B. Be physically present on the firing line during firing and ensure all safety personnel are present.

- C. Maintain constant downrange surveillance for persons, vehicles, or aircraft. Issue an immediate cease-fire, if necessary.
  - D. Ensure that each lane safety NCO has a clear line of sight to all targets in his lane and the range limit markers.
  - E. Ensure that gunners do not fire at any target not in their lane.
  - F. Verify that lanes are safe to fire prior to firing and safe after a cease-fire or check-fire is given.
  - G. Maintain communications with the OIC and lane safety NCOs.
  - H. Ensure that all M60 bipods are staked down and there are four inches of sandbags under the butt of the weapon. Ensure that no weapon can be fired at an elevation in excess of 51 mils.
  - I. Ensure that no weapon is handled in such a manner that a round may be fired outside the range limits or over the hill behind the 800-meter line.
  - J. Ensure that all weapons are rodded and cleared before removal from the firing line.
  - K. Ensure that all misfires, jammed weapons, or runaway weapons are handled safely and IAW the appropriate manuals.
  - L. Ensure that the range flags are raised during the day. If firing at night, the range limit markers will be marked with flashing red lights issued by Range Control or unit supplied red chemical lights. Ensure all NODS are operational and a set is supplied to the range operator in the tower.
  - M. Call an immediate cease-fire if the limit markers are not visible.
  - N. Ensure that no one goes forward of the firing line when the range is hot or until all weapons are clear.
  - O. Ensure that all weapons not on the firing line are on mechanical safe and feedtray covers are open.
  - P. Rod all weapons before they leave the line.
- (4) Lane Safety NCO: Specific duties include, but are not limited to:
- A. Responsible for being familiar and complying with Fort Devens Reg 350-3 and appropriate FMs and TMs for the weapons systems.
  - B. Ensure that gunners can identify their targets in their lanes and the range limit markers are visible and pointed out to gunners.

- C. Ensure weapons cannot be fired in excess of 51 mils of elevation, that there are four inches of sandbags under the butt of the weapon, that M60 bipods are staked down and weapons are not handled in any manner that may cause a round to be fired outside the assigned lane, the range limits, or over the hill to the rear of the 800-meter line.
  - D. Ensure the gunner can hear and understand commands from the tower.
  - E. Ensure weapons at the firing point; but not in use, are behind the firing line with feed tray covers open, on mechanical safe and clear.
  - F. Rod all weapons and clear them before removal from the firing line. Ensure that weapons are carried at "PORT ARMS," pointed downrange to the center of the firing line where the Range Safety Officer will rod them again before the weapon leaves the firing line.
  - G. Ensure all misfires, jams, runaway weapons are handled in a safe manner IAW instructions in the TMs.
  - H. Ensure no one goes forward of the firing line when the range is hot or before weapons are cleared.
- (5) Ammo NCO: Specific duties include, but are not limited to:
- A. Responsible for being familiar and complying with Fort Devens Reg 350-3, FMs and TMs for the weapons systems, course of fire and applicable publications governing handling and storage of ammunition.
  - B. Ensure the ten pound B-C fire extinguisher is present and filled, and the inspection tag is up-to-date.
  - C. Ensure all damaged or misfired ammunition is identified and separated from serviceable ammunition.
  - D. Ensure all ammunition and residue is accounted for and returned to the ASP as required. Will safeguard ammunition at all times.

13. General Instructions: The provisions in Fort Devens Reg 350-3, DA PAM 385-63 and any supplemental instructions from Range Control will govern all firing exercises. In addition:

- a) All persons firing qualification will have zeroed and qualified on the 10-meter range first.
- b) All gun crews will know how to deal with misfires, jams and runaway guns before firing.

- c) Safety precautions and procedures in applicable manuals will be adhered to.
- d) All firing will be within the range limit markers and within the assigned lane.
- e) No rounds will be fired so as to impact short of the minimum range or beyond the maximum range. M60s WILL NOT BE FIRED AT TARGETS CLOSER THAN 400 METERS.
- f) The maintenance building and any other storage containers or structures, or supply storage areas are OFF LIMITS to unit personnel.
- g) Range Control is the only authority for a range to go to a hot status. Radio communication will be maintained and constantly monitored by the unit.
- h) Ammunition will not normally be stored on the range overnight. Case-by-case exceptions may be made by Range Control only. Overnight ammunition guards will have radio communications with Range Control.
- i) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-17. KILO Range**

1. Location: BH 83400878 (NAD 1983 / WGS 84) off Dixie Road.
2. Description: 25-meter zero/qualification. Zero range for ECHO Range. There are 35 prone firing positions.
3. Ammunition Authorized: 5.56mm, 9mm.
4. Hours of firing: 0730-2300
5. Targets: M16A1/A2 25-meter zero and alternate course C targets.
6. Facilities: Bleachers, target ammo shed, portable latrine, tower.
7. Range Flagpole: Rear of range.
8. Communications: BK Radio / FM radio 38.85.
9. Equipment Required: PPE as required by DA PAM 385-63 para 2-10. Radio, ten pound B-C fire extinguisher, FMs and TMs for weapons, DA PAM 385-63, range packet from Range Control.
10. Restrictions: No automatic or burst fire.
11. Parking: Across Dixie Road. Communications vehicle may park on the range.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-18. OSCAR Range**

1. Location: BH 83380770 (NAD 1983 / WGS 84).
2. Description: Mortar firing point for 60mm, 81mm, and 120mm (restricted to the subcaliber M303 or M313 insert devices for 81mm). The impact area is extremely limited and small errors in gunnery can be very dangerous. Training areas and ranges are less than 800 meters beyond the impact area. It is very important that all data be correct.
3. Facilities: Bleachers, covered ammo breakdown point. No latrine.
4. Ammunition Authorized: HE, WP, illumination, sabot round.
5. Hours of firing: 0800 – 2200 Monday – Saturday  
0900 – 2200 Sunday
6. Ammunition Handling: Break down only the amount of ammo needed in order to prevent problems with returning it to the ASP. Ammunition will be handled IAW DA PAM 385-64.
7. Firing Positions: Four.
8. Observation Point (OP): The OP will be located at either DELTA Range at BH83400821(NAD 1983) or on ECHO Range at BH83400829(NAD 1983).
9. R-4102 Restricted Airspace: The airspace must be activated with the Federal Aviation Administration (FAA). Mortars cannot fire unless R-4102A/B is activated. Range Control will not accept requests for mortar fire less than 14 working days out. Airspace is controlled as follows:
  - a. (R-4102A is from surface to 1999 feet above mean sea level (MSL). R-4102B is 2000 to 3995 feet. Both must be activated for any projectile with a maximum ordinate of 45 meters or more.
  - b. Commercial air traffic will be routed 1000 feet above the activated airspace.
  - c. Maximum ordinate of rounds fired will not exceed 3995 feet above MSL.  
  
**NOTE: THIS ALLOWS A MAXIMUM ORDINATE OF 3,740 FEET DUE TO THE ALTITUDE OF THE RANGE.**
  - d. R-4102 covers all of South Post to include the Oxbow Wildlife Refuge. Aircraft are denied use of the airspace when mortar fire is scheduled.
  - e. Range Control must notify the FAA one hour prior to the first round downrange. A check-fire of one hour or more requires the airspace to be returned to the FAA. The airspace cannot be reactivated that day.
  - f. An air observer must be posted to watch for stray aircraft. If aircraft are observed in the airspace, cease firing immediately and notify Range Control. Private civilian aircraft may not heed posted Notice to Airmen (NOTAM).

10. Declination Station: Located on Whittemore Hill (Hill 455) at 444 feet, coordinates BH 81340680 (NAD 1983 / WGS 84). It is a small brass disc set in concrete. See Figure 1 for declination diagram.
11. Required Publications: Appropriate TMs and FMs for the weapons systems must be on the range. Some that are required are:
  - a. DA PAM 385-63, Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat.
  - b. FM 7-90, Mortar Gunnery.
  - c. FM 3-22.90, Mortars.
  - d. Appropriate Firing Table for weapon and ammunition being fired.
  - e. TM 9-1010-223-10 (Operator's Manual for 60-mm M224)
  - f. TM 9-1015-249-10 (Operator's Manual for 81-mm M252)
  - g. TM 9-1015-250-10 (Operator's Manual for 120-mm) Sub-cal firing only with 81-mm device.
  - h. TM 9-1015-254-13&P (Operator's Unit and Direct Support Maintenance Manual Subcaliber Insert M303).
  - i. DA PAM 385-64, Ammunition and Explosives Safety Standards.
  - j. Fort Devens Regulation 350-3, Training; Ranges, Training Facilities and Training Areas.
12. Duds: Using the firing data, plot the location where the dud is suspected to have impacted. If the dud cause or location cannot be determined, notify Range Control immediately.
13. Minimum Required Equipment:
  - a. Two (2) ten pound B-C fire extinguishers.
  - b. Radios.
  - c. Map of range and impact area.
  - d. Mortar safety card.
  - e. Firing Tables (tabular).
  - f. Aiming circle.
  - g. Gunners bore sight device M45.
  - h. Mounting grid azimuth or orienting angle.

- i. Ammunition repack cards (if used).
- j. PPE; hearing, eye, helmet and body armor, as required by DA PAM 385-63 para 9-1.c.

14. Increments Removed from Cartridges: Increments will be placed in a metal or wooden container located at least 25 meters away from the firing position. Excess increments should not accumulate near the mortar positions but are removed to a designated place of burning and destroyed. The following is one way to dispose of the increments:

- a. Select a point at least 100meters from the mortar position and ammunition point and vehicles.
- b. Clear all dead grass or brush within 30 meters around the burning place. Do not burn increments in piles – spread them in a train 1 to 2 inches deep, 4 to 6 inches wide, and as long as necessary.
- c. From this train, extend a starting train that will burn against the wind of single increments laid end to end. End this starting train with not less than 1 meter of inert material (dry grass, leaves, or newspaper).
- d. Ignite the inert material.
- e. Do not leave unused increments on the range.
- f. Call Range Control to have the area inspected to insure that the burning is complete and no fire is left burning.

15. Misfires:

- a. Actions outlined in DA PAM 385-63, FM 3-22.90 and TM's for weapon must be followed. Misfires will be placed in a sandbagged pit with safety pins re-inserted. Misfires will be returned to the ASP.
- b. EOD will be notified if there is a round lodged in the tube that cannot be removed by prescribed methods. All EOD support must come from New Jersey.

16. Short Rounds: If a short round occurs, firing will cease immediately and Range Control notified. Firing will not resume until the cause is determined and corrected.

**IF A DUD SHORT ROUND IS IN CLOSE PROXIMTY TO THE RANGE, DO NOT GO FORWARD OF THE FIRING LINE TO LOOK FOR IT.**

17. Ammunition Accountability: Provide Range Control a copy of the DA Form 581, Request for Issue and Turn-in of Ammunition when the OIC signs for the range. To clear the range, the OIC will give Range Control an Ammunition Consumption Certificate, an increment burn count and the location of any duds.

18. OIC Responsibilities: In addition to responsibilities outlined elsewhere in this regulation, ensure all mortar equipment is functioning properly. Physically check the OP before firing. Establish and maintain communications with Range Control and the OP. Call an immediate cease-fire if communication with either is lost.

19. RSO Responsibilities:

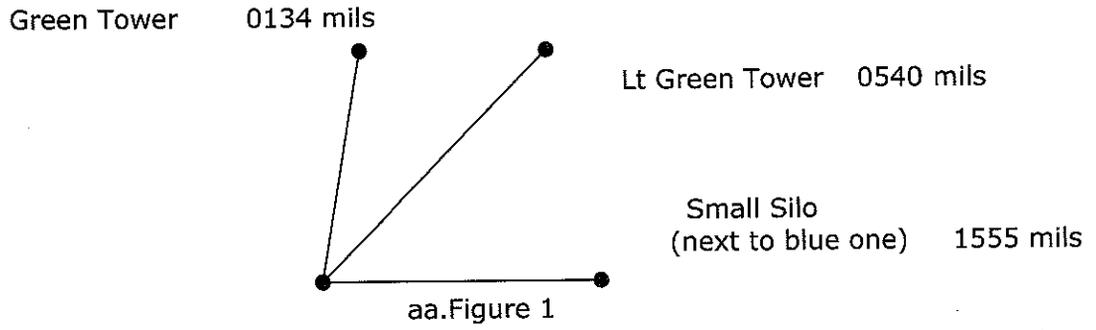
- a. Check all rounds for the proper number of increments. THE MAXIMUM IS CHARGE 2 FOR 60mm, 4.2 INCH SUB-CAL AND 81mm.
- b. Ensure a count and recording of increments prior to burning. Ensure proper and safe burning.
- c. Ensure all data is accurate and correctly placed on the gun(s).
- d. Ensure that aiming circles are declinated properly.
- e. Ensure that the safety fan is entered in RED on the firing chart and turned over to Range Control upon clearing.
- f. Ensure that a Fire Direction Center (FDC) is used and staffed with at least two plotters.
- g. Ensure that all guns are bore sighted, all gunners know the left and right boundaries and that the first round is fired center of sector.
- h. Actions Before Firing:
  - i. Verify the mortar safety card applies to the exercise.
  - j. Verify the firing position is the same as shown on the safety card.
  - k. Verify the laying of the guns.
  - l. Verify computation of the left and right safety limits.
  - m. Verify the FDC firing chart and plotting board.
  - n. Inform all safety personnel and gunners of the right and left safety limits, the maximum and minimum elevations, charges and minimum fuse settings.
  - o. Check overhead clearance and mask. Make safety checks of all guns and ensure sights are properly seated.
  - p. Protect ammunition from sunlight and moisture.

20. VERIFY THAT THE FIRING TABLES AND AMMUNITION MATCH.

- a. Survey and Ammunition Data:
  - 1) Survey Date: 18 May 1989, by the Fort Drum Artillery Survey Team.
  - 2) OSCAR Range Survey Point: BT 8327507404.
  - 3) OSCAR Range Altitude: 78 meters (255 feet).
  - 4) Mortar Pit #2: BT 8328707412 NAD 1927 (BH 8338507705 NAD 1983)

- 5) (1)LEFT LIMIT AZIMUTH: 4925 MILS (GRID)
- 6) RIGHT LIMIT AZIMUTH: 5633 MILS (GRID)
- 7) AZIMUTH TO CENTER SECTOR: 5279 MILS (GRID)
- 8) MOUNTING AZIMUTH: 5400 MILS (GRID)
- 9) MINIMUM RANGE: (81mm HE) 941 meters
- 10)MINIMUM RANGE: (60mmHE/81mmWP) 700 meters
- 11)MAXIMUM RANGE: 1304 meters
- 12)MAXIMUM ORDINATE: 1140 meters
- 13)MINIMUM CLOUD BASE ALTITUDE: (deleted)
- 14)MAXIMUM CHARGE: Charge 2
- 15)For Illumination Only:
  - a) MAXIMUM RANGE TO BURST 1304 meters
  - b) MAXIMUM RANGE TO IMPACT: 1609 meters
  - c) MAXIMUM CHARGE: 1
- 16)ALL OTHER DATA AS ABOVE.
- 17)Authorized Ammunition:
  - a) 60mm: HE M720 Fuse, MO M734
  - HE M49A4 Fuse, PD M525
  - WP M302A1 Fuse, PD M527
  - IL M83A3 Fuse, Time M65A1
  - b) 81mm: HE M374A2 Fuse, PD M567
  - HE M374A3 Fuse, PD M567
  - WP M375A2 Fuse, PD M567
  - RP M819 Fuse, MTSQ M772
  - IL M301A3 Fuse, TimeM84A1

21. Declination Diagram: The declination station is located in Area 6C, Whittemore Hill. The station is marked with a brass control point lain in concrete flush to the ground, on the east side of the hilltop, approximately 20 meters from the crest of the hill.



**C-19. PAPA Range**

1. Location: BH 83390890 (NAD 1983 / WGS 84)off Dixie Road.
2. Description: Combat Pistol, MP Qualification Course, Multi-purpose small arms use. Handguns, shotguns, sub-machine guns.
3. Ammunition Authorized: All handguns up to .45 cal, shotgun, 5.56 ball.
4. Hours of firing: 0730-2300.
5. Targets Authorized: Paper in fixed frames.
6. Facilities: Target shed, tower, portable latrine, ammo shed.
7. Range Flagpole: Rear of range next to Dixie Road.
8. Communications: BK Net / FM radio 38.85.
9. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for weapons, DA PAM 385-63, range packet from Range Control, radio, PPE as required by DA PAM 385-63 para 2-10.
10. Restrictions: Any reflexive fire with M-4/M-16 will be coordinated with Range Control in advance. All targets will be properly frame mounted. Nothing will be thrown in the air to shoot at. Objects lying on the ground will not be shot.
11. Parking: Across Dixie Road.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-20. PAPA-ALPHA Range**

1. Location: BH 83390885 (NAD 1983/WGS 84) off Dixie Road.
2. Description: Combat Pistol, MP Qualification Course, Multi-purpose small arms use. Handguns, shotguns, sub-machine guns.
3. Ammunition Authorized: All handguns up to .45 cal, shotgun, 5.56 ball.
4. Hours of firing: 0730-2300.
5. Targets Authorized: Paper in fixed frames.
6. Facilities: Target shed, tower, portable latrine, ammo shed.
7. Range Flagpole: Rear of range next to Dixie Road.
8. Communications: BK Net / FM radio 38.85.
9. Equipment Required: Ten pound B-C fire extinguisher, FMs and TMs for weapons, DA PAM 385-63, range packet from Range Control, radio, PPE as required by DA PAM 385-63 para 2-10.
10. Restrictions: Any reflexive fire with M-4/M-16 will be coordinated with Range Control in advance. All targets will be properly frame mounted. Nothing will be thrown in the air to shoot at. Objects lying on the ground will not be shot.
11. Parking: Across Dixie Road.
12. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-21. TANGO Range**

1. Location: Off Trainfire Road at BH 83380737 (NAD 1983 / WGS 84).
2. Description: 25-meter rifle range.
3. Targets: M16A1/A2 zero and alternate course C.
4. Ammunition Authorized: 5.56mm, handgun up to .45 cal., shotgun.
5. Hours of firing: 0730 – 2300 hours
6. Facilities: Target shed, tower with PA system, ammo shed, portable latrine, bleachers.
7. Firing Line: 23 fighting positions/prone supported or unsupported positions.
8. Range Flagpole: Right rear of the range.
9. Communications: BK Net / FM radio 38.85.
10. Equipment Requirements: Ten pound B-C fire extinguisher, FMs and TMs for weapons, scorecards, DA PAM 385-63, range packet from Range Control, safety paddles, PPE as required by DA PAM 385-63 para 2-10.
11. Restrictions: No automatic or burst fire.
12. Parking: All vehicles except a communications vehicle, park across Trainfire Road.
13. Remarks:
  - a) Aircraft departing Turner DZ may fly directly overhead. Range Control will call a check-fire when aircraft is 5 minutes from Time-on-Target (TOT). Radio must be constantly monitored.
  - b) Night fire is authorized. Unit must provide target illumination. Pyrotechnics will not be used without Range Control permission on a daily basis.

**C-22. UNIFORM I Range**

1. Location: Off Trainfire Road at BH 83290728 (NAD 1983 / WGS 84).
2. Description: 25-meter zero/alternate course C qualification.
3. Targets: M16A1/A2 zero and alternate course C.
4. Ammunition Authorized: 5.56, handgun up to .45 cal., shotgun.
5. Hours of firing: 0730 – 2300 hours.
6. Facilities: Target shed, tower with PA system, ammo breakdown building, bleachers, portable latrine.
7. Firing Line: 50 fighting positions/prone supported and unsupported positions.
8. Range Flagpole: At right rear of the range.
9. Communications: BK Radio / FM radio 38.85.
10. Equipment Requirements: Ten pound B-C fire extinguisher, FMs and TMs for weapons, safety paddles, DA PAM 385-63, range packet from Range Control, scorecards, PPE as required by DA PAM 385-63 para 2-10.
11. Parking: Across Trainfire Road. Communication vehicle may park on the range.
12. Restrictions: No automatic or burst fire.
13. Remarks:
  - a) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft TOT. The radio must be constantly monitored.
  - b) Night fire authorized. Unit must provide target illumination. Pyrotechnics will not be used without Range Control permission on a daily basis.

**C-23. UNIFORM II Range**

1. Location: Trainfire Road at BH 83170716 (NAD 1983 / WGS 84).
2. Description: 25-meter zero/alternate course C qualification.
3. Targets: M16A1/A2 zero and alternate course C.
4. Ammunition Authorized: 5.56, handgun up to .45 cal., shotgun.
5. Hours of firing: 0730 – 2300 hours.
6. Facilities: Bleachers, ammo breakdown building, tower with PA system, target shed, portable latrine.
7. Firing Line: 50 fighting positions and prone supported/ unsupported positions.
8. Range Flagpole: At the right rear of the range.
9. Communications: BK Net / FM radio 38.85.
10. Equipment Requirements: Ten pound B-C fire extinguisher, FMs and TMs for weapons, scorecards, safety paddles, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10.
11. Restrictions: No automatic or burst fire.
12. Parking: Across Trainfire Road. Communication vehicle may park on the range.
13. Remarks:
  - a) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire when aircraft is 5 minutes from TOT. Radio must be constantly monitored.
  - b) Night fire authorized. Unit must provide target illumination. Pyrotechnics will not be used without permission from Range Control on a daily basis.

**C-24. VICTOR Range**

1. Location: Trainfire Road at BH 82890705 (NAD 1983 / WGS 84).
2. Description: ARF, Automated M16 record/NBC/night fire range with air powered pop-up targets.
3. Targets: Silhouettes air powered with muzzle flash indicators for night fire. Electronic scoring, computer operated.
4. Ammunition Authorized: 5.56mm ball and tracer.
5. Hours of firing: 0730 – 2300 hours.
6. Facilities: Ammo breakdown building, portable latrine, tower with PA system, bleachers
7. Firing Line: 16 positions for record fire.
8. Range Flagpole: At the right rear of the range.
9. Communications: BK Net / FM radio 38.85.
10. Equipment required: Ten pound B-C fire extinguisher, FMs / TMs for weapons, safety paddles and/or flashlights with appropriate lenses, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10.
11. Restrictions: No automatic or burst fire.
12. Parking: Across Trainfire Road. Communication vehicle may park on the range.
13. Remarks:
  - a) Unauthorized persons will not tamper with machines or attempt repairs.
  - b) Night fire requires a red flashing light or red chemical light at right and left limit markers and on the flagpole or tower. The range has emergency lighting. Pyrotechnics will not be used without permission from Range Control on a daily basis.
  - c) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire when aircraft is 5 minutes from TOT. Radio must be constantly monitored.

**C-25. X-RAY I Range**

1. Location: Trainfire Road at BH 82790676 (NAD 1983 / WGS 84).
2. Description: 25-meter zero/alternate course C qualification.
3. Targets: M16A1/A2 zero and alternate course C qualification.
4. Ammunition Authorized: 5.56mm, handgun up to .45 cal., shotgun.
5. Hours of firing: 0730 – 2300 hours.
6. Facilities: Ammo breakdown building, bleachers, tower with PA system, portable latrine.
7. Firing Line: 50 fighting positions and prone supported or unsupported positions.
8. Range Flagpole: At the right rear of the range.
9. Communications: BK Net / FM radio 38.85.
10. Equipment Requirements: Ten pound B-C fire extinguisher, FMs and TMs for weapons, scorecards, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10.
11. Restrictions: No automatic or burst fire.
12. Parking: Across Trainfire Road. Communication vehicle may park on the range.
13. Remarks:
  - a) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire when the aircraft is 5 minutes from TOT. The radio must be constantly monitored.
  - b) Night fire is authorized. Units must provide target illumination. Pyrotechnics will not be used without permission from Range Control on a daily basis.

**C-26. X-RAY II Range**

1. Location: Trainfire Road at BH 82670664 (NAD 1983 / WGS 84).
2. Description: 25-meter zero/alternate course C qualification.
3. Targets: M16A1/A2 zero and alternate course C qualification.
4. Ammunition Authorized: 5.56mm, handgun up to .45 cal. Shotgun.
5. Hours of firing: 0730 – 2300 hours.
6. Facilities: Bleachers, tower with PA system, portable latrine, ammo breakdown building.
7. Firing Line: 50 fighting positions and prone supported or unsupported positions.
8. Range Flagpole: At the right rear of the range.
9. Communications: BK Net / FM radio 38.85.
10. Equipment Requirements: Ten pound B-C fire extinguisher, TMs and FMs for weapons, scorecards, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10.
11. Restrictions: No automatic or burst fire.
12. Parking: Across Trainfire Road. Communication vehicle may park on the range.
13. Remarks:
  - a) Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire when aircraft is 5 minutes from TOT. Radio must be monitored constantly.
  - b) Night fire is authorized. Unit must furnish target illumination. Pyrotechnics will not be used without permission from Range Control on a daily basis.

**C-27. YANKEE Range**

1. Location: Trainfire Road at BH 82590652 (NAD 1983 / WGS 84).
2. Description: 25-meter zero/alternate course C qualification.
3. Targets: M16A1/A2 zero and alternate course C qualification.
4. Ammunition Authorized: 5.56mm, handgun up to .45 cal.
5. Hours of firing: 0730 – 2300 hours.
6. Facilities: Portable latrine, ammo breakdown building, bleachers, tower with PA system.
7. Firing Line: Twenty-eight fighting positions and prone supported or unsupported positions.
8. Range Flagpole: At the right rear of the range.
9. Communications: BK Net / FM radio 38.85.
10. Equipment Requirements: Ten pound B-C fire extinguisher, FMs and TMs for weapons, scorecards, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 2-10.
11. Restrictions: No automatic or burst fire.
12. Parking: Across Trainfire Road, communication vehicle may park on the range.
13. Remarks:
  - a) Aircraft departing Turner DZ may overfly the range. Range Control will call a checkfire when aircraft are 5 minutes from Time On Target (TOT). Radio must be constantly monitored.
  - b) Night fire is authorized. Unit must provide target illumination. Pyrotechnics will not be used without permission from Range Control on a daily basis.

**C-28. ZULU I Range**

1. Location: Firebreak Road at BH 81890886 (NAD 1983 / WGS 84).
2. Description: Demolition range for charges not to exceed 20 lbs (above ground) and 40 lbs (buried).
3. Targets: Supplied by unit with approval from the DPW, Environmental Division and Range Control.
4. Demolitions Authorized: Claymore mines, C-4, TNT, M-1 Military Dynamite, Bangalore Torpedo, Cratering and Shaped charges.
5. Hours of firing:                   0800 – DUSK Monday – Saturday  
  0900 – 1700    Sunday
6. Facilities: Covered demo tables, underground observation bunker.
7. Range Flagpole: At range entrance.
8. Communications: BK Net / FM radio 38.85.
9. Equipment Requirements: two (2) ten pound B-C fire extinguishers, appropriate FMs and TMs for demolition exercises conducted, helmets, appropriate equipment for filling craters, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 15-1b.(11), hearing, eye, helmets and body armor).
10. Parking: All vehicles will park off the range so as to be protected from flying debris.
11. Remarks:
  - a) Requests for military demolition training must be submitted through the Fort Devens Directorate of Plans and Training, Range Control Officer with concurrence of the installation Safety Director prior to conducting activities employing field expedient procedures or explosives.(See DA PAM 385-63, para 15-1.f.(1).
  - b) Requests for demolition training both military and civilian will require a shot plan and a Record of Environmental Consideration (REC) be submitted to the Range Safety Officer a minimum of fourteen (14) days prior to the training event for processing. The shot plan will require the approval of the Range Officer and the REC will require the approval of the DPW Environmental Chief. Range Control will not approve any demolition training until an approved REC is received in writing from DPW Environmental.
  - c) Minimum safe distances as shown in FM 3-34.214 tables 6-2 and paragraph 6-31 will be observed.
  - d) The OIC will be a Sergeant First Class or above. The RSO will be a Staff Sergeant or above.
  - e) Range Control will be provided a DA 581 and a copy of the demolition recon report upon check-in.

12. Restrictions:

- a) Demolition firing may be conducted from 0800-Dusk, Monday through Saturday and Sunday from 0900-1700. Firing weight limits or types of explosives may be limited or denied due to adverse weather conditions. Present charge limits are **20** pounds above ground (untamped) and **40** pounds below ground (tamped). A charge is defined as that amount of explosives detonated by one detonator. Charge firings will be no closer than one minute apart. Range Control will be notified prior to each firing. The OIC of the range will maintain a log of each firing to include time, type of explosive and amount of each charge. The log will be turned-in to Range Control upon clearing. The using unit is responsible for clearing and disposing of debris from targets, and repairing craters and any other terrain damage.
- b) Steel cutting charges will be base on FM 3-34.214 and will be fired in an excavated pit that is at least 1 meter deep and a mat made of hemp-type material must cover the charge. Steel cutting charges fired outside a steel-cutting bunker will not exceed 0.9 kilogram. Personnel must be a minimum 100 meters from the charge at detonation and must be in a missile proof shelter, 300 meters in defilade, or 1,000 meters if in the open.
- c) Charges placed on concrete will not exceed 20 pounds and will be placed on the side nearest the observers. Observers must be at least 100 meters away in a missile-proof shelter, 300 meters away in defilade, or 900 meters away in the open. An unoccupied distance of 900 meters will be provided on the opposite side of the charge where most missile hazards will be thrown.
- d) Misfire procedures in FM 3-34.214 paragraph 6-38 (non-electric) and 6-41(electric) will be followed.
- e) Range Gates 5 and 6 on the north and south ends of Firebreak Road locked. Units may post a road guard at the north end of Firebreak Road rather than locking this gate. The unit must provide radio communication with the range to insure no traffic is allowed down Firebreak Road while a shot is being fired.
- f) All personnel will be in the underground bunker, excess personnel will move off the range to a safe distance.
- g) THE COVERED OBSERVATION AREA AND/OR TOWER ON TOP OF THE HILL (ZULU-2 RANGE) ARE NOT TO BE USED FOR OBSERVING DEMO SHOTS.
- h) Electrical means of firing shots will not be used during electrical storms.
- i) Engineer equipment, if needed to restore the range, will be on-site before firing. All firing and target debris will be removed and properly disposed of by the unit.
- j) No more than one (1) Bangalore section will be fired at one time.
- k) Weather and/or atmospheric conditions (a focus) may cause a reduction of charge sizes or closing of the range. Indications a focus exists are:
  - 1) A steady 5 mph or more wind and/or gusts of greater velocity.

- 2) Clear days when layering of smoke or fog is observed.
- 3) Cold, hazy, or foggy mornings.
- 4) A day following one with large temperature extremes between day and night.
- 5) High barometric pressures and low temperatures.

Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-29. ZULU II Range**

1. Location: Firebreak Road at BH 81820897 (NAD 1983 / WGS 84).
2. Description: Hand grenade range.
3. Ammunition Authorized: High explosive grenades. No gas or riot agents.
4. Hours of firing:                   0800 – DUSK Monday – Saturday  
  0800 – 1700    Sunday
5. Facilities: Covered observation/holding area, tower.
6. Firing Line: Two throwing points with knee walls.
7. Range Flagpole: At range entrance.
8. Communications: BK Net / FM radio 38.85.
9. Equipment Required: Two (2) ten pound B-C fire extinguishers, helmets, FMs and TMs for grenades, DA PAM 385-63, range packet from Range Control, PPE as required by DA PAM 385-63 para 5-2,a.(3).
10. Parking: All vehicles will park off the range in a protected position.
11. Remarks:
  - a) The OIC will be a Sergeant First Class or above. The RSO will be a Staff Sergeant or above.
  - b) Range Control will be presented a DA Form 581 upon check in.
  - c) A practice course must be run before throwing live grenades.
  - d) Procedures in FM 3-23.30 Appendix A will be followed for throwing live hand grenades.
  - e) Live grenades will be stored in the base of the tower, to the left and right of the doorway leading to the throwing bays. Grenades are issued only to those soldiers who are next in line to go to the throwing bays. The safety NCO makes sure the Soldiers are holding the grenades properly and at chin-chest level. When departing to the live bay the safety officer directs the Soldiers to sound off, each indicating with which hand he will throw the grenade.
  - f) Throwing of live grenades:
    - The Range OIC must be positioned in the tower (base) to observe the throw phase and count grenade explosions for the purpose of accountability and duds.
    - A pit safety NCO is assigned to each throwing pit.

- The safety NCO issuing grenades directs Soldiers to specific throwing pits.
- The pit safety NCO observes movement of the Soldier to the pit.
- The Soldier identifies the throwing arm to the pit safety NCO.
- The pit safety NCO directs the Soldier to the appropriate position of the pit, based on left or right throwing arm.
- The pit safety NCO directs the Soldier to hand over the grenade in his nonthrowing hand.
- The pit safety NCO directs the Soldier to remove the safety clip and prepare to throw. From this point on, the pit safety NCO does not remove his eyes from the throwing hand until completion of the throw. The pit safety NCO signals the tower that the soldier is prepared to throw by holding up his left or right arm in a vertical position.

**WARNING**

**If a grenade is dropped in the pit, the pit safety NCO forces the Soldier out of the pit into the designated safe area and follows him.**

- When all throwing pits are ready, the tower NCO commands THROW, and the pit NCO repeats the THROW command to the soldier in the pit.
- All pits throw at the same time.
- The soldiers throw the grenades, and then drop to cover. If the soldier does not take cover, the pit NCO forces the soldier to take cover if needed.
- The tower NCO commands clear after observing(hearing) each grenade detonate.
- The soldiers prepare to throw a second grenade, repeating the required steps.

**WARNING**

**If a soldier releases the safety lever but fails to throw the grenade, the pit safety NCO forcefully repeats the command to throw; if necessary, the pit safety NCO grabs and throws the grenade himself.**

12. Restrictions:

- a) IN THE EVENT OF A DUD GRENADE, CEASE-FIRE IMMEDIATELY. NO FURTHER GRENADES WILL BE THROWN IN THAT LANE UNTIL THE DUD CAN BE CLEARED BY EOD PERSONNEL. PERSONNEL IN THE THROWING PIT WILL REMAIN UNDER COVER A MINIMUM OF FIVE MINUTES PER FM 3.23-30. NOTIFY RANGE CONTROL IMMEDIATELY. PLOT THE DUD LOCATION AS ACCURATELY AS POSSIBLE ON A SKETCH MAP AND GIVE TO RANGE CONTROL.
- b) A road guard will be posted at the range entrance and the gate entering the demo range will be closed and locked.
- c) Gloves will not be worn when throwing grenades. Helmets, proper eye protection, and body armor will be worn.
- d) Range Technicians will not schedule this range for routine use by Units if snow covers the road inside the gate leading to the range, the range floor, or it is forecasted that snow will cover the ground on the scheduled day of training.

13. Aircraft departing Turner DZ may overfly the range. Range Control will call a check-fire 5 minutes before the aircraft's TOT (time on target). The radio must be constantly monitored. Range Control will announce on the radio net when aircraft are clear and units may resume firing.

**C-30. Facility 1: Basic Compass Course**

1. Location: Training Areas 8, 9A, 9B. BH 80900945
2. Remarks: Facility 1 Compass Course SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html) Course packet available from Range Control. Requires co-use agreements with other units using the training areas. The course meets the Expert Field Medical Badge requirements.
3. Communication will be maintained with Range Control on FM 38.85/BK NET

**C-31. Facility 2: Basic Land Navigation Course**

1. Location: Training Areas 7A, 7B, 7C at BH7990745
2. Remarks: Facility 2 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html) Course packet available from Range Control. Requires co-use agreements with other units using the training areas. Requires plotting grid coordinates on Map (user supplied).
3. Communication will be maintained with Range Control on FM 38.85/BK NET.

**C-32. Facility 3: Vehicle Recovery Course**

1. Location: Training Area 6A, off Shirley/Lancaster Road at BH80880709
2. Remarks: Requires RTS-Maintenance permission before Range Control schedules.
3. Communication will be maintained with Range Control on FM 38.85/BK NET

**C-33. Facility 4: Leadership Reaction Course**

1. Location: Co-located with Obstacle Course off Trainfire Road at BH 82400641.
2. Remarks: Facility 4 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html) Scenarios available from Range Control. Equipment is on-site.
3. Communication will be maintained with Range Control on FM 38.85/BK NET.

**C-34. Facility 5: Obstacle/Confidence Course** (Approximately 1.5 mile in length with 14 obstacles.)

1. Location: Trainfire Road at BH82440633
2. Remarks: Facility 5 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html)

3. Requirements/Restrictions:

- a) Radio communication with Range Control at all times on FM 38.85/BK NET.
- b) Safety NCO at each obstacle.
- c) Report injuries immediately to Range Control. Request ambulance through Range Control.
- d) The intent of this course is to build teamwork and confidence. It should not be used as a test of speed.
- e) Pyrotechnics will not be used.
- f) Notify Range Control immediately of any needed repairs or unsafe conditions.

**C-35. Facility 6: Rappel Tower (See Appendix J)**

1. Location: Co-located with Obstacle Course at BH82210607, off Trainfire Road.
2. Remarks: Facility 6 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html) Packet available at Range Control.
3. Communication with Range Control will be maintained on FM 38.85/BK NET.

**C-36. Facility 7: Nuclear, Biological, Chemical (NBC) Chamber**

1. Location: Training Area 14A at BH82981059. Does not include any portion of the training area except the immediate area around the chamber.
2. Remarks: Facility 7 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html) Packet available at Range Control.
3. Required Equipment: Water containers with fresh water, radio, TM 3-42-40-279-10/TM 3-42-40-280-10, Fort Devens Reg 350-3.
4. Personnel Requirements: The OIC/NCOIC must be a Staff Sergeant or above and are chemical officers (branch code 74), chemical NCOs (MOS 54B), school trained chemical, biological, radiological, and nuclear (CBRN) officers (SSI 3R) and NCOs (SQI C).
5. Communication will be maintained with Range Control on FM 38.85/BK NET
6. Operation and Safety:
  - a) Sign for chamber at Range Control, occupy and establish communications.
  - b) Screen soldiers for medical conditions that may preclude exposure to agent, i.e. contact lenses, pregnancy, etc.

- c) Air chamber 30 minutes before requesting clearance by Range Control.
- d) Have extra masks and spare parts.
- e) Conduct exercise IAW DA PAM 385-63,13-2c..

**C-37. Facility 8 Tactical Training Base**

- 1. Location: Training Area 9B, off Bivouac Rd, at BH7960408612.
- 2. Remarks: The TTB consist of fixed structures, modulated containers and tent shelters. The TTB is broken down into two 150 personnel Force Provider Expeditionary Base Camps. The billeting tents are temperature controlled and provide the capacity of housing 308 personnel. The tents are furnished with lighting, bunk beds and trunk lockers. Each tent sleeps 22 personnel. Facility 8 SOP is available on the Fort Devens website at:  
[https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html)

**C-38. Facility 9: Convoy Course**

- 1. Location: Training Area 6A, off Ponakin Road, at BH81210673.
- 2. Remarks: This course is approximately 1.2 miles and is not a live fire course. Facility 9 SOP is available on the Fort Devens website at  
[https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html).
- 3. Course packet is available from Range Control.
- 4. Ammunition authorized: Blanks and pyrotechnics, units must request permission daily.
- 5. Communication will be maintained with Range Control on FM 38.85/BK NET

**C-39. Facility 10: Turner Drop Zone.**

- 1. Location: BH8019708048.
- 2. This is a surveyed Parachute Drop Zone, a copy of the DZ survey is available from Range Control.
- 3. No tracked vehicles are allowed, limited wheeled vehicle traffic due to ground conditions (contact Range Control for updated condition status).
- 4. See Appendix D for the use of this Facility.

**C-40. Facility 11 Classroom/AAR Building.**

- 1. Location: BH83510837.
- 2. This facility has seating for approximately 30 personnel, no internet connection.

3. Remarks: Facility 11 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html)

**C-41. Facility 12 Urban Assault Course (UAC).**

1. Location: Off Jackson Road at BH83130956.
2. This facility is designed to teach soldiers to clear and enter buildings, use the M203 grenade launcher and conduct underground operations in an urban environment and consists of the following:
  - a) Station 1: Individual and Team Trainer with 6 interior precision targets.
  - b) Station 2: Squad & Platoon Trainer with 10 interior precision targets.
  - c) Station 3: Grenadier Gunnery Trainer with 13 non-precision targets.
  - d) Station 4: Urban Offense / Defense Trainer with 10 interior precision human targets.
  - e) Station 5: Underground Trainer, no targets and presently limited to one entry point connected to the Urban Offense / Defense Trainer.
3. Ammunition Authorized: 5.56mm Blank, practice grenade fuse and body, 40mm practice grenade (M781). No other ammunition or pyrotechnics are authorized without written approval from Range Control.
4. Remarks: Facility 12 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html).

**C-42. Facility 13 Automated Live Fire Shoothouse.**

1. Location: Off Jackson Road co-located with the UAC at BH8294309469.
2. The Fort Devens Automated Shoot House consists of a building with eight rooms, two hallways on a single story, with 360° shooting. The walls are constructed of AR 500 steel and covered with a layer of ballistic rubber capable of stopping 9mm and 5.56mm service ammunition. Its primary use is for Squad/Team level precision room clearing live fire, under day or night conditions.
3. Remarks: Facility 13 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html)

**C-43. Facility 14 IED Petting Zoo**

1. Location: Off Train Fire Road co-located with the Leadership Reaction Course at BH 82480635.
2. This indoor facility is designed to provide an up to date IED recognition program for units.

**C-44. Facility 15 MOUT**

1. Location: In TA 7A co-located with LZ 14 at BH 79600691.

2. This facility consists of a series of buildings which are reconfigurable, modular containers designed for non live fire urban training.

3 Ammunition Authorized: Blank ammunition, CCMCK, and UTM. Pyrotechnics, demolition effects simulators (DES) and any smoke producing items are not allowed in any of the buildings.

4. Remarks: Facility 15 SOP is available on the Fort Devens website at [https://www.devens.army.mil/Devens\\_Staff/Training/rangeControlPublications.html](https://www.devens.army.mil/Devens_Staff/Training/rangeControlPublications.html)

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

## **APPENDIX D**

### **Parachute and Air Operations**

**D-1. The Drop Zone Safety Officer (DZSO)** must be knowledgeable with the following:

- a. Fort Devens Regulation 350-3.
- b. FM 90-26, Airborne Operations.
- c. FM 3-21.220 (AFMAN11-420) Static Line Parachuting Techniques and Training.
- c. Fort Devens and FAA Letters of Agreement.
- d. The latest drop zone survey (available from Range Control).

**D-2. Special Requirements.** Airborne commanders will designate key personnel for each airborne operation. The DZSO (Drop Zone Safety Officer) has command authority over actions and safety of all personnel on the Drop Zone, procedures for DZ operations are described in Chapters 20,21 and 22 of FM 3-21.220. The DZSO must be on-site one hour prior to Time On Target (TOT). It is the responsibility of the DZSO to block all entrances to the DZ and stop traffic by using barriers and/or roadguards. Range Control will warn units operating in adjacent training areas, but the DZSO must physically coordinate with them to control traffic. Any vehicle caught on the DZ when jumpers are in the air will come to a complete halt so the jumpers can guide around it.

### **D-3. Communications.**

a. Communication between the DZSO and Range Control and the DZSO and the aircraft will be maintained constantly. Any loss of communication will cause all jumps or drops to cease until communication is reestablished. FM radio communication with Range Control will be on 38.85 / Saber Net. Internal unit traffic will not be conducted on this frequency.

b. Pilots should contact Range Control by telephone when planning missions to get a range and non-participating aircraft update. Prior to entering R-4102A/B airspace, aircraft with FM capabilities must contact Range Control on FM 38.85 for the latest information. The DZSO will obtain range activity information from Range Control and provide it to aircraft without FM capabilities. Range Control is closed at night if there is no troop activity scheduled.

**D-4. Ground Traffic.** Vehicle traffic off the roads and established trails across the DZ will be held to a minimum. At no time will tracked vehicles operate in the DZ with the exception of using Shoefelt Road and the trails leading into Training Area 7, and the trail along the southern wood line. Any time the ground is soft enough that vehicles will leave ruts, no vehicles will operate off roads and trails and may be restricted from those in the DZ. Heavy cargo drops will be canceled when soft ground conditions exist. Training bundle missions that do not require heavy equipment for recovery may go as scheduled. Units causing damage will either repair the damage before clearance is granted or be required to pay for repairs.

### **D-5. Scheduling.**

- a. The DZ will be scheduled by means of the computerized scheduling system (RFMSS).

Scheduling is IAW paragraph 2-4 of this regulation. Cancellations should be sent to Range Control as soon as known. Telephonic notification will be followed up in writing. Follow-up, in writing, is not necessary if cancellation is by the RFMSS. Air operations and mortar fire will not be scheduled during the same time frame. Range Control will provide a daily air and range schedule to Boston Air Route Traffic Control Center (TRACON).

b. All aircraft must have a current Prior Permission Request (PPR) on file at Range Control prior to entering or conducting air operations at Fort Devens. The PPR must be filed at least three (3) working days prior to the event. See Appendix H (H-9) for the PPR form.

**D-6. Co-Use.** Agreements may be established between units and participating aircraft. TOT, routes flown, altitudes and anything else that may pose a hazard to aircraft or troops on the ground, will be thoroughly understood by all personnel involved. A written agreement signed by all concerned commanders will be on file with Range Control before co-use will be scheduled or allowed.

**D-7. R-4102A/B Airspace.** R-4102A extends from ground level up to, but not including 2000 feet MSL. R-4102B is from 2,000-3,995 feet MSL. The airspace is activated by Notice to Airmen (NOTAM) IAW DA PAM 385-63 Chapter 2, PARA 2-4. Special use airspace is required to be activated prior to conducting any activity over 45 meters above ground level to include ricochet ordnates that would be hazardous to aircraft, i.e. mortar fire, 7.62, demolition and explosive devices, remotely piloted and unmanned aerial vehicles, small arms ranges and unlighted night parachute jumps, etc. Other air activities do not activate the airspace, but do establish a warning zone to non-participating aircraft. The airspace is considered uncontrolled Visual Flying Rules (VFR) airspace when not activated and VFR procedures apply. When the airspace is activated, the only authorized controllers are the FAA, Range Control and the DZSO. The warning zone encompasses a .5 nautical mile circle from the center of the DZ. This is further amended by Fort Devens as .5 nm from the perimeter of the DZ. It does not deny or restrict the area to non-participating aircraft, but does demand extreme caution when flying through the area.

**D-8. Impact Area Entry.** Any entry into the impact area to recover jumpers or cargo will not be attempted until coordination with Range Control.

**D-9. Inbound/Outbound Aircraft.** The DZ axis is 108 degrees magnetic. Fixed wing aircraft dropping jumpers should make an immediate hard right turn over Whittemore Hill (elev. 455) after the last jumper exits each pass. This will avoid over flight of firing ranges. Aircraft on cargo delivery missions may overfly firing ranges. The DZSO must notify Range Control when the aircraft is five minutes out to allow time to check-fire firing ranges.

**D-10. Accidents/Injuries.** In the event of accidents or injuries that cannot be handled by on-site medical personnel, contact Range Control immediately. The DZSO will provide Range Control a report of all accidents/injuries upon clearance.

**D-11. Helicopter Landing Zones.** There are nine established LZs on South Post. Landing is at the discretion of the pilot in command. Ground units planning to bring in helicopters must schedule the required LZ and have co-use agreements, if required. Established LZs are:

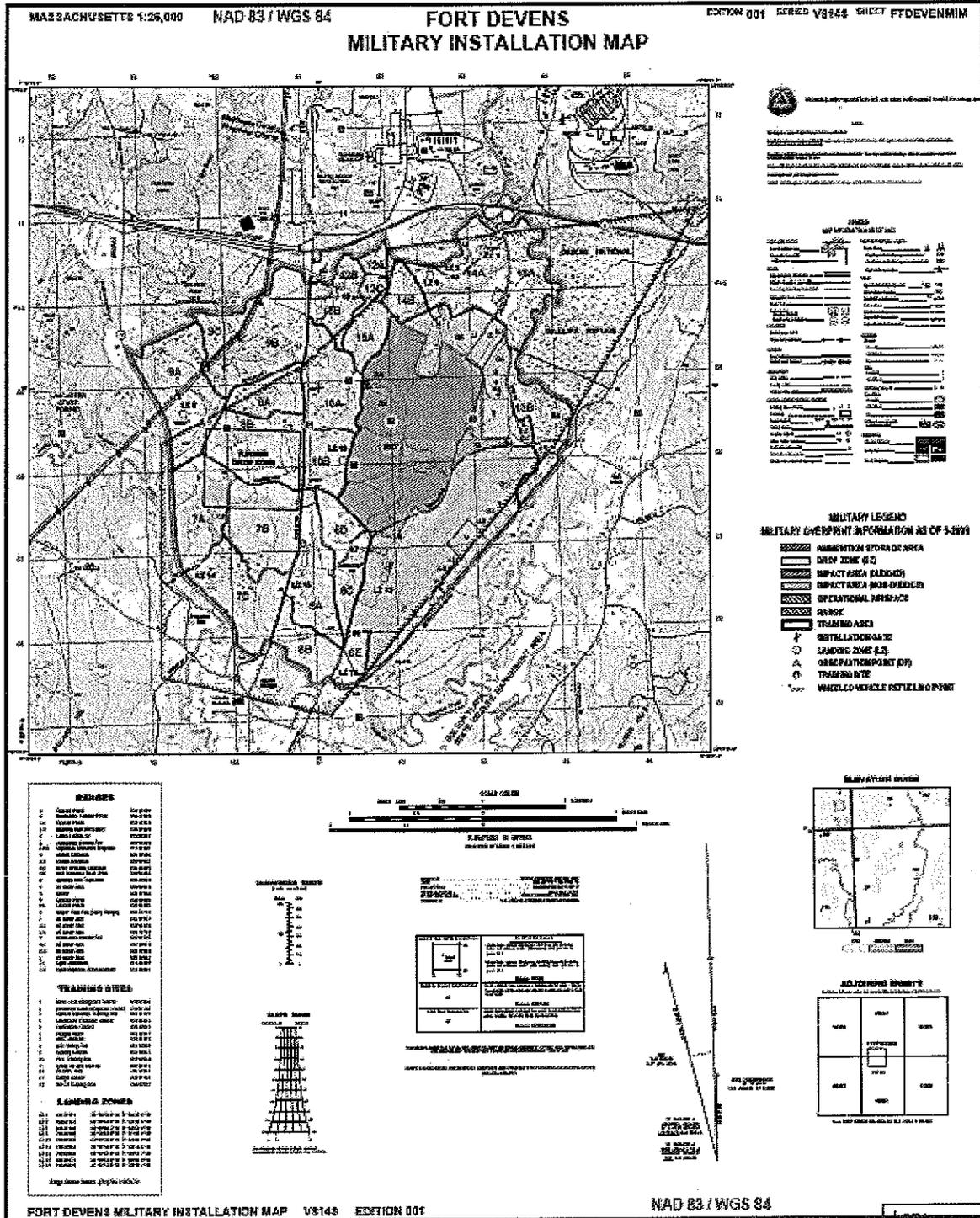
	<u>LZ</u>	<u>GRID</u>	<u>Training Area</u>	<u>Number of AC</u>
a.	LZ 1	BH83151051	TA14A	1 AC (UH-60)
b.	LZ 2	BH82931037	TA 14A	4 AC (UH-60)

c.	LZ 3	BH82521022	TA 14A	2 AC (UH-60)
d.	LZ 8	BH79480868	TA 9A	1 AC (UH-60)
e.	LZ 10	BH81400805	TA 10B	2 AC (UH-60)
f.	LZ 13	BH81850664	TA 6C	2 AC (UH-60)
g.	LZ 14	BH79550686	TA 7C	3 AC (UH-60)
h.	LZ 15	BH80810673	TA 6A	1 AC (UH-60)
i.	LZ 18	BH81250544	TA 6E	1 AC (UH-60)

**D-12. JPADS Parachute Drop Procedures.** (Joint Precision Air Drop System) JPADS is a high altitude capable guided precision airdrop system that provides increased control release from the aircraft, and reduces on ground load dispersion with accuracy. These drops are done from above the altitude limits of R-4102B and must be coordinated with the FAA. The procedures above apply and the Drop Zone Safety Officer is responsible for blocking all additional roads as required by Range Control due to the variable location of the failure ellipse. When these drops are scheduled, Range Control will post a NOTAM and activate both R-4102A and R-4102B. The aircrew will provide Range Control with a copy of the failure ellipse a minimum of two hours in advance of the time on target (TOT) and if the failure ellipse is in an area which Range Control can not vacate and allow this drop to occur, the mission will be denied.

**D-13 Unmanned Aircraft Systems (UAS /UAV) Small Unmanned Aerial (see Fort Devens Reg 95-23)**

**D-14. Fort Devens Installation MAP (R-4102 Overlay)**



**APPENDIX E**  
**Field/Tent Heaters Safety Guidelines**

**E-1. Portable Radiant-Type Space/Tent Heaters(IAW FORSCOM Reg. 385-1 ch5)**

1. Fire can engulf a tent in 10 seconds and destroy it in 60 seconds, giving soldiers very little time to react. Conversely, carbon monoxide is odorless, tasteless, and can kill soldiers while they are sleeping. While commercial off-the-shelf (COTS) heaters and stoves may seem to be a good solution for heating problems in the field, soldiers must be trained on proper procedures before using a piece of COTS equipment. In addition no COTS heaters on the market meet Army requirements for field environments. Standard military heaters, on the other hand, are designed to vent combustion fumes to the outside, are tested for safe field use, and should be used in the place of COTS heaters.
2. The following are heaters that are approved for Army use:
  - a) **H-45 Space Heater (NSN 4520-01-329-3451):** The H-45 replaces the old potbelly M-1941. Designed to heat general purpose and TEMPER tents, the H-45 burns liquid and solid fuels.
  - b) Arctic **space heater (NSN 4520-01-444-2375):** The Arctic heater replaces the gasoline-burning M-1950 Yukon heater and is a lightweight, portable heater for 5-man and 10-man arctic tents. The Arctic heater burns liquid and solid fuels.
  - c) Small **space heater (NSN 4520-01-431-8927):** The small space heater is ideal for use in small tents such as 4-man soldier/crew tent. It burns liquid fuel and has a built-in tank, so no fuel can or stand is required.
  - d) Convective **space heater (NSN 4520-01-431-8927):** The convective space heater provides forced hot air for tents and shelters; this heater generates its own power and recharges its battery.
  - e) Thermoelectric **fan (NSN 4520-01-457-2790):** The thermoelectric fan is a compact, self-powered unit that fits on top of any military tent heater. The fan uses some of the heat to turn the fan blades, which circulate heated air, improve comfort and save fuel.
3. Operation of authorized heaters:
  - a) Operate all heaters and stoves in accordance with the applicable technical manual. There will be a proper fire extinguisher for every heater in operation. Fuel cans will be located outside the tent as far away as the fuel lines will allow. Gasoline will never be used in any heater for any reason.
  - b) Heating shelters at night requires that a **soldier in each shelter be on duty as fireguard all times when other soldiers are sleeping in the tent.** In the event of a tent fire or suspected presence of carbon monoxide, the first and most important task is to evacuate the tent. In a tent fire, there are no seconds to spare.

**E-2. Immersion Heaters:** Will be operated by licensed persons and IAW TM 5-4540-202-12&P and TM 10-4500-200-13.

**E-3. Unauthorized kerosene heaters are prohibited.**

**E-4.** All soldiers should be made aware of the symptoms of carbon monoxide poisoning.  
See GTA 08-05-062

**APPENDIX F**  
**Opening/Closing Procedures**

**F-1. Opening a Range.**

1. Certified OIC signs for the range and equipment at range control. The OIC provides a copy of the command approved CRM (ORM) worksheet.
2. Occupy the range. Make sure you are on the right range.
3. Establish communications with Range Control. Request a range inspector to issue targets, inspect the range and give a briefing on safety and the operation of the range.
4. When the range inspector is satisfied with the range setup, he will notify Range Control that the range may go hot when you call for a hot time.
5. Raise the red flag after you receive a hot time. Maintain constant monitoring of the Range Control frequency, FM 38.85 / BK Radio Net.

**F-2. Closing a Range.**

1. Call Range Control for a cold time. Give the number of rounds fired by type and the number of personnel trained.
2. After receiving a cold time, take down the red flag.
3. Remove all targets from the silhouettes and remove silhouettes from the frames.
4. Police the range to include along the road. On Trainfire Road, this includes across the road, up to the fence. Rake the firing line and fill any ruts caused by vehicles. Replace all fighting position covers and place the sandbags on the covers. Sandbags will be refilled and replaced as necessary. Police around and under bleachers
5. Call Range Control and request an inspector to clear the range.
6. The inspector will notify Range Control when the unit has cleared off the range.
7. Remove all equipment, trash, vehicles and personnel from the range. Return anything drawn from Range Control back to Range Control.

**F-3. Occupying a Training Area.**

1. The OIC signs for the training area and occupies it. The OIC provides a copy of the command approved CRM (ORM) worksheet.
2. Establish and maintain communications with Range Control. Provide six-digit grid of CP to Range Control.
3. Inspect the entire training area and notify Range Control of any discrepancies.

4. Check the area for dead trees or trees with dead branches that may fall and cause injury or damage.

**F-4. Clearing a training area.**

1. The unit signed for the area is responsible for the entire area, whether used or not.
2. Police the area. Remove all wire, signs put up by the unit, trash and equipment. Police up spent blank brass, smoke canisters and flares. Recover any unspent trip flares. This includes any ambush sites that may be outside the area, such as along roads.
3. Remove any barriers, engineer tape, roadblocks and signs put up by unit.
4. Fill all fighting positions in the area, whether or not your unit placed them there. Do not bury trash or anything else in the holes. Mound them up 12 inches to allow for settling.
5. Notify Range Control when you are ready for inspection. If the unit departs the area, leave a clearing party. All personnel and equipment must be out of the area before inspection.
6. The range inspector will notify Range Control that the area is clear.

**APPENDIX G**

**Physical Security of Arms, Ammunition, and Explosives**

**G-1.** All commanders of Army Reserve, National Guard and ROTC units will coordinate physical security plans with the local Physical Security Office 72 hours prior to training on South Post.

**G-2.** When securing weapons in "gun racks," commanders will be responsible for providing armed personnel with live ammunition to protect Category I and II arms, ammunition and explosives (AA&E). No waivers or exceptions will be authorized.

**G-3.** In accordance with AR 190-11, paragraph 1-13, commanders are responsible for ensuring reasonable security measures are taken to safeguard property that may be vulnerable to criminal acts or other disruptive activities.

**G-4.** A physical security inspection and audit of AA&E will be conducted when deployed in the field for training to ensure these items are protected.

**G-5.** Commanders responsible for AA&E will establish a training program for those personnel responsible for guarding stored weapons with live ammunition. Army Regulation 190-11, paragraph 2-10, 190-14, and Appendix C, USARC Pamphlet 190-1 apply.

**G-6.** AR 190-11, paragraph 2-10, outlines a training program for responsibility and accountability of AA&E.

**G-7.** All armed guard personnel will be armed with appropriate weapons and ammunition at the discretion of the commander concerned. The provisions of AR 190-14 apply.

**G-8.** Only approved locks will be used to secure weapons in the field gun racks. Key controls are listed in AR 190-11, paragraph 3-8.

**G-9.** Each weapon issued for field training or any other reason will be carried on the person of the individual to whom it is issued at all times or it will be properly safeguarded and secured. Except during emergencies, weapons will not be entrusted to the custody of any other person except those responsible for the security of operational weapons.

**G-10.** Chains used to secure racks will be heavy-duty hardened steel, galvanized and of at least 5/16-inch thickness.

**G-11.** Personnel assigned to guard stored weapons will have available instant radio communications for security checks and in the event of any unforeseen emergencies.

**G-12.** Commander will have a plan to secure SM weapons in case of SM become injured and becomes unable to secure his own weapon.

**G-13.** Report all losses (actual or suspected) or recoveries within 2 hours of initial detection to the proper law enforcement agencies. Commander will notify range control in the case of a lost weapon. Range Control will lock down south post and notify the Police Station.

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

**APPENDIX H**  
**Range Forms and Maps**

**APPLICATION FOR RADIO FREQUENCY ASSIGNMENT**

FROM COMMANDER \_\_\_\_\_  
REQUESTING UNIT: \_\_\_\_\_  
COMPLETE ADDRESS: \_\_\_\_\_

POINT OF CONTACT: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

TO FORT DEVENS  
NETWORK ENTERPRISE CENTER  
ATTN: IMNE-DEV-IM  
DEVENS, MA 01434-5409

1. TYPE OF FREQUENCY: HF: \_\_\_\_\_ FM: \_\_\_\_\_

2. HOURS OF OPERATION: \_\_\_\_\_

3. DURATION OF REQUIREMENT: \_\_\_\_\_

4. NUMBER OF FREQUENCIES: \_\_\_\_\_

5. MOBILE: \_\_\_\_\_ FIXED: \_\_\_\_\_

6. TRANSMITTER LOCATION: \_\_\_\_\_

7. RECEIVER LOCATION: \_\_\_\_\_

8. ANTENNA NAME: \_\_\_\_\_

9. TRANSMITTER NOMENCLATURE: \_\_\_\_\_

10. COMPLETE THE FOLLOWING FOR HF ONLY:

a. EMISSION: \_\_\_\_\_

b. POWER: \_\_\_\_\_

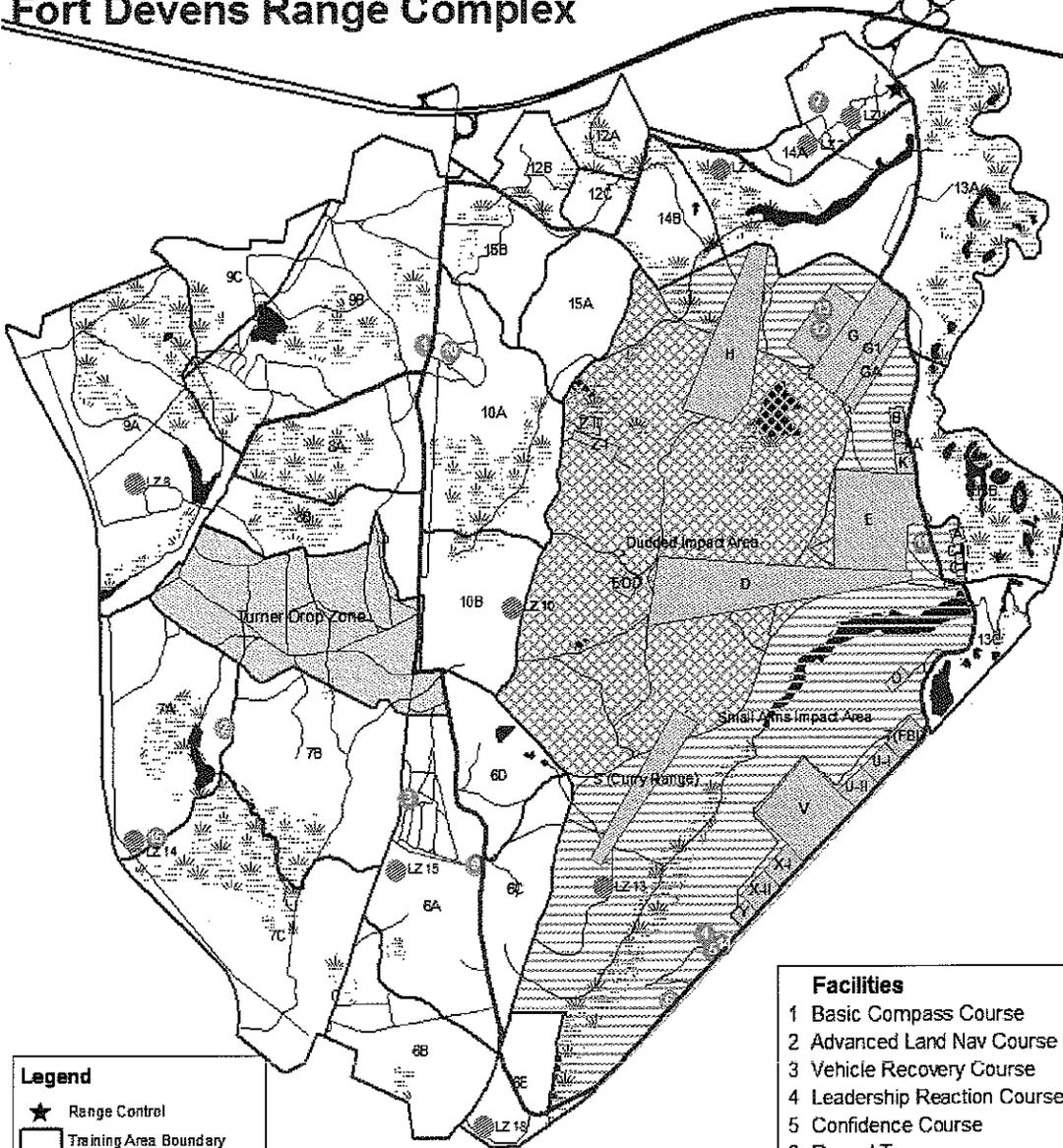
c. TRANSMITTER ANTENNA AZIMUTH: \_\_\_\_\_

d. FREQUENCY RANGE: \_\_\_\_\_

**FREQUENCY MANAGER TELEPHONE: DSN: 256-3098/COM: 978-796-3098/FAX: 2131**

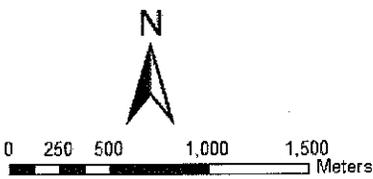
**SOUTH POST MAP**

**Fort Devens Range Complex**



**Legend**

- ★ Range Control
- ▭ Training Area Boundary
- Paved Road (not to scale)
- Maneuver Trail
- Streams
- Wetlands
- Landing Zones (not to scale)
- ▨ Duded Impact Area
- ▩ Small Arms Impact Area
- Facility



- Facilities**
- 1 Basic Compass Course
  - 2 Advanced Land Nav Course
  - 3 Vehicle Recovery Course
  - 4 Leadership Reaction Course
  - 5 Confidence Course
  - 6 Rappel Tower
  - 7 Gas Chamber
  - 9 Convoy Course
  - 10 POL Training Site
  - 11 Classroom
  - 12 Urban Assault Course
  - 13 Shoothouse
  - 14 IED Petting Zoo
  - 15 MOUT Site

**OIC / RSO SAMPLE**

**DEPARTMENT OF THE ARMY  
1<sup>ST</sup> BATTALION 87<sup>TH</sup> INFANTRY DIVISION  
64 LOBAS ROAD  
PODUNK, WEST VIRGINIA 09927-9999**

WVNG-TC-(350)

30 April 2013

MEMORANDUM FOR Range Control, Fort Devens , MA

SUBJECT: Range Certification of OIC/RSO.

1. References: Fort Devens Regulation 350-3, dtd. 4 Feb 2013; AR 385-63, dtd. 30 January 2012; and DA Pam 385-63, Chapter 1-5 dtd. 30 January 2012.
2. The below listed personnel of A Company (WB6SAA) 1-87<sup>th</sup> IN BN have satisfactorily completed training and testing and are certified to serve in the positions indicated.

<u>NAME</u>	<u>RANK</u>	<u>SSN</u>	<u>OIC</u>	<u>RSO</u>	<u>SYSTEM</u>
Mudd, Claude D.	CPT	2734	X	X	M16, Demo, M9
Smith, Jon B.	SFC	4567	X	X	MK19, MORTARS
Dolan, Don	SGT	2345		X	M16, M9
Friday, Joe	GS07	3899	X	X	M16, M9, Shotgun
Gannon, William	GS05	7954		X	M16, M9, Shotgun

3. The below listed personnel of B Company (WB7SAA) 1-87<sup>th</sup> IN BN have satisfactorily completed training and testing and are certified to serve in the positions indicated.

<u>NAME</u>	<u>RANK</u>	<u>SSN</u>	<u>OIC</u>	<u>RSO</u>	<u>SYSTEM</u>
Smith-Cline, Jon	SFC	4467	X	X	MK19, MORTARS
Dollar, Don	SGT	2445		X	M16, M9
Friburg, J	GS07	3999	X	X	M16, M9, Shotgun
Cannon, William	GS05	8954		X	M16, M9, Shotgun

4. Point of contact at the Battalion Headquarters is the undersigned or the S-3 SGM Gofast at 999-333-5555, or email [john.f.gofast@us.army.mil](mailto:john.f.gofast@us.army.mil).

JOHN J. FLANAGAN  
LTC, IN  
Commanding

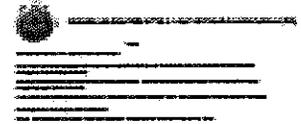
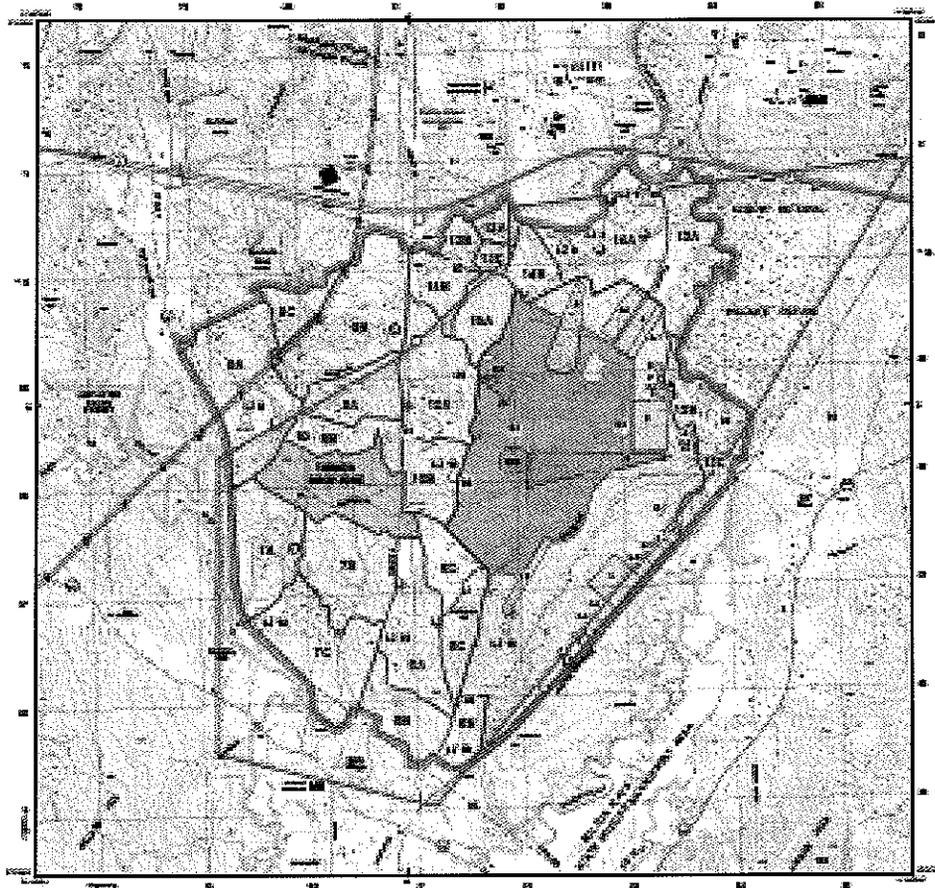
Fort Devens MIM 1:25,000

MASSACHUSETTS 1:25,000

NAD 83 / WGS 84

FORT DEVENS  
MILITARY INSTALLATION MAP

SECTION 061 STATE 45:000 SHEET FTDEVEN061



**SYMBOLS**

**LEGEND**

[Symbol]	ADDITIONAL STORAGE AREA
[Symbol]	DEPOT AREA
[Symbol]	IMPACT AREA (PENDING)
[Symbol]	IMPACT AREA (APPROVED)
[Symbol]	RAILROAD
[Symbol]	TRUCK TRAIL AREA (PENDING)
[Symbol]	TRUCK TRAIL
[Symbol]	RAIL
[Symbol]	RAILROAD (PENDING)

**MILITARY OVERSEER INFORMATION TABLE OF CONTENTS**

[Symbol]	ADDITIONAL STORAGE AREA
[Symbol]	DEPOT AREA
[Symbol]	IMPACT AREA (PENDING)
[Symbol]	IMPACT AREA (APPROVED)
[Symbol]	RAILROAD
[Symbol]	TRUCK TRAIL AREA (PENDING)
[Symbol]	TRUCK TRAIL
[Symbol]	RAIL
[Symbol]	RAILROAD (PENDING)

**SYMBOLS**

**LEGEND**

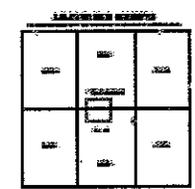
[Symbol]	ADDITIONAL STORAGE AREA
[Symbol]	DEPOT AREA
[Symbol]	IMPACT AREA (PENDING)
[Symbol]	IMPACT AREA (APPROVED)
[Symbol]	RAILROAD
[Symbol]	TRUCK TRAIL AREA (PENDING)
[Symbol]	TRUCK TRAIL
[Symbol]	RAIL
[Symbol]	RAILROAD (PENDING)



**SYMBOLS**

**LEGEND**

[Symbol]	ADDITIONAL STORAGE AREA
[Symbol]	DEPOT AREA
[Symbol]	IMPACT AREA (PENDING)
[Symbol]	IMPACT AREA (APPROVED)
[Symbol]	RAILROAD
[Symbol]	TRUCK TRAIL AREA (PENDING)
[Symbol]	TRUCK TRAIL
[Symbol]	RAIL
[Symbol]	RAILROAD (PENDING)



FORT DEVENS MILITARY INSTALLATION MAP 1:25,000 SECTION 061

NAD 83 / WGS 84

**Range Clearance Checklist:**

**FORT DEVENS  
RANGE CLEARANCE FORM**

Units conducting training at Fort Devens are responsible for the police, sanitation and general upkeep of their assigned areas.

RANGE / TA \_\_\_\_\_.

UNIT \_\_\_\_\_.

UNIT REP \_\_\_\_\_.

**GENERAL:**

- 1. Are all fighting positions filled in with dirt?
- 2. Have all obstacles and barricades on the roads and trails been removed?
- 3. Has all wire been removed?
- 4. Has all trash been removed?
- 5. Are all troops and vehicles out of the area?

**RANGES:**

- 1. Is all brass and ammo picked up?
- 2. Are all sandbags serviceable and stacked? (two per position)
- 3. Are all permanent foxholes clean and clear of brass and ammo?
- 4. Is the range free of all trash, paper, etc. ?
- 5. Are targets neat and striped in the ammo shed?
- 6. Is shed swept and clean?
- 7. Is there any damage to the shed?
- 8. Is the Range Tower clean and neat?
- 9. Is the power turned off?
- 10. Is there any damage to the tower?
- 11. Is the fire extinguisher in working order?

**PARKING AREA:**

- 1. Is area free of all trash?
- 2. Are holes and ruts filled in?

**NUMBER OF PERSONNEL:** \_\_\_\_\_.

**AMMUNITION COUNT:** \_\_\_\_\_.

\_\_\_\_\_  
RANGE INSPECTORS SIGNATURE

**Record of Environmental Consideration (REC)**  
 U. S. Army Garrison Fort Devens, Massachusetts

<b>Date form initiated:</b>			
<b>Project Description:</b>			
<b>Location</b>			
<b>Project Originator/Coordinator Organization Name and Phone:</b>			
<b>Project Type:</b>			
<b>SECTION A: (To be completed by Project Originator/Coordinator)</b>			
<b>GENERAL ENVIRONMENTAL CONCERNS:</b>			
	<b>Yes</b>	<b>No</b>	<b>More Data Needed</b>
Will oil, hazardous, or toxic materials be brought onsite? (e.g., Paint, chemicals, solvents, etc.)			
Will hazardous or toxic waste be generated?			
Will fueling/refueling operations be conducted?			
Will any materials be removed offsite?			
Will non-hazardous solid waste be generated?			
Will any digging or excavation occur before or during project?			
Will project activities cause any discharges to soil, drains, or emissions to air?			
Will activities include fuel-containing vehicles? (circle): Tankers, tactical vehicles, aircraft, generators, backhoes, cranes, etc?			
<b>Environmental Considerations:</b> The contractor will be briefed on minimizing any impact on the area and the ITAM Coordinator will supervise and ensure compliance to all environmental policies and regulations. Minimal excavation/digging will take place.			
I, Project Coordinator, verify that the information above is accurate and complete.			
Project Coordinator Signature: _____		Date: _____	

<b>Section B: (To be completed by DPW Environmental Staff)</b>	<b>Yes</b>	<b>No</b>	<b>More Data Needed</b>
Are any impacts possible on the following physical, natural, or cultural resources?			

1. Air quality			
2. Storm Water (NPDES standards)			
3. Wastewater permit standards			
4. Drinking Water quality			
5. Floodplains or wetlands			
6. Marine or estuary resources			
7. Rare plant, fish, or animal species; habitats			
8. Cultural/archeological resource or land use plans/policies, historical property			
9. Energy resources			
10. Noise levels			
11. Geological or subsurface conditions (soils, etc)			
12. Contribute to growth/expansion of non-native invasive species (EO 13112)			
13. Require a permit from a federal, state, or local agency to proceed?			
14. Potential for "significant environmental impact" as indicated by federal, state or local agencies			
15. Have potential for local or state controversy because of environmental effects			
16. Have cumulative environmental impact?			
Discussion of any other impacts or concerns:			
<p><b>Program Managers/Reviewers:</b> Ron Defilippo(-electronic), Tom Poole(-electronic), Jim Chambers (-electronic), John Delcore (-electronic)</p>			

**Environmental Analysis and Instructions:**

**The following is the responsibility of the Construction Agent to ensure the below information is included in the contract for this action and is enforced.**

General

- Construction Agent/Contractor must comply with all federal, state and local environmental regulations.

Asbestos

Lead Based Paint

Hazardous Materials/Hazardous Waste

Stormwater



**Categorical Exclusions**

<b>Approved for Categorical Exclusion (Y/N):</b>		<b>EA or EIS required (Y/N):</b>	
<b>Determination: Selected CATEX</b>			
<b>DPW Environmental Reviews:</b>	<b>Signature</b>	<b>Date Signed</b>	
Environmental Specialist			
Director of Public Works/ Environmental Chief			
<b>Other Required Coordination:</b>			

**PRIOR PERMISSION REQUEST (PPR)**

1. DATE OF MISSION: \_\_\_\_\_
2. UNIT: \_\_\_\_\_
3. AIRCRAFT TYPE: \_\_\_\_\_
4. NUMBER OF A/C: \_\_\_\_\_
5. AIRCRAFT CALL SIGN: \_\_\_\_\_
6. SUPPORTED UNIT: \_\_\_\_\_
7. DESTINATION (LZ): \_\_\_\_\_
8. ESTIMATED TIME ARRIVAL: \_\_\_\_\_
9. ESTIMATED TIME DEPARTURE: \_\_\_\_\_
10. UNIT POC AND PHONE NUMBER \_\_\_\_\_
11. CREW POC AND PHONE NUMBER \_\_\_\_\_
12. REMARKS: \_\_\_\_\_

**Aircraft must contact the Fire Desk at Range Control prior to entering the Range Complex. (978) 796-2723/2155 and FM 38.850MHZ.**

**DO NOT OVERFLY: Federal or State Prisons (north of RT 2) and the Fort Devens Ammunition Supply Point (ASP).**

**This form can be emailed to: USARMY.DEVENS.93-SIG-BDE.LIST.FORT-DEVENS-RANGE-CONTROL@MAIL.MIL or faxed to (978)-796-2380.**

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

**APPENDIX I**  
**Rappel/Fast Rope Operations**

**I-1. Rappelling.** Because of the inherited danger of rappelling and fast rope operations, a Risk Assessment will be performed by using unit and signed by commander IAW TC 21-24. This will be provided to Range Control and post Safety Officer for review prior to use of the facility.

**I-2. Training Site.**

1. No vehicles are allowed through the gates with the exception of emergency vehicles during the process of evacuation.
2. Smoking is not allowed in or around the tower at any time.
3. The sandy area around the base of the tower is a controlled area and only belay personnel and rappellers are allowed in that area.

**I-3. Rappel Master.** The proponent for accreditation, evaluation and information for Army Rappel Master courses is the G-3, Directorate of Operations and Training, U.S. Army Infantry School, ATTN: ATSH-TDD, Fort Benning, Georgia 31905-5593.

1. Duties and Responsibilities: The rappel master is responsible for the safety of rappellers. He ensures that all equipment (installation, unit and personal property) is serviceable. He personally supervises the rappelling operation.
2. Qualifications. Rappel master qualification is awarded only after the successful completion of Training and Doctrine Command (TRADOC) accredited Rappel Master Course to include the following subjects:
  - a) Duties and responsibilities of a rappel master.
  - b) Safety standing operating procedures (SOP), regulations and references.
  - c) Construction of a deployment bag.
  - d) Conduct of an equipment rappel off the rappel tower.
  - e) Conduct of a lock-in.
  - f) Talking a rappeller through completion of a rappel.
  - g) Conduct of ground training.
  - h) Inspecting for proper hookups.

- i) Inspecting and maintaining equipment.
  - j) Inspecting and maintaining snap links.
  - k) Inspecting and maintaining rappelling gloves.
  - l) Inspecting and maintaining rappel ropes.
  - m) Identifying the rappel capabilities of aircraft used.
  - n) Controlling rappels from UH-1H or UH-60 aircraft.
  - o) Tying knots (square, bowline, half hitch, Prusik), safety lines and rappel seats (Swiss seat, Australian seat).
  - p) Inspecting a rappel seat.
  - q) Aircraft rigging for rappelling operations.
  - r) Aircraft command and control.
3. Proficiency Maintenance. To remain current, rappel masters must execute their duties in a tactical or training exercise once every six months. If rappel masters do not execute their duties once every six months, they must take a refresher class taught by a current rappel master. The refresher class includes subjects listed in the rappel master qualifications section at paragraph I-3.2.
4. **Rappel Master On-Site Training Requirements.** Units may conduct ground training and wall-side tower rappelling without a school-trained rappel master as long as the following is met:
- A fully qualified rappel safety officer (RSO) is on site to assume the duties and responsibilities of the rappel master. The RSO must be certified and appointed by the commander.

**I-4. Rappel Safety Officer.** The RSO serves as the OIC during all rappel operations. Holding the rank of SFC or above, he is trained on applicable rappel master tasks and is certified by his commander to serve in the position. Extensive training in rappel operations and risk management, or graduation from one of the following courses are RSO requirements: Rappel Master Course; Air-assault Course, Ranger Course, Basic Military Mountaineering Course (summer or winter).

1. The RSO is responsible for the overall safety of all rappellers and ensures that all safety precautions are followed.
2. The RSO briefs VIPs, visitors and inspecting authorities on training, safety requirements and the layout of training areas.

**I-5. Rappel Lane NCO.**

1. Duties and Responsibilities. Safety is the rappel lane NCOs number one priority. The rappel lane NCO:

- a) Ensures proper safety procedures are followed.
  - b) Ensures proper hookup once directed to a rope station.
  - c) Issues commands and maintains eye contact with the rappeller at all times.
2. Qualifications. The rappel lane NCO holds the rank of corporal (CPL/E-4) or above, is air assault or ranger qualified and is selected by the commander. Each tower rappel lane must have a qualified rappel lane NCO.
3. Training. The rappel lane NCO must also be trained on the following subjects:
- a) Responsibilities and safety requirements.
  - b) Inspection and maintenance of equipment.
  - c) Identification of satisfactory anchor points.
  - d) Identification of safe and unsafe hookups.
  - e) Establishment of a rappel joint.
  - f) Inspection of a rappel seat.
  - g) Coaching techniques.
  - h) Rappelling procedures.
  - i) Emergency procedures.
  - j) Belay control procedures.
4. Participation. The rappel line NCO must participate in at least seven rappel operations; three as a rappeller, two as an assistant rappel lane NCO, and two performing the duties of a rappel lane NCO under the supervision of a qualified rappel master.
5. Proficiency Maintenance. If a rappel lane NCO has not conducted his duties within the last six months, he must complete the training listed in paragraph J-3.c. Under the supervision of a current rappel master.

**I-6. Rappeller.** Rappel qualification requirements apply to the individual rappeller. Participants in tower rappel training must complete the following listed requirements under the supervision of a rappel master. The unit commander ensures that personnel successfully complete these requirements before beginning aircraft rappel training:

1. Identify all rappelling equipment.
2. Demonstrate the construction and attachment of the rappel seat and the rappel rope to the seat.
3. Identify unsafe attachments, equipment, rope connections and seat construction.

4. Define terms used in rappelling operations.
5. Identify knots used in rappel operations.
6. Understand and demonstrate rappel commands.
7. Demonstrate rappelling positions.
8. Demonstrate belaying procedures.
9. Exhibit satisfactory performance from a rappel tower of at least 34 feet in height (two rappels with equipment and weapon, two without equipment and weapon). Two rappels are conducted from the free side of the tower (no wall).
10. Demonstrate the ability to lock-in.

**I-7. Belayer.** Belay requirements are a subtask of basic rappel requirements. Soldiers must know how to belay before conducting rappelling training. The belayer:

1. Assumes a position at the base of the lane, about one pace away from the tower area.
2. Ensures that the rappel ropes are even with the ground during tower rappels.
3. Loosely holds the rappel rope with both hands so as not to interfere with the rappeller, but still able to stop the rappeller should he fall.
4. Immediately stops the rappeller by pulling downwards on the rappel ropes if the rappeller shouts, "falling" or loses control of his brake hand during descent.
5. Does not wear gloves to ensure a firm grip on the rappelling rope.
6. Watches the rappeller at all times and maintains constant voice or visual contact.
7. Wears a helmet to prevent injuries from falling debris.

**I-8. Belay Safety.** The belay safety must be air assault or ranger qualified. Ensures belay personnel are performing their duties properly. Rappel training requires one belay safety for each two-rappel station.

**I-9. Safety.** The following personnel and equipment must be present during static tower training:

1. Two military rappel ropes for each rappel station.
2. One safety officer.
3. One rappel master for each rappel site.
4. One rappel lane NCO per rappel station.
5. One medic with medical kit and backboard.

6. One safety or medical evacuation driver with vehicle.
7. One belayer for each rope station. Rappelers alternate stations.
8. One belay safety for each two-rappel stations (four ropes).

**I-10. Safety Briefing.** As in all training, a safety briefing precedes rappel operations. The rappel master briefs all personnel on safety, to include the following instructions:

1. Each rappeller ensures loose clothing and equipment is secured.
2. Rappel seats are tied by the soldier and inspected by the rappel master before climbing the tower. Rappel seats are removed upon completion of every rappel retied and reinspected by a rappel master or rappel lane NCO before subsequent rappels.
3. Rappelers climb the tower only when directed by the rappel master or rappel lane NCO.
4. Rappelers stay in the center of the tower until instructed to move to a rappel point.
5. No more than three personnel are behind each rappelling point.
6. If using a troop ladder, only three soldiers are on the ladder at one time. Soldiers do not climb the ladder until told to do so by a rappel master.
7. All rappel masters, rappel lane NCOs, instructors and anyone else standing near the edge of the top of the tower, must wear a restraining strap or safety rope. The strap or rope must be attached to an anchor point.
8. No one should lean or sit on the railings or banisters of the tower.
9. No one is allowed within three feet of the edge of the tower without being secured.
10. When attaching the rappel rope to the snap link, rappellers will pull the slack towards the anchor point. The rappel master or rappel lane NCO will also physically check each hookup.
11. All personnel weighing more than 200 pounds will conduct a standard hookup rappel to determine if they require a friction hookup. A friction hookup is created by placing an additional two ropes in the gate of the snap link (for a total of six ropes in the snap link).
12. Combat equipment is positioned on the rappeller so that it does not interfere with the brake hand. The weapon must be slung diagonally across the back with the muzzle pointing down and on the opposite side of the brake hand.
13. Heavy duty gloves are required for all rappel training.
14. Kevlar helmets with chinstraps fastened are worn during tower rappel training.
15. While on the tower, the rappeller maintains eye contact with the rappel master or rappel lane NCO and receives all commands from them.

16. The rappeller ensures that he has a belayer on his rope.
17. The belayer does not wear gloves and keeps both hands on the rope at all times. He also faces the rappeller at all times.
18. All tower rappelling is performed with a double strand of rope.
19. No running is allowed on the tower.
20. No smoking or eating is allowed near the tower.
21. All participants who are unable to rappel, lack confidence, or refuse to rappel are reported to the rappel master or OIC. These participants are immediately removed from the training area.
22. The RSO and rappel master must be aware of overconfidence and carelessness of some rappellers. The rappel master ensures all personnel are tower qualified before beginning aircraft rappel training.

**I-11. Tower Safety and Preparation.** The rappel master is in charge of the tower. He conducts a visual and physical inspection of every item of equipment, to include the structural lumber and timber, the ladder, the platform floor and all anchor points.

1. The static tower will not be used during thunderstorms or excessively high winds. If ice is present or if the platform is slick from rain, rappelling will be delayed until conditions are safe.
2. All rope stations are rigged with two anchor points. The first anchor point is a middle-of-the-rope knot and the second is an end-of-the-rope anchor knot. The rappel master removes all the slack between the knots to create equal tension on the anchor points. He ensures that no less than 10 feet of rope is on the ground during static rappelling.

**I-12. Rappeller Preparation.** Before conducting a rappel, each rappeller must prepare their individual clothing and equipment:

1. Secure shirttails, loose clothing, equipment, straps and long hair.
2. Wear a helmet during rappelling. Properly fasten all straps and ensure their helmet is in serviceable condition.
3. Wear heavy leather workmen's gloves.
4. Wear identification tags.

### **FAST ROPE INSERTION**

**I-13. Guidance for Commanders.** Units that have HQDA approval to perform fast rope insertion/extraction system (FRIES) operations are authorized to conduct initial FRIES qualification and FRIES master (FRM) qualification training. Training requirements are established in USASOC Reg 350-6 and applicable SOAR policies.

**I-14. Training Prerequisites.** Before allowing soldiers to participate in FRIES training and operations, the unit commander must make sure the soldiers are physically fit. Minimum screening standards that apply to each training participant include:

1. Having passed the Army Physical Fitness Test within the past six months.
2. Having passed a medical examination within the past two years.
3. Being free of any injury or physical condition that could cause a potential safety hazard during FRIES training.
4. Demonstration of ability to perform controlled descent from a height of 15 feet while carrying a 40-pound load (not including the basic duty uniform and combat boots).
5. Demonstration of ability to hold a static position on a FRIES rope for 20 seconds using hands and feet to lock-in while carrying a 40-pound load.

NOTE: The peacetime maximum soldier load will not exceed 50 pounds. This includes helmet, weapon, vest, web gear and rucksack. Rucksack weight will not exceed 35 pounds.

**I-15. Personal Equipment Required.** The minimum personal equipment required for FRIES training and operations includes:

1. Heavy leather gloves.
2. A helmet with a chinstrap.
3. Protective goggles.
4. A long-sleeve shirt or jacket, long pants and boots.
5. Hearing protection and identification tags for helicopter operations.

**I-16. Initial FRIES Qualification Training.** Before participating in fast rope operations, personnel are briefed on the FRIES and its purpose, capabilities and limitations. The briefing also covers the duties, responsibilities and safety of FRIES master (FRM), the assistant FRIES master (AFRM) and any ground assistants. Once the FRIES briefing is conducted, the remainder of the initial training is hands-on practice of the proper FRIES operational techniques.

1. Individuals are shown the proper techniques for boarding the aircraft, moving to the door, grasping and descending, locking-in and clearing the rope.
2. After the demonstration, all ropers participate in a practice exercise in which they properly perform the following tasks using a tower and subsequently, an aircraft:
3. All ropers must demonstrate a minimum of six properly executed FRIES descents (three without equipment and three with equipment).
4. At least one successful lock-in.
5. Perform FRIES descent and lock-in from a tower at the 34-foot level.

6. Training should be progressive, starting from a tower at the 34-foot level without equipment and then with equipment.
7. All ropers must complete a successful lock-in at this level. Ropers will not progress above the 34-foot level until after demonstrating the ability to stop descent, lock-in and hold a stationary position for 20 seconds with equipment.

**I-17. FRIES Proficiency Sustainment Training.** Commanders must make sure soldiers participating in FRIES operations receive sustainment training on equipment and procedures within 24 hours before the FRIES operation. Ropers who do not attend FRIES sustainment training will not be allowed to participate in FRIES operations. As a minimum, training will include a review of the following:

1. Arm and hand signals.
2. Individual equipment riggings.
3. Aircraft familiarization.
4. Safety procedures.
5. Any rehearsals the FRM or commander deems necessary.

**I-18. Selection and Qualification of FRIES Masters.** Selection and qualification of FRIES masters (FRMs) is a unit prerogative. Units will maintain records of qualification and proficiency. These records will accompany soldiers to new units when a permanent change of station occurs.

**I-19. FRIES Master Training and Certification.** During FRM training and certification, FRM candidates must participate in three FRIES helicopter operations (twice observing another FRM and once executing FRM duties under observation of a current FRM) and be certified by either the parent unit or an authorized school. FRMs must be proficient in FRIES operations and must demonstrate proficiency in the following:

1. Inspecting, preparing and rigging all FRIES gear.
2. Inspecting and preparing aircraft for FRIES operations.
3. Controlling and coordinating actions of AFRMs, safeties and ropers.
4. Preparing and conducting both insertion and extraction operations.
5. Conducting troop and pilot briefings.
6. Giving arm and hand signals.
7. Giving time warnings and associated commands.
8. Deploying and retrieving FRIES ropes.
9. Rigging and lowering equipment.

**I-20. FRIES Master Refresher Training.** Units will conduct refresher training to maintain acquired skills. FRMs who have not participated in FRIES operations during the past six months will receive refresher training by a current FRM and serve as an AFRM before performing FRM duties. Refresher training for ropers consists of an FRM briefing and participation in FRIES training.

**I-21. Key Personnel Duties and Responsibilities.** The following personnel duties and responsibilities provide baseline requirements for the safe conduct of FRIES operations. Unit standing operating procedures (SOPs) may increase, but will not reduce training safety requirements.

1. FRIES Training Officer: Units that conduct FRIES training appoint a training officer-in-charge (OIC) or a noncommissioned officer-in-charge (NCOIC) to manage the training. The OIC is responsible for planning and coordinating various aspects of training to include:
  - a) Coordinating all support activities such as procuring FRIES equipment, aircraft, training areas, medical support and communication.
  - b) Assigning qualified personnel to perform FRM, AFRM, ground safety and medic duties.
  - c) Adhering to procedures for planning, preparing and executing the operation IAW this appendix, the USASOC Reg 350-6 and the participating units' SOPs.
  - d) Ensuring the FRMs, AFRMs, pilots-in-charge (PICs), aircrews, safeties and medics are briefed on the operation.
  - e) Ensuring a medic, an aid bag, a backboard and a dedicated vehicle and driver are on-site during all training.
  
2. FRIES Master: Units conducting FRIES operations will designate one overall FRM to organize, coordinate and supervise the activities of the day and AFRMs as needed. AFRMs are additional FRM-qualified soldiers who assist the primary FRM. An AFRM will be designated for each roping point. AFRMs are responsible for all preparation, inspection and command and control of all roping activities on their points. FRMs must also:
  - a) Ensure all FRIES roping personnel, including FRMs, AFRMs and safeties are qualified and current and understand the proper roping procedures for FRIES operations.
  - b) Perform safety and serviceability checks on all FRIES equipment and rigging.
  - c) Ensure the attachment bar or points are serviceable and free of any defects or contamination and that quick-release mechanisms and safety pins are present, serviceable and operate correctly.
  - d) Inspect the rope to make sure it has no contamination, damage or defects that could make it unsafe.
  - e) Check the rope to make sure it is the correct type and length for the operation (smooth rope for infiltration or looped for exfiltration).

- f) Ensure the rope is properly attached with the safety pin in place and back coiled.
  - g) Ensure the extraction harnesses are serviceable and properly worn.
  - h) Ensure the rope chemlights are correctly rigged and illuminated, when needed (two at the mount, two at the end and two 15 feet from the end).
3. FRIES Roper: Ropers are responsible for notifying the FRM, AFRM, safety or pilot if they observe any unsafe acts or conditions. Ropers may halt or call for a halt of roping for safety at any time. During FRIES insertion training, the number of ropers on the fast rope at one time is limited to three. During extraction training, the total weight per extraction bar or rope will not exceed a total of 1,500 pounds. When rucksacks are worn by ropers, the rucksacks must not exceed a weight of 35 pounds (total roper equipment weight will not exceed 50 pounds). Ropers will:
- a) Keep hands at head level.
  - b) Maintain visual contact with lower ropers during their descent.
  - c) Maintain a minimum of a one-second interval on exit to avoid collisions.
  - d) Keep at least two points of contact on the rope (both hands) at all times.
  - e) Use their feet for additional braking any time needed.
  - f) Execute descents at a safe speed.
  - g) Show the rate of descent halfway down the rope to avoid landing on each other.
  - h) Move quickly away from the rope upon arrival on the surface.
  - i) Know correct wear of extraction (STABO) harness and extraction procedures.

**I-22 Ropes and Harness.** FRIES equipment should be maintained in the same manner as a parachute. The unit rigger section can provide detailed guidance on appropriate inspection, care and maintenance of FRIES equipment.

1. FRIES ropes and harnesses must always be stored in a clean, cool and dry space out of direct sunlight and free of chemicals or chemical vapors. Equipment that becomes wet with fresh water should be hung up to dry (indoors) on hardwood pegs. Equipment that is exposed to salt water or becomes imbedded with dirt or mud should be washed and rinsed in fresh water (within 72 hours) and hung up to dry (indoors) on hardwood pegs (out of direct sunlight).
2. Before conducting a fast rope operation, the FRM:
  - a) Inspects the fast rope thoroughly and carefully. Checks the rope length to ensure it is the correct rope for the operation planned.

- b) Checks the woven loop on the mount end for excessive wear or chemical contamination. Checks the rope along its entire length for fraying, cuts or chemical contamination.
- Do not use a rope that is severely frayed. (Light fraying on the rope from normal use does not weaken the rope.)
  - Do not use a rope when any single strand is cut halfway through or has two or more cuts that penetrate one-third or more through any strand's thickness within one foot of the running length of the FRIES.
- c) Inspects the rope for contamination of acid, alkaline compounds, salt water, fire extinguisher solutions or petroleum-based solvents. Changes in color caused by chemicals are usually blotchy and have an unusual odor. Although used ropes gradually change color, such changes do not indicate a decrease in strength, unless the change is due to contact with strong chemicals. Changes occurring because of use are usually uniform throughout the length of the rope.
- d) Inspects the extraction loops to the same standard as the main rope. Ensures the woven loops are secure.
- e) Inspects the harness to ensure:
- Ropers are wearing the harness under all load-carrying equipment.
  - Ropers have properly fastened all connectors.
  - Harness material and stitching are not cut, torn or contaminated and all hardware is free of corrosion and is in operable condition.

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

	YES	NO
<b>BEFORE TRAINING CHECKS</b>		
<b>Rappel Tower</b>		
a. Surface Area Adjacent to the Tower Where the Rappelers Will Impact		
(1) Are there any holes? If so, have they been filled?		
(2) Are there any large foreign objects present? Have they been removed?		
(3) Is there anything present that could endanger a rappeller?		
b. General Supporting Structure of the Tower		
(1) Is there any structural damage?		
(2) If so, will that damage endanger personnel utilizing the facility?		
c. Stairs/Ladder Leading to the Top of the Tower		
(1) Is the structure sturdy?		
(2) Are any steps missing?		
(3) Are any steps slippery?		
(4) Are handrails present?		
(5) Will the stairs/ladder support the weight of personnel utilizing them?		
(6) Is there anything concerning the stairwell that could possibly endanger the personnel being trained?		
d. Rappelling Surface Wall		
(1) Is the lumber of the wall rotted?		
(2) Are there any nails protruding from the wall?		
(3) Is there anything on the wall that could be harmful to a rappeller?		
(4) Are there any boards missing or gaps between the boards where rappellers could get their feet caught?		

	YES	NO
e. Top Platform of the Tower		
(1) Are there any boards missing?		
(2) Are there any boards rotted to a degree that personnel could possibly fall through?		
(3) Is there anything present that could cause anyone to trip & fall off the tower.		
(4) Are guardrails present where needed?		
(5) Are guardrails sturdy?		
f. Anchor Points		
(1) Are both primary & secondary anchor points present?		
(2) Are both primary & secondary anchor points independent of each other?		
(3) Are they secure enough to hold the rappellers?		
(4) Is padding present adjacent to each anchor point?		
(5) Will padding keep ropes from making contact with any sharp edges?		
g. Rigging and Equipment (snap links, ropes, gloves, etc):		
(1) Is the correct equipment being used?		
(2) Is enough equipment available to replace anything that becomes unserviceable during training?		
(3) Is the tower properly rigged?		

**APPENDIX J  
ROTARY WING OPERATIONS**

**J-1. Purpose.** To establish polices and procedures for administrative airspace control of aircraft operating over the Fort Devens Military Installation. To prescribe requirements to be met by aviation units and aviators prior to conducting aerial flights over Fort Devens and operational procedures for Range Control.

**J-2. Applicability.** The procedures outlined herein are applicable to all aviators and aviation units.

**J-3. General.** The polices and procedures set forth in Devens RFTA Reg 95-1, and this appendix will govern flight procedures and the issuance of hazard area advisories by Range Control on Fort Devens. This appendix is designed to allow aircraft to operate in and around live fire training areas in a safe and timely method with minimum disruption to the conduct of live firing training.

**J-4. Responsibilities.**

1. The DPTS through the Range Control airspace management element is charged with staff responsibility for planning, coordinating, and monitoring of airspace control.
2. Range Control will:
  - a) Implement the provisions of this regulation and provide air route advisories to all aircraft operating on the Fort Devens.
  - b) Maintain a Fort Devens map, 1:25,000, posted with the routes and known points as specified in this regulation. Active ranges, DZ, LZs and other current hazards to aviation will be posted on the map.
  - c) Monitor FM at 38.85MHz published in appropriate flight information publications.
  - d) Issue advisories on known hazards to aviation and provide flight following services.
3. Unit Airspace Entry Requirements.
  - a) All aircraft must have a current Prior Permission Request (PPR) on file at Range Control prior to entering or conducting air operations at Fort Devens. The PPR must be filed at least three (3) working days prior to the event. See Appendix H (H-9) for the PPR form.
  - b) Prior to entering the airspace all aircraft must establish contact (10 minutes out) with Range Control via FM radio (Fort Devens Range Safety Net 38.85 mhz), This coordination is required to receive the current status of HOT ranges and firing points, and for any advisory regarding the restricted airspace and weather.
  - c) All aircraft must have a current map of the installation and an operational FM radio. Units conducting aviation operations and/or pilots using the Fort Devens Range Complex must receive a safety/orientation briefing in person or

telephonically from the Fort Devens Range Control Operations section prior to flying aircraft into Fort Devens airspace. Pilots are expected to have thorough knowledge of the terrain features and location on the ground of major landmarks, obstructions, range facilities, and mortar firing points. Pilots who do not possess this knowledge must request guidance and/or landing instructions from Range Control.

- d) All aircraft are strictly prohibited from over flying the Ammunition Supply Point. All aircraft are strictly prohibited from over flying the impact area unless authorized by Range Control.
  - e) Aircraft intending to land at any point on Fort Devens shall advise Range Control of their point of entry, intended route of flight, destination, and egress route. All aircraft will advise Range Control of the intended route from the Fort Devens Helo Routes Map (Black, Blue, etc. route)
  - f) All clearances by Range Control for aircraft flight within the Fort Devens airspace will be, "Proceed at Pilot's Discretion".
4. Aviators conducting aerial flights over Fort Devens will be familiar with the provisions of this regulation and conduct all flights IAW advisories provided by Range Control. In the event of unforeseen situations or emergencies, the pilot in command is responsible for the safe operation of his aircraft and keeping Range Control advised of the current situation.

#### **J-5. Airspace Control Operation.**

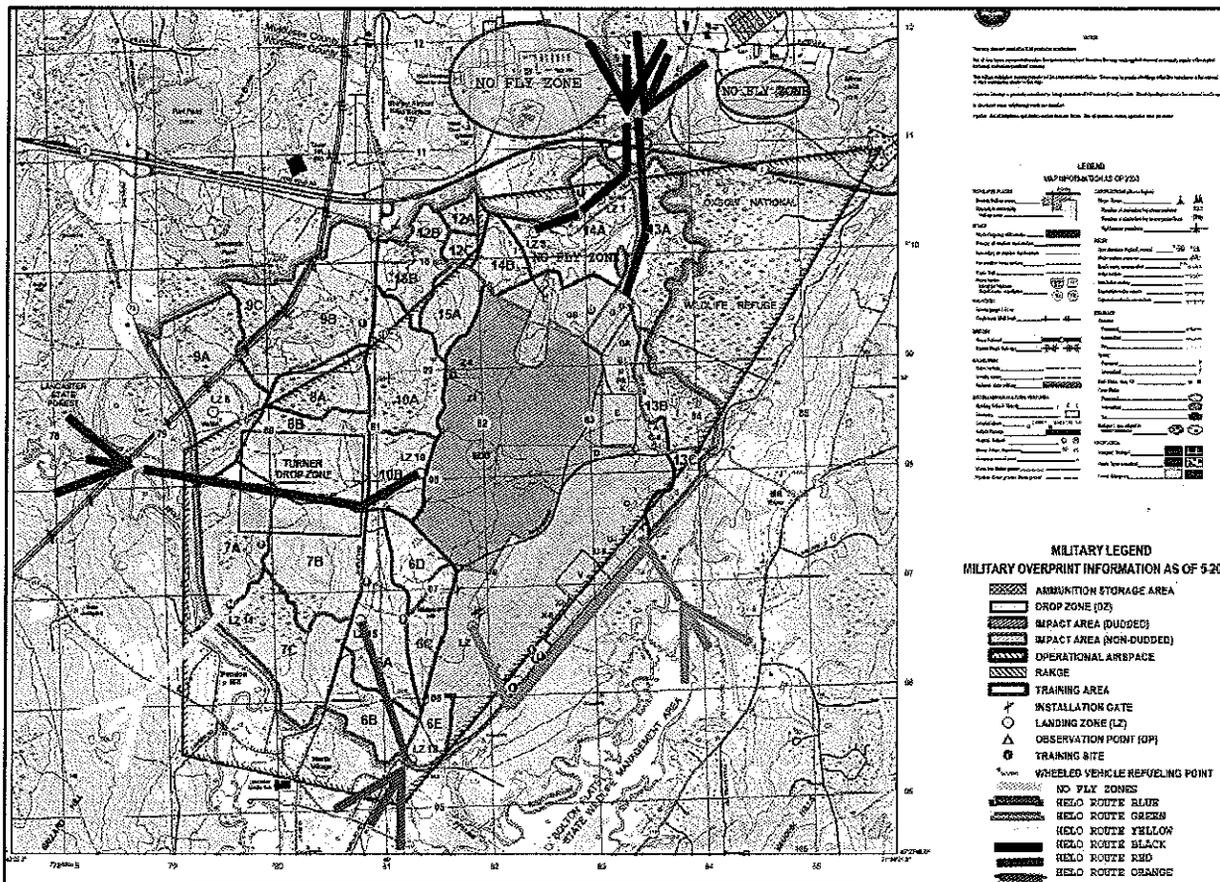
- 1. Airspace control: Range Control will be manned by qualified personnel at all times and will provide limited flight following and aircraft route advisories into and out of designated LZs. Range Control will maintain communications with all active ranges/firing points/range activities and restricted area data. Range Control radio facilities will provide a communications system to furnish route advisories. Positive control is dependent on aircraft operating within predetermined lanes over easily identifiable terrain. The following routes (see subparagraphs b and c below) have been established to aid in flight following and provide a positive means of channeling aircraft in the vicinity of hazards such as range fans or airdrops.
- 2. Routes: The following route structure is designed to provide a well-defined means of navigation between major areas of the reservation. Aircraft will avoid over-flight of prohibited areas in the vicinity of routes; however, safe operations will take precedence in all instances. Fort Devens routes are:

	ROUTE	DESCRIPTION
1.	GREEN	Tango Range (BH 8343507465) east to Trainfire Road), turn southwest to Rappel Tower Fac 6 (BH82210607), turn northwest to LZ 13 at (BH81850664).
2.	RED	Intersection MA Route 70 and Bivouac Road (BH79270800) east to Turner Drop Zone (BH80840780), north east to LZ10 at (BH81400805).

3. BLACK Intersection MA Route 2 and Jackson Road (BH83481098), south to Range Control (BH83391066), south west to LZ1 (BH83151051), southwest to LZ2 (BH82931037), to LZ 3 (BH82521022).
  4. BLUE Intersection MA Route 2 and Jackson Road (BH83481098) south staying east of Jackson Road to Golf Range at (BH83170940).
  5. YELLOW MA Route 70 and Ligget Road (BH7940679) northeast to LZ 14 (BH79550686).
  6. ORANGE Intersection of MA RT 117 and B&M Railroad (BH8087104824) northeast to LZ 18 (BH825205442) northwest to LZ 15 (BH8080706729)
3. Routes. Routes have been developed to provide precise flight paths to be utilized in the vicinity of live fire range fans or other activities that would restrict aircraft flight. Routes have the following airspace restrictions:
- a) Altitude. A maximum of 100 feet above obstacles. Aircraft may climb to 200 feet mean sea level or above ground level to reestablish radio communications with Range Control. Aviators will report change in altitude and Range Control will determine if the mission can be continued at the attitude.
  - b) Airspeed. Airspeed will be adjusted to ensure ground track remains within prescribed limits.

J-6 Route MAP.

Helicopter Routes Map  
Version 2011.0



**APPENDIX K**

**Personal Protective Equipment**

**PPE REQUIRED BY DA PAM 385-63 OR WEAPON TM**

<u>WEAPON/AMMO TYPE</u>	<u>HEARING</u>	<u>EYE</u>	<u>ACU</u>	<u>GLOVES</u>	<u>HELMET</u>	<u>BODY ARMOR</u>	<u>CCMCK</u>	<u>FACE MASK</u>	<u>PAM REF</u>
BLANKS	X(S)	X(S)	X(S)						2-9d.
SMALL ARMS	X(W)	X(S)							2-10.
HAND GRENADES	X(W)	X(W)			X(W)	X(W)			5-1b.
GRENADE	X(W)	X(S)			X(HE)	X(HE)			5-2a.(3)
LAUNCHER									
MK 19	X(W)	X(S)			X(HE) <sup>4</sup>	X(HE) <sup>4</sup>			5-2.b(4)
ANTITANK ROCKETS	X(W)	X(S) <sup>5</sup>			X	X			6-1a.
MAAWS ROCKETS	X(W) <sup>6</sup>	X(W)			X	X			6-1a.
MORTARS	X(W)	X(E) <sup>4</sup>			X(W)	X(W)			9-1.c.
DEMO/EXPLOSIVE	X(W)	X(S)			X(W)	X(W)			15-1.b(11)
UTM/CCMCK	X(W)	X <sup>1</sup>	X	X	X			X <sup>2,3</sup>	14-14a, *
IED SIMULATOR (Non-Pyrotechnic)	X(W)	X(W)			X(W)				15-10g.(6)

(S) = Should wear

(w) = Will wear

(E) = Encouraged ref DA Pam 385-63,2-10c.

\*Close Combat Mission Capability Kit TM 9-6920-3700-10

<sup>1</sup> CCMCK Eye Wear – (Sun Wind and Dust Goggles) NSN 8465-01-328-8268

<sup>2</sup> CCMCK Face Mask NSN 8415-99-359-9160

<sup>3</sup> CCMCK requires groin protection (athletic cup or padding)

<sup>4</sup> Marine Corps at all times

<sup>5</sup> ACU sleeves should be down and collars up

<sup>6</sup> MAAWS must wear properly inserted foam earplugs as well as properly fitting ear muffs.

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY.**

**Appendix L**  
**Portable Toilet Coordination**

**L-1.** On the Fort Devens Range Complex, ranges and facilities have at least one portable toilet each. Coordinating portable toilets is the unit's responsibility when using the training areas

**L-2.** The Directorate of Plans Training and Security provides portable toilets on a no fee basis to USAR units; all others units to include ROTC must provide their own funding. USAR units will coordinate with the Operations POC for this service at least 30 days prior to their training dates. Operations Branch will coordinate with the contractor and arrange placement per unit instructions. The unit will then be responsible to meet the contractor at Range Control and coordinate exactly where the portable toilets will be placed within the training area the unit is occupying

**L-3.** USAR units must to provide all the following information NLT 30 days out to the point of contact at the DPTS Operations Branch: at 978-796-3155, DSN 256, or FAX 2185.

- Point of contact, including name, rank and position title
- Telephone number, if different than unit telephone number
- Unit name
- Unit telephone number
- Location of training
- Number of personnel at each training site
- Location for portable toilets within training areas and grid coordinates, if available

**L-4.** All other units will coordinate directly with the current vendor and provide their own funding. Contact DPTS Operations Branch for the current vendors contact information.

**L-5.** The criteria for the number of portable toilets for each training site are one for every 15. Each portable toilet is cleaned every other day.

**L-6.** Once placed by contractor, the portable toilets cannot be moved by units. These toilets are not to be used for the disposal of trash, if it won't flush in your toilet at home-don't put it in this toilet. The unit will be held responsible for all damages and any actions that add costs to the contract.

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY**

## GLOSSARY

**Barrier.** A permanent or temporary impediment to foot and or vehicular traffic which personnel are prohibited to pass without approval from range control. A barrier may be sentinel, wire fencing, gate, sign, or other access-limiting device.

**Cease-fire.** A command given by anyone observing an unsafe firing condition on any training complex to immediately terminate an active (hot, wet) firing status of a weapon system(s).

**Certified ammunition.** Ammunition, to include fuzes, propellants, and projectiles, which have been cleared by the U.S. Army Materiel Command for overhead fire of unprotected personnel.

**Civilian Personnel:** A person who is not currently on either: active duty military status, active guard reserve status (AGR), reserve component serving on official orders (AT/IDT).

**Cold firing status.** A firing condition where authorization to fire a weapon system has not been given or has been revoked by the installation range control office. Also referred to as a dry firing status.

**Control Tower.** A structure usually situated behind the firing line or position from which range operations of a training event is controlled.

**Cook-off.** A functioning of any or all of explosive components due to high temperatures within a weapon system.

**Crew-Served Weapon System.** Any weapon system requiring two or more personnel to fire the system.

**Deviation.** A departure from the requirements of this pamphlet and the policy in AR 385-63/MCO 3570.1B, Range Safety.

**Direct fire.** Fire delivered on a target when the weapon system is laid by sighting directly on the target using the weapon system sighting equipment.

**Downrange.** A descriptive term used to address the orientation of personnel, materiel, or property relative to the direction or path of ammunition and or explosives (to include guided missiles and rockets) fired or launched from weapon systems. The direction of orientation is from the firing line or position toward the target.

**Dud.** An explosive item or component of a weapon system that fails to function as intended when fired.

**Field Expedient Explosive Device.** A standard item of explosive that is combined with other standard explosive items or non-explosive items using techniques and procedures outlined in doctrinal publications (FMs and TMs.)

**Firing line.** The line from which weapon systems are fired downrange which consists of firing points or positions.

**Firing position.** The point or location at which a weapon system (excluding demolitions) is placed for firing. For demolitions, the firing position is the point or location at which the firing crew is located during demolition operations.

**Gun Target Line (GTL).** An imaginary line drawn between the firing position and target position. Also referred to as the line of fire.

**Hangfire.** A delay in the functioning of the firing train of ammunition

**Hearing Hazard, Hearing Hazard Zone.** All personnel exposed to levels of 140 dBP and above must wear hearing protection. The area where the impulse noise levels are 140 dBP or higher and hearing protection is required.

**Hearing Protection Zone.** Area on the range within which all personnel must wear hearing protection during weapons fire. It may be larger than the hearing hazard zone, but never smaller.

**Hot Firing Status.** A firing condition where authorization to fire a weapon system has been given by the installation range control office. Also referred to as a wet firing status.

**Impact Area.** The ground and associated airspace within the training complex used to contain fired, or launched ammunition and explosives, and the resulting fragments, debris, and components from various weapon systems. A weapon system impact area is the area within the surface danger zone used to contain fired, or launched ammunition and explosives, and the resulting fragments, debris, and components. Indirect fire weapon system impact areas include probable error for range and deflection. Direct fire weapon system impact areas encompass the total surface danger zone from the firing point or position downrange to distance *X*.

*a. Temporary impact area.* An impact area within the training complex used for a limited period of time to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components. Temporary impact areas are normally used for non-dud producing ammunition or explosives, and should be able to be cleared and returned to other training support following termination of firing.

*b. Dedicated impact area.* An impact area that is permanently designated within the training complex and used indefinitely to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components.

Dedicated impact areas are normally used for non-sensitive ammunition and explosives.

*c. High-hazard impact area.* An impact area that is permanently designated within the training complex and used to contain sensitive high explosive ammunition and explosives and the resulting fragments, debris, and components. High hazard impact areas are normally established as part of dedicated impact areas where access is limited and strictly controlled due to the extreme hazard of dud ordnance (that is, ICM, HEAT, 40-mm, and other highly sensitive ammunition and explosives.)

**Improved Conventional Munitions.** Munitions characterized by the delivery of two or more antipersonnel or antimateriel and or antiarmor submunitions.

**Indirect Fire.** Fire delivered on a target when the weapon system is not in line of sight with the target.

**Malfunction.** Failure of an ammunition item to function as expected when fired, launched, or when explosive items function under conditions that should not cause functioning. Malfunctions include hangfires, misfires, duds, abnormal functioning and premature

functioning of explosive items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions do not include accidents or incidents that arise solely from negligence, malpractice, or situations such as vehicle accidents or fires.

**Military Operations In Urban Terrain (MOUT).** A terrain complex where manmade construction impacts on the tactical options available to commanders. Military operations in urban terrain facilities replicate urban sprawl environments.

**Misfire.** A complete failure to fire that is not necessarily hazardous. Because it cannot be readily distinguished from a delay in functioning (hangfire), it must be handled as worst case in accordance with procedures for the weapon system.

**Officer-in-Charge (OIC).** The individual in charge of troops or the training of troops who conducts firing on or using of range facilities, and has responsibility for the operation of the firing range. Civilians may act as OICs/Range Safety Officers (RSOs) of firing ranges if they are qualified and approved to perform such duties by the installation Range Control Officer (RCO). Such qualifications normally consist of National Rifle Association certification or installation certification

**Mission-Essential Personnel.** Those individuals who are directly involved or in support of weapon systems firing without whom the firing mission could not take place.

**PPE.** Personal protective equipment.

**Proper Eye Protection (or eye armor).** Approved eye protection, as a minimum, when required by safety and or installation/community range regulations and or standing operating procedures.

**Proper Hearing Protection.** Approved single or double hearing protection, as a minimum, when required by safety or installation range regulations or standing operating procedures.

**R-4102A/B Airspace.** That area designated by agreement with the FAA within which all firing of any projectile with a trajectory exceeding 45 meters (148 feet) and parachute operations must take place. R-4102A is from 0-1999 feet above ground level. R-4102B extends from 2000-3995 feet above ground level.

**Range Control Officer.** A commissioned officer, warrant officer, non-commissioned officer, or civilian who serves as the central point of control and coordination for all activities conducted within the installation/community training complex, and implements and enforces the installation/community range safety program. This may include the scheduling and maintenance of the training complex.

**Range Personnel.** Persons designated to assist the range control officer in executing the Installation Range Safety Program.

**Range Safety Officer.** The officer, warrant officer, or noncommissioned officer who is the direct representative of the OIC of firing or other operations. The RSO is responsible to the OIC for insuring the adequacy of safety of firing, training operations, and ensuring compliance with laser range safety requirements and local standing operating procedures.

**Risk Management.** The process of weighing (analyzing) training realism and the expected benefits of an exercise or operation against the known risks.

**Safe Area.** An area within the surface danger zone where the probability of injury is minimal to exposed soldiers/Marines or those provided with protective cover.

**Safety Certification Program.** A program established and maintained by the battalion/squadron commander to ensure that personnel under their command designated as OICs and RSOs are competent and qualified to carry out the responsibilities and duties of the respective positions.

**Single Hearing Protector (or protection).** Wearing either earplugs or noise muffs or noise attenuating helmets.

**Special Use Airspace.** Airspace of defined dimension identified by an area on the surface of the earth wherein activities must be confined because of their nature and or wherein limitations that may be imposed upon aircraft operations that are not a part of those activities.

**Surface Danger Zone.** The ground and airspace designated within the training complex (to include associated safety areas) for vertical and lateral containment of projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of weapon systems to include explosives and demolitions.

**Target Area.** The point or location within the surface danger zone where targets (static/moving, point/array) are emplaced for weapon system engagement. For demolitions, it is the point or location where explosive charges are emplaced.

**Unexploded Ordnance (UXO).** Ammunition and explosives which have been primed fused, armed, or otherwise prepared for action and which has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations/communities, personnel, or materiel, and remains unexploded either by malfunction or design or any other cause.

**Up-range.** A descriptive term used to address the orientation of personnel, materiel, or property relative to the direction or path of ammunition and or explosives (to include guided missiles and rockets) fired or launched from weapon systems. The orientation is from the target area or impact area toward the firing line or position.

**Weapon System Qualified.** An individual, military or civilian, who has completed a standard program of instruction for a particular weapon system.

**Weapon System Knowledgeable.** An individual, military or civilian, who has completed a standard program of instruction for a particular weapon system or has completed familiarization training established by the installation commander. Familiarization training may involve live-fire training. Familiarization training should be approved by proponent school.

**UNCLASSIFIED**

**THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY.**

