FIRING/NONFIRING DATA

LOG# 1-1-10

For use of this form see USAIC Regulation 210-4; the proponent agency is DOT

TO: Chief, Range Division Directorate of Operations and Training Fort Benning, GA 31905	**DATE:** 6 Jan 10
THRU: Operations, Range Division, Fort Benning, GA. 31905	**FROM:** Survey, Range Division, Fort Benning, GA. 31905

SECTION I

Problem Number:	**Range:** Carmouche	**Title:** BFV Gunnery
Type Training: (a. Live Fire) b. Non-live Fire	**CP/Controller Coordinates:** 1063 9507 (Tower)	

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit (Mils)	Right Limit (Mils)
See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure
See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure
See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure
See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure
See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure	See Weapon/Ammo Enclosure

SECTION IV, LIVE FIRE EXERCISES Attach the *following:*	SECTION V, NON-LIVE FIRE TRAINING
a. Scenario of training to be conducted: See Encl	a. Training area(s) to be occupied:
b. Sketch of area : See Encl	b. Scenario of training to be conducted:
c. Risk Assessment : See Encl	c. Sketch of area(s) to be occupied:
d. FB Form 210-4-2-R if Mortar or artillery is being fired: NA.	d. REMARKS: All lasers used for training are eye safe beyond 25m
Name/rank/signature of requesting officer: Benjamin Bolding, Chief, Survey Technician	Name/rank/signature of Major Unit S3/Commander: Brad Tesch, Chief, Range Operations

SECTION VI, FOR RANGE DIVISION USE

TO: Range Operations Ft Benning, GA 31905	FROM: Range Division, Directorate of Operations & Training Fort Benning, GA 31905	DATE: 7 JAN 10

a. Roadblocks to be closed:

b. Road(s) to be closed/road barrier locations: See Weapon/Ammo Enclosure

c. This approval expires: INDEF

d. REMARKS: Class IIIA lasers are not eye safe on Dual Low Mode within 25 meters. In addition to the AN-PEQ-2A, some weapons may be mounted with the AN/PAC-4C. Both lasers are bore lighted with the AN/PEM-1A. The PEM – 1A is not a tactical laser and must be used within 25 meters. Laser warning signs will be in place.

Chief, Range Division Directorate of Operations and Training	Signature:

IMSE-BEN-PLT-R 6 Jan 2010

MEMORANDUM FOR WHOM IT MAY CONCERN

SUBJECT: Standing Operating Procedures for Carmouche Range

1. PURPOSE: To establish Standing Operating Procedures (SOP) to be used during training on Carmouche Range.

2. APPLICABILITY: This SOP applies to all units/activities using Carmouche Range. All Officers in Charge (OIC), Non-Commission Officers in Charge (NCOIC) and Range Safety Officers (RSO) will be familiar with the contents of this SOP and all other applicable references.

3. REFERENCES:

a. AR 385-63 and DA PAM 385-63, Range Safety.

b. USAIC Regulation 210-4, Range and Terrain Regulation.

c. TM 9-1300-206, Ammunition and Explosives Standards.

d. FM 3-22.1, Bradley Gunnery

4. SCHEDULING: Each unit/activity scheduling Carmouche Range will prepare and submit the following documents to Range Operations, DPTM:

a. FB 46-R, Risk Management Worksheet and Daily Risk Management.

b. FB Form 210-4-3R, scenario, sketches, FB Form 144, and any specific enclosures as required.

c. Training guidelines: All training will be conducted in accordance with (IAW) this SOP, together with references listed in paragraph 3 of the SOP and FB 210-4-3 R approved by Range Operations, DPTM. Units are responsible for developing and submitting a new range packet, if requested training deviates from the standard range packet that has been developed by Range Division.

d. When scheduling, units will schedule the Range through Range Control.

5. ADMINISTRATIVE:

a. Using unit is responsible for daily cleanliness of the latrines prior to departing range. There is only one latrine which will accommodate male and female soldiers. Units will provide their own hand soap, paper towels, toilet paper, and trash bags.

b. Using unit is responsible for daily cleaning and removal of all trash and debris from all ammo points and range support facilities prior to departing range.

c. A red range flag will be provided to using unit by Target Systems Support personnel located at Carmouche Range. The range flag will be displayed on the pole at the entrance prior to training and must be returned to range support personnel prior to departing the range.

d. There is no portable water source available at Carmouche Range.

g. All range fires will be suppressed and reported to Range Control IAW USAIC Regulation 210-4.

6. GENERAL: Carmouche Range is a Bradley Fighting Vehicle (BFV) and Tank Range.

REQUIREMENTS: A specific operation 210-4-3R/scenario package will be prepared by the unit for Carmouche Range and approved by Chief, Range Division. All supporting documents, i.e., regulations, field manuals, TMs, etc. with an approved 210-4-3/scenario package will be on site. All visiting persons and civilian personnel will also be directly controlled by the OIC/NCOIC. Prior to training, all personnel will be given range orientation/safety briefing, to include location of dud areas, medical procedures, loading and clearing weapons, misfire procedures, emergency cease fire signals, etc. Only weapons/ammo listed on an approved FB Form 210-4-3R/scenario package will be allowed on the range. Prior to and after training, an ammo/weapons check will be made to ensure no individual or vehicle has any unauthorized ammo/weapons. Prior to vacating the range, using unit will ensure the range is cleaned to include latrines. All refuse generated, pallets, ammo boxes, food packaging.

7. MEDICAL: Medical personnel and equipment on site will be IAW unit POI and risk management worksheet risk level for the training conducted. MEDVAC will be IAW USAIC Regulation 210-4 and USAIC Regulation 40-2. Landing zone for MEDEVAC aircraft is located at grid 107953 and will be marked appropriately.

8. VEHICLE CONTROL: POV and wheeled military vehicle parking is located on Carmouche Range.

9. AMMO POINTS: There will be an ammo point. No weapons or open flame will be allowed within 50 feet of each ammunition point. Two bicarbonate fire extinguishers will be available at all times at each ammunition point. Ammunition Non-Commissioned Officer (NCO) will control issue of live ammunition and monitor at all times. All Ammunitions will be issued and turned in to the Ammunition NCO.

10. OPENING OF RANGE: Tasks for opening the range and occupying the site:

a. The OIC:

1. Signs for the range from Range Control.
2. Arrives at the range or training site before the unit.

3. Checks Communications.
4. Arranges for backup communications for live-fire exercises.
5. Briefs the safety officer, the evaluators, and the training units.
6. Ensures that range equipment is present and operational.

b. The NCOIC:
1. Sets up any additional training areas.
2. Supervises ammunition, targets, and administrative details.

c. The weapons system-certified range safety officer or NCO:
1. Ensures no one brings ammunition onto a non-firing range.
2. Supervises placement of vehicles in correct order for firing or training.
3. Inspects storage of restricted or suspended ammunition.
4. Inspects handling and lot numbers of restricted or suspended ammunition.
5. Inspects medical and vehicle support.
6. Gives safety briefing before all live fire events.
7. Ensures barriers are closed prior to Live Fire.
8. ensures that the range guards are posted and briefed on their duties.

d. The Master Gunner:
1. Ensures that all DA forms 2408-4, Weapons Record Data, are up to date.
2. Gives final briefing to Bradley crew evaluators.
3. Ensures that the concurrent training site is set up.
4. Arrives at the range or training site before the firing unit.

11. Conduct of Exercise: Tasks for conducting the exercise follow:
a. The OIC:
1. Controls live fire exercise.
2. Maintains efficient throughput among units going through the course.
3. Maintains all required communications.

b. The NCOIC:
1. Supervises all details.
2. Controls the movement of vehicles and personnel.

c. The weapons system-certified safety officer or Safety NCO:
1. Ensure that the crew handles misfires IAW safety regulations.
2. Observes for any safety violation.
3. Clears each Bradley at the end of each exercise.

d. The Master Gunner:
1. Ensures the range firing adheres to the appropriate gunnery table.
2. Ensures that crews boresight and zero correctly.
3. Conducts on-site remedial training as needed.
4. Supervises Bradley crew evaluators.
5. Helps safety personnel clear weapons when required.

6. Helps maintenance personnel identify and correct malfunctions.
7. Helps the commander determine or verify alibi conditions.

12. Closure of the Range: Tasks for closing the range follows:

a. The OIC:

1. Notifies range control that firing has terminated.
2. Debriefs unit personnel.
3. Ensures clearing of the range or training area follows local regulations and SOP.

b. The NCOIC:

1. Supervises ammunition and target details.
2. Ensures that range facilities have been policed.

c. The master gunner updates DA Form 2408-4 for each M242 fired.

d. The ammunition NCOIC:

1. Ensures that only authorized personnel remove munitions from range.
2. Prepares residue certificates required by ammunition supply point.

13. BFV/Tank vehicle flags: Vehicles will display flag to show the vehicles weapon status. The following procedures apply:

a. Displays no flag: Vehicle has no ammunition on board.

b. Displays Green flag: Vehicle has no ammunition on board. Vehicle participating in dry/MILES training.

c. Displays Green and Red flags: Ammunition on board vehicle, electrical and manual safeties engaged.

d. Displays Yellow and Red flags: Vehicle has experienced a malfunction or misfire. Weapon pointed at the target area. Electrical and manual safeties engaged. If not, range safety personnel are notified.

e. Displays Red flag: Vehicle engaging target area. Weapon loaded, all safeties are off.

14. Safety:

a. During Bradley Gunnery operations all BFV's will maintain communications with the tower at all times. If communications goes down all movements and engagements will cease fire freeze until communication is restored.

b. All commands come from the tower.

c. All engagements will be cleared and authorized by tower personnel.

d. BFV's will only fire at approved targets on the target list.

e. Proper weapon status flags will be present and visible while executing each phase.

f. If a malfunction occurs, all operations will cease fire freeze and the malfunction will be attempted to be fixed, if assistance is needed the Master Gunner will be notified via radio communication.

g. All weapon systems will remain oriented down range at all times.

h. BFV's that are preparing to run the course will be given the order to load or unload the ammunition by the tower.

i. Through the duration of the gunnery only one BFV will be allowed down range at a time.

j. The emergency cease fire signal will be briefed during the range safety brief.
k. An FLA with qualified medics will be present through the duration of the gunnery.
l. All BFV's will be cleared onto and off of the execution line by a qualified master gunner.

15. The point of contact for this action is Mr. Whitehead, Survey Tech, Range Division, Directorate, Plans, Training, Mobilization and Security, COMM (706) 544-6267.

BRAD TESCH
YA02, USA
Chief of Range Operations

Carmouche Range Division BFV Gunnery (Log # 1-1-10) Section III, Weapons & Ammunition Requested				
Coordinates of Weapons Position	Type Weapon Model Number	Type Ammunition	Left Limit of Fire Grid Azimuth	Right Limit of Fire Grid Azimuth
VTCE BASELINE 1069 9514 to 1070 9504	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1160 MILS 1135 MILS	2005 MILS 2075 MILS
VTCE FP1 START 1075 9511 to STOP 1099 9517	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1150 MILS 1100 MILS	2000 MILS 2115 MILS
VTCE FP2 START 1091 9496 to STOP 1112 9485	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1095 MILS 1095 MILS	2005 MILS 2000 MILS
VTCE FP3 START 1119 9486 to STOP 1133 9501	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1065 MILS 1065 MILS	1985 MILS 2155 MILS
VTSE BASELINE 1132 9483 to 1131 9473	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0830 MILS 1270 MILS	1950 MILS 2125 MILS
VTSE FP1 START 1140 9484 to STOP 1161 9488	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0810 MILS 0590 MILS	1975 MILS 2280 MILS
VTSE FP2 START 1185 9530 to STOP 1197 9507	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0930 MILS 0930 MILS	1565 MILS 1565 MILS
VTSE FP3 START 1188 9496 to STOP 1186 9474	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0625 MILS 0625 MILS	2110 MILS 2080 MILS
VTSE FP4 START 1187 9472 to STOP 1188 9460	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1385 MILS 0715 MILS	1920 MILS 2305 MILS
VTSE FP5 START 1186 9452 to STOP 1185 9466	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0585 MILS 0585 MILS	1985 MILS 2085 MILS
VTSE FP6 START 1181 9470 to STOP 1175 9472	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0695 MILS 0695 MILS	2090 MILS 2180 MILS
BP 1 1092 9520	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1235 MILS 2110 MILS	2000 MILS 1235 MILS
BP 2 1093 9497	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	0970 MILS 0860 MILS	1945 MILS 2050 MILS
BP 3 1119 9483	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1030 MILS 1025 MILS	1985 MILS 2020 MILS
BP 4 1123 9492	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1110 MILS 1105 MILS	2005 MILS 2185 MILS
BP5 1135 9500	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	1135 MILS 1130 MILS	1985 MILS 2155 MILS

Roadblocks: K: 5, 13, 14, 16, 17, 20, 41, 44, 45, 46.

Carmouche Range Division BFV Gunnery (Log # 1-1-10)
Target List

Coordinates of Weapons Position	Type Weapon Model Number	Type Ammunition	Targets
VTCE BASELINE 1069 9514 to 1070 9504	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M302-M304. GRP1, GRP3, M301.
VTCE FP1 START 1075 9511 to STOP 1099 9517	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M301, M302 (LT 1/2), M303, M304. GRP1, GRP5, GRP7, A305, A306, M301.
VTCE FP2 START 1091 9496 to STOP 1112 9485	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A309, A313-A318, M302-M304. GRP3, GRP5, GRP7, A305-A309, M302.
VTCE FP3 START 1119 9486 to STOP 1133 9501	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M302 (Lt 1/2), M303, M304. GRP5, GRP7, A305-A307, M302.
VTSE BASELINE 1132 9483 to 1131 9473	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M302-M304. GRP3, GRP5, GRP7, A307-A309, M302.
VTSE FP1 START 1140 9484 to STOP 1161 9488	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A306, A307, A313-A318, M302 (LEFT 1/2), M303, M304. GRP5, GRP7, GRP8, GRP9, A305-A307, A315, A316, M302.
VTSE FP2 START 1185 9530 to STOP 1197 9507	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A313, M303. M303.
VTSE FP3 START 1188 9496 to STOP 1186 9474	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A307, A313-A318, M302 (LT 1/2 FROM MIDDLE OF FP3 TO FP3 STOP), M303, M304. A307, A315-318, M302 (LT 1/2 FROM MIDDLE OF FP3 TO FP3 STOP).
VTSE FP4 START 1187 9472 to STOP 1188 9460	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A314-A318, M304. GRP8, GRP9 (FROM FP4 STOP), A315-A318, M302 (RIGHT 1/2).
VTSE FP5 START 1186 9452 to STOP 1185 9466	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A313-A318, M302 (RT 1/2), M304. GRP8, GRP9, A315-A318, M302 (RT 1/2).
VTSE FP6 START 1181 9470 to STOP 1175 9472	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A307, A313-A318, M302, M304. GRP8, GRP9, A307, A315-A318, M302.
BP 1 1092 9520	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M301, M302 (LT 1/2), M303, M304. GRP1, GRP5, GRP7, A305, A306, M301.
BP 2 1093 9497	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M301-M304. GRP1, GRP3, GRP5, GRP7, A305, A306, A308, A309, M301.
BP 3 1119 9483	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M302-M304. GRP3, GRP5, GRP7, A305-A309, M302.
BP 4 1123 9492	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M302-M304. GRP3, GRP5, GRP7, A305-A309, M302.
BP5 1135 9500	M242 M240	25MM M793 TPT/M910 TPCSDS-T 7.62MM B/T/ LINK	A305-A307, A313-A318, M302 (LT 1/2), M303, M304. GRP5, GRP7, A305-A307, M302.

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED *(YYYYMMDD)*
M2A3 Bradley Gunnery- Carmouche Range	20100111	20100113	*20091208*

4. PREPARED BY

a. LAST NAME	b. RANK	c. POSITION
Cazee	SSG	B CO. 1/29th IN REGT, 197th BDE, Company Master Gunner

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
1. Movement to and from Range from Battalion Motorpool and Bldg 5500.	Falling, either by tripping of falling off a vehicle	MEDIUM	1. Watch your footing. 2. Keep alert for tripping hazards, i.e. rocks, branches, etc. 3. Maintain 3 points of contact while on the vehicle	LOW	NCOIC/OIC will give Safety Briefing and Supervise	Supervisor	
	Vehicles strike another vehicle	HIGH	1. NCOIC/OIC will Identify the hazards during the convoy safety briefing 2. Ground guide will be used when necessary 1. TC/VC will ensure vehicle separation is maintained at all times 2. Vehicles will maintain minimum distance of 50 meters between each other while on movement during periods of clear unrestricted visibility	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	TC/VC Supervisor	
	Vehicle roll over	HIGH	1. NCOIC/OIC will identify the hazards during the convoy safety briefing 2. Driver will adhere to posted speed limit at all times 3. Vehicles will remain on the center-line of tank train to avoid washout areas and ditches.	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC Convoy CDR	
	Heat	MEDIUM	1. Monitor weather condition	LOW		Supervisor	

Additional space for entries in Items 5 through 11 is provided on Page 2.

Solc

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED *(Check one)*

☐ LOW ☒ MODERATE ☐ HIGH ☐ EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
Michael A. Junot	LTC	1st Battalion, 29th IN REGT, 197th Infantry BDE Battalion Commander	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Movement to and from Range from Battalion Motorpool and Bldg 5500 (CONT)	Soldier is hit by vehicle	HIGH	1. NCOIC/OIC will Identify the hazards during the convoy safety briefing 2. Ground guide will be used when backing 3. Driver will adhere to posted speed limit at all times 4. Allow enough distance between the vehicle and any pedestrians 5. Vehicle will maintain a minimum distance of 100 meters between each other during periods of limited visibility 6. BC's or drivers will halt movement when visibility conditions are severely restricted and service drives will be used (dust/whiteout conditions.) 7. Turret will remain at the 12 o'clock when passing another vehicle	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	TC/VC Supervisor	
	Ramp crushes Soldier	High	1. NCOIC/OIC will identify the hazard during the convoy safety briefing 2. All Soldiers will be familiar with ramp operations prior to deploying to training or range. 3. Ground guides and BC's will ensure that ramps are clear before raising and lowering	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC Convoy CDR	
	Soldier hits head or is struck by equipment in crew compartment	High	1. NCOIC/OIC will identify the hazard during the convoy safety briefing 2. BC's will ensure all equipment is properly stowed and secured 3. BC's will ensure that all Soldiers wear seatbelts and Kevlar or CVC helmet.	MEDIUM	1. NCOIC/OIC will give Safety Briefing and Supervise 2. Leaders conduct inspection prior to movement.	BC/VC Convoy CDR	
	Soldier crushed by vehicle	High	1. NCOIC/OIC will identify the hazard during the convoy safety briefing 2. Soldiers will ground guide when necessary 3. BC/VCs will ensure vehicle separation is maintained at all times. 4. Vehicles will maintain minimum distance of 50 meters between each other while on movement during periods of clear / unrestricted visibility 5. Vehicles will maintain minimum distance of 100 meters between each other while on movement during periods of limited visibility 6. BCs will conduct halt when conditions are severely restricted.	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC Convoy CDR	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9 RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
6. Bradley Gunnery	Accidental discharge, weapon malfunction and misfires for the M242/ M240C	HIGH	**OIC/RSO will conduct the following:** 1. Conduct a Range Safety Briefing. Safety briefing will address possibility of accidental discharge, weapon malfunction and misfire for the M2A2 Chain Gun, M240C coax. 2. Designate a clearing NCO who ensure that M2A2 and M240C weapons are cleared prior leaving the course. **RSO / Clearing NCO will do the following:** 1. Ensure that if nothing ejected and the weapon is hot (200 or more rounds fired in less than 2 mins). Don't open the cover. Push the safety lever to the right (Red the ring is not visible), which places the weapons on safe. Keep the weapon pointed downrange for 15mins, and than clear the weapon. Be careful when clearing the when the barrel is hot; a round the may fire (cook off) due to the weapons heat instead of the firing mechanism 2. During training or ona firing range, after the weapon has fired 200 rounds, the barrel is considered "HOT." Wait 15 mins before clearing a hot weapon and applying immediate or remedial action. OIC Will do the following: 1. Ensure all personnel are weapon system qualified (BGST, BCPC and UCOFT) 2. Ensure proper maintenance and services of weapons are conducted. Instructors will supervise signing of pre-fire checklist. 3. Ensure weapons are oriented downrange at all times.	MEDIUM	RSO / OIC will give Safety Brief and supervise all training	RSO, OIC, Instructors	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9 RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
6. Bradley Gunnery (CONT)	Soldier's limb crushed by weapon	HIGH	OIC/RSO will do the following 1. Identify the hazards during the safety briefing 2. Turret drive will be off when placing the weapon on manual safe 3. Turret drive will be off to clearing the weapon 4. Turret drive will be off to clearing the weapon 5. Combat Override Switch will not be used during training	6. Bradley Gunnery (CONT)	Soldier's limb crushed by weapon	HIGH	
	25MM ammunition detonating	HIGH	1. Range RSO or OIC will cover that there is a possibility that the 25MM gun can double feed while using M910 ammunition. If malfunctions are not properly cleared, multiple round initiations may occur. 2. To avoid this from occurring the following will be enforced a. Ensure that rounds are properly aligned in the links. Ensure M910 rounds that are missing nose caps are removed from link. b. Do not remove serviceable nose caps from M910 rounds. c. Malfunctions that can not be cleared by pushing the misfire button and cycling the gun back to sear, must be cleared by removing the feeder and physically inspecting the chamber for unfired ammunition by the RSO. d. If the straight drive shaft is dropped for any reason, the feeder must be removed from the receiver and the weapon visually checked and cleared by the RSO. 3. The RSO clears all 25MM guns IAW USAIC Regulation 210-4. 4. Ammo will be stored in assigned location on Range and covered until used.		25MM ammunition detonating	HIGH	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Soldier bitten or stung by insect or snake	MEDIUM	1. NCOIC will identify the hazards during the Range Safety Briefing 2. Educate the soldiers on the dangers prior to executing the Range or Training 3. Have emergency supplies available to reduce outcome. 4. Brief Soldiers on the various types of hazards wildlife and instruct Soldiers not to handle or harass the wildlife 5. Identify Soldiers who are allergic to insects. Ensure that those Soldiers have equipment to remedy themselves (bee sting kits, etc.). Soldiers with severe allergies are marked with white engineer tape with red X.	LOW	RSO / OIC will give Safety Brief and supervise all training	All Soldiers	
	Accidental discharge of weapons of weapon malfunction	HIGH	1. NCOIC will identify the hazards during the Range Safety Briefing 2. BC's and instructor will provide additional instruction and supervision during loading and clearing procedures. 3. Range OIC will designate a clearing NCO who will ensure that all weapons is cleared prior to leaving the firing position and range. 4. BC's and gunners will ensure proper maintenance and service of weapons are conducted. Instructors will supervise signing of pre-fire checklist. 5. Medics will be on site during all LFX 6. Pre-fire checklist will be complete prior to crews drawing ammo. 7. All systems boresigthed before firing.	MEDIUM	RSO / OIC will give Safety Brief and supervise all training	RSO, BC, Gunners	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Mixing of DODICS	HIGH	OIC and RSO will inspect the rounds on the range with the Ammunition NCO to ensure the proper Ammunition has been placed on the range IQW the Fire/Non-Fire Data. DODICS to be fired: A940 CTG 25 MM TPDS-T M910 A976 CTG 25 MM TP-T M793 A128 7.62MM BALL LNKD A131 7.62MM BALL 4/1 TRACER MIX	MEDIUM	RSO / OIC will give Safety Brief and supervise all training	RSO, OIC, AMMO NCO	
	Soldiers Injured lifting equipment and Ammo	MEDIUM	1. Identify the Hazards 2. Personnel will work in groups and use proper lifting techniques	LOW	NCOIC/OIC will give Safety Briefing and Supervise	Supervisor	
	Falling, either by tripping of falling off a vehicle	MEDIUM	1. Watch your footing. 2. Keep alert for tripping hazards, i.e. rocks, branches, etc. 3. Maintain 3 points of contact while on the vehicle	LOW	NCOIC/OIC will give Safety Briefing and Supervise	Supervisor	
	Soldier is hit by vehicle	HIGH	1. Identify the Hazards 2. Ground guide will be used when backing	MEDIUM	Hazards will be briefed prior to ammo loading operation	BC/VC Supervisor	
	Vehicles strike another vehicle	HIGH	1. NCOIC/OIC will Identify the hazards during the convoy safety briefing 2. Ground guide will be used when necessary 3. TC/VC will ensure vehicle separation is maintained at all times 4. Vehicles will maintain minimum distance of 50 meters between each other while on movement during periods of clear unrestricted visibility	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC Supervisor	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Vehicle roll over	HIGH	1. NCOIC/OIC will identify the hazards during the convoy safety briefing 2. Driver will adhere to posted speed limit at all times 3. Route recon will be conducted daily prior execution of range 4. Vehicles will only be driven on flat range surfaces. These must be cleared by RSO. 5. All students will have rehearsed rollover drills prior to the range, IAW unit SOP 6. BC's will have commo at all times with the driver 7. Range OIC will ensure students and drivers are familiar with the course road. 8. Range OIC will ensure crews are familiar with the course.	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC Convoy CDR	Vehicle roll over
	Hatch closes on soldier	HIGH	1. NCOIC will identify the hazard during the daily range briefing 2. All Soldiers will be familiar with hatch operation prior to deploying to the range. 3. BC's will ensure that hatches have all the required safety pins and that they are operational and in place.	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC	
	Ramp crushes Soldiers	HIGH	1. NCOIC will identify the hazards during the daily range safety briefing 2. All soldiers will be familiar with ramp operations prior to deploying to the range 3. Ground guide and BC's will ensure that ramps are clear before raising and lowering.	MEDIUM	NCOIC/OIC will give Safety Briefing and Supervise	BC/VC	
	Soldier hits head or is struck by equipment in crew compartment	HIGH	1. NCOIC/OIC will identify the hazard during the convoy safety briefing 2. BC's will ensure all equipment is properly stowed and secured 3. BC's will ensure that all Soldiers wear seatbelts and Kevlar or CVC helmet.	MEDIUM	1. NCOIC/OIC will give Safety Briefing and Supervise 2. Leaders conduct inspection prior to movement.	BC/VC	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Soldier is struck by lightning	HIGH	1. Monitor weather conditions 2. Identify safe areas for when conditions warrant. 3. Suspend all training during electrical storm IAW Unit SOP 4. Brief Soldiers on electrical storm plan and point out location for evacuation and accountability 5. Ensure that all soldiers ground individual and don their wet weather gear.	MEDIUM	Safety Briefing	RSO	
	Heat Casualty Injury	HIGH	1. NCOIC will monitor the wet bulb and keep OIC and Range MG informed of heat category. Previous heat injuries will be marked with red tape or engineer tape on LBE suspenders. 2. Once buttoned up in the vehicle; the crew will not exceed the work limits dictated by the Heat Category. Heat Categories will be enforced as follows: Heat Category 1 WBGT Index: 78-81.9 F Water intake: ½ quart /hour (minimum) "Easy work: ½ qt./hr, no limit to work/rest ratio." "Moderate work: 1 qt/hr, no limit." "Hard work: 1 qt/hr, 40 min work/20 min rest." Heat Category 2 WBGT Index: 82.0-84.9 F "Easy work: 1 qt./hr, no limit." "Moderate work: 1 qt/hr, no limit." "Hard work: 1 qt/hr, 30 min work/30 min rest." Heat Category 3 WBGT Index: 85.0-87.9 F "Easy work: 1 qt./hr, no limit." "Moderate work: 1 qt/hr, no limit." "Hard work: 1 qt/hr, 30 min work/30 min rest."	MEDIUM	IAW USAIC Regulation 40-14 "Prevention of Heat Injuries" Iced sheets will be used IAW USAIC regulation	RSO / NCOIC / Medics	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Heat Casualty Injury	HIGH	Heat Category 4 WBGT Index: 88.0-89.9 F "Easy work: 1 qt./hr, no limit." "Moderate work: 1.25 qt/hr, 30 / 30." "Hard work: 1.25 qt/hr, 20 / 40." Heat Category 5 WBGT Index: 90 F and above. "Easy work: 1 qt./hr, no limit." "Moderate work: 1.25 qt/hr, 30 / 30." "Hard work: 1.25 qt/hr, 15 / 45." 3. Heat casualties will be treated as needed by the CLS on site and may be evacuated via evac vehicle or air MEDEVAC. During Heat Cat 3 and above all firing vehicles hatches (except the driver) will be in the pop up position and safety-locking lever will be in the lock position. 4. BCE's will have 2 canteens of water with them while evaluating a crew downrange. Before the crew begins the course, the BCE will maximize his time in the shade. BCE's will refill both canteens during AAR periods. BCE's will eat 3 meals each day. 5. Students in the turret will have a canteen accessible to them at all times while they are waiting to go downrange. As crewmembers wait, the ramp will remain down and the driver's hatch will be open. Each crewmember will have a minimum of two full canteens on hand at all times. In addition to two full canteens, each crew will have a minimum of one five gallon jug of water on the back of each firing vehicle.	MEDIUM	IAW USAIC Regulation 40-14 "Prevention of Heat Injuries" Iced sheets will be used IAW USAIC regulation	RSO / NCOIC / Medics	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Heat Casualty Injury	HIGH	6. The NCOIC of the range will be responsible for verifying that the crews are adhering to the guidelines as stated above. When a vehicle is down range the BCE will ensure all members on the vehicle are consuming water at all times and report any heat situations to the tower. Students and crew members waiting to enter the vehicles will stay in the shade and drink water buffalo will remain positioned next to the range control shed at all times. In the event that a water buffalo is not present, their will be additional water stored at the control tower located to the left of the AAR shed.	MEDIUM	IAW USAIC Regulation 40-14 "Prevention of Heat Injuries" Iced sheets will be used IAW USAIC regulation	RSO / NCOIC / Medics	
	COLD Weather Injury	HIGH	1. NCOIC will monitor the cold weather conditions and keep OIC and Range MG informed of cold weather situations. Previous cold weather injuries will be marked with red tape or engineer tape on LBE suspenders. 2. Cold weather casualties will be treated as needed by the CLS on site and may be evacuated via evac vehicle or air MEDEVAC. Their will be a warming tent setup, the tent will be used for rotating personnel in and out to keep warm IAW the weather report.	LOW	"Cold Weather Prevention IAW FM 31-70	RSO / NCOIC / Medics	
	Loss of hearing or eyesight	HIGH	Educate students on Dangers 1. Brief soldiers on the dangers of low-hanging branches. 2. Ensure all soldiers wear single hearing protection (CVC or earplugs). 3. Ensure extra hearing protection is available (see Supply NCO). 4. CADRE/BCE will ensure soldiers are wearing hearing protection while maneuvering downrange.	LOW	IAW USAIC Regulation 210-5 "Garrison SOP"	RSO / NCOIC / Medics	

ITEMS 5 THROUGH 12 CONTINUED

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Bradley Gunnery (CONT)	Firing unapproved ammo on the range	HIGH	1. OIC, RSO, NCOIC, and Ammo NCO will cross check the range packet with the 581 to ensure only the approved ammo is present on the range. As well verify the DODIC of the ammo matches the Firing Non-Firing data sheet in the range packet. 2. OIC, RSO, NCOIC, and Ammo NCO will crack open at least one case of every type of ammo to verify contents are correct with the DODIC.	MEDIUM	RSO brief AMMO NCO on the type of ammunition to be fired.	RSO, OIC, AMMO NCO	
	Round Fired out of range Fan/Impact Area	HIGH	1. A crew packet including BGST score sheets for all crew members, UCOFT printout, and a crew worksheet signed by the crew's company commander will be submitted to the OIC and MG running the range, prior to any crew conducting dry or live fire training.		OIC will collect crew packets during initial range brief on day one of range	OIC	
			2. The Ammo NCO will collect a prefire checklist and physically verify the presence of a crew checklist attached to the coax door inside the vehicle turret, prior to issuing ammo for a table.		Ammo NCO will be briefed on responsibility to collect prefire checklist and verify presence of crew checks	OIC/MG/Ammo NCO	
			3. Each Table will be proofed from a BFV, in step with the table script, to assure targetry presented is correct and safe, as well as within the range fans.		Prior to execution of table, MG will conduct dry run in a Bradley with the script from the tower	OIC/MG	
			4. Firing vehicle will be clearly marked with a chemilight or flashlight on each side of the turret, with a light of a different color attached to the middle rear of the turret.		Standard briefed during safety brief by RSO. Beach master will not advance a vehicle not in compliance.	RSO/Beach master	
			5. At night or during times of limited visibility, each firing vehicle will be followed by a chase vehicle to assure the firing vehicle maintains proper turret orientation during conduct of the table. The chase vehicle CDR will be a SSG or above with Bradley Commander Experience. The driver of the chase vehicle will have night vision capability. The chase vehicle will have FM communication with both the tower and firing vehicle		Tower will not begin live fire table during night or limited vis without chase vehicle in place and on the firing freq	OIC/MG	

Risk Assessment Matrix

			HAZARD PROBABILITY				
			FREQUENT	LIKELY	OCCASIONAL	SELDOM	UNLIKELY
			A	B	C	D	E
SEVERITY	CATASTROPHIC	I	EH	EH	H	H	M
	CRITICAL	II	EH	H	H	M	L
	MODERATE	III	H	M	M	L	L
	NEGLIGIBLE	IV	M	L	L	L	

RISK LEVELS

Extremely High - Loss of ability to accomplish the mission

High - Significantly degrades mission capability

Medium - Degrades mission capability

Low - Little or no impact to mission capability

Examples

I/A = Extremely High

II/B = High

III/C = Medium

IV/D = Low

EFFECT

1. CATASTROPHIC - Death or permanent total disability, system loss, major property damage.
2. CRITICAL - Permanent partial disability, temporary total disability, major system damage, major property damage.
3. MODERATE - Minor injury, lost workdays, compensable injury/illness, minor system damage, minor property damage.
4. NEGLIGIBLE - First aid or minor supportive medical treatment, minor system impairment.

PROBABILITY

A. FREQUENT - Occurs often - resources are continuously exposed.

B. LIKELY - Occurs frequently - resources are exposed frequently and/or several times.

C. OCCASIONAL - Occurs sometimes - resources are exposed sporadically.

D. SELDOM - Remote occurrence - resources are possibly exposed.

E. UNLIKELY - Rare occurrence of exposure

RANGE CONTROL KILO AREA ROADBLOCK LIST, 01 NOV 09

BLOCK	GRID	LOCATION	TYPE
K-2	163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate
K-3	153 894	Across entrance road leading to Concord OP 250m N. of its intersection with Buena Vista Rd.	Gate
K-4	144 901	Across entrance road leading to Hartell Bunkers 50m N. its of intersection with Buena Vista Rd.	Gate
K-5	117 920	Across Shamanski Rd 25m N. of its intersection with Buena Vista Rd.	Gate
K-7	095 935	Across Audernarde Trail 10m E of its intersection with Lorraine Road.	Gate
K8	099 947	Across Bulls Eye Rd 50m E of its intersection with Lorraine Road.	Gate
K9	105 927	Across Audernarde Trail 30m W of Moore Rd, 575m N of Buena Vista Rd & Moore Rd intersection.	Gate
K-10	118 920	Across Buena Vista Rd at K-5 road block. (Road guard location).	Gate
K-11	103 922	Across Moore Rd 50m N. of its intersect-ion with Buena Vista Rd. Entrance to Terry Demo Rng. (Road guard location)	Gate
K-12	104 988	Across Old Lorraine Rd 900m S. of its intersection with Lorraine Rd.	Cable
K-13	109 937	Across Moore Rd 10m N. of its intersection with Bullseye Rd.	Gate
K-14	113 998	Across Moore Rd 10m S. of its intersection with Lorraine Rd.	Gate
K-15	114 999	Across course road leading out of Ruth Range 50m E. of its intersection with Moore Rd.	Gate
K-16	190 003	Across Rinehart Rd 100m W. of its intersection with Box Springs Rd.	Gate
K-17	116 013	Across unnamed trail 15m E. of Moore Rd and 130m N. of Ruth Range tower.	Cable
K-18	122 033	Across Moore Rd. at the northern reservation boundary. Permanenty closed.	Berm
K-19	121 023	Across unnamed trail 1400m N. of Ruth Range and 150m E of Moore Rd.	Cable
K-20	141 026	Across unnamed trail off northern boundary trail along railroad tracks 400m E. of Cox Creek ford.	Cable
K-24	219 968	Across Turrentine Rd at reservation boundary. Permanently closed.	Barrier/ Berm
K-25	180 923	Across unnamed trail leading to Shiloh Trail 10m W. of Box Springs Rd. Permanently closed.	Cable
K-26	201 968	Across Turrentine Rd 20m W. of its intersection with Boundary Rd.	Gate

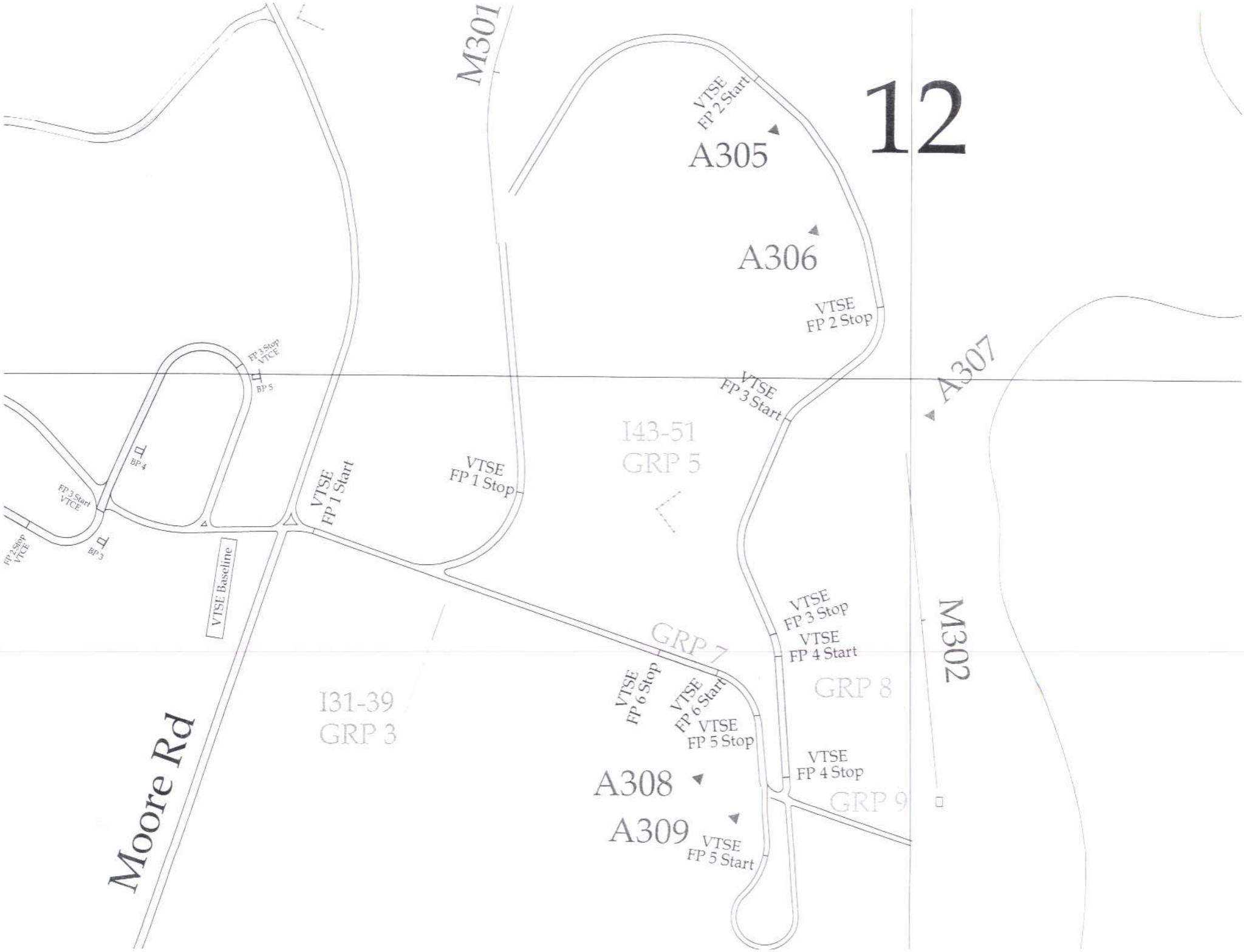
BLOCK	GRID	LOCATION	TYPE
K-28	191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Cable
K-30	193 916	Across Cactus Rd 150m N. of Pine Knot Creek. Permanently closed.	Gate
K-32	192 915	Across Shamanski Rd 35m W. of its intersection with Cactus Rd.	Gate
K-34	134 932	Across Buzancy Trail at its intersection with Rinehart Rd. Permanently closed.	Berm
K-36	162 882	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd. (Road guard location).	Gate
K-38	201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Cable
K-39	202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Cable
K-40	174 908	Across Box Springs Rd 30m S. of Pine Knot Creek.	Gate
K-41	192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Cable
K-42	194 956	Across Box Springs Rd 1200m N. of its intersection with Cactus Rd.	Gate
K-43	197 984	Across Box Springs Rd. approx 450m N. of its intersection with the Hastings Range baseline road.	Cable
K-44	113 955	Across Moore Rd on the N. side of Carmouche Range maneuver box.	Gate
K-45	116 964	Across Moore Rd 30m S. of its inter-section with the old Ware Range course road.	Gate
K-46	119 979	Across Moore Rd 725m S. of its intersection	Gate
		intersection with Americo Trail.	

BLOCK	GRID	LOCATION	TYPE
O-1	063 979	Across unnamed trail 10m NE of its intersection with Midwest Rd.	Gate
O-2	058 988	Across Engineer Trail 20m N of its intersection with Midwest Rd.	Gate
O-3	056 998	Across unnamed trail 700m NE of its intersection with Midwest Rd.	Gate
O-4	078 009	Across unnamed trail 50m N. of Gorday DZ.	Gate
O-5	095 995	Across Engineer Trail 100m W of its intersection with Lorraine Rd.	Gate
O-6	092 980	Across unnamed trail 10m W of its intersection with Lorraine Rd.	Gate

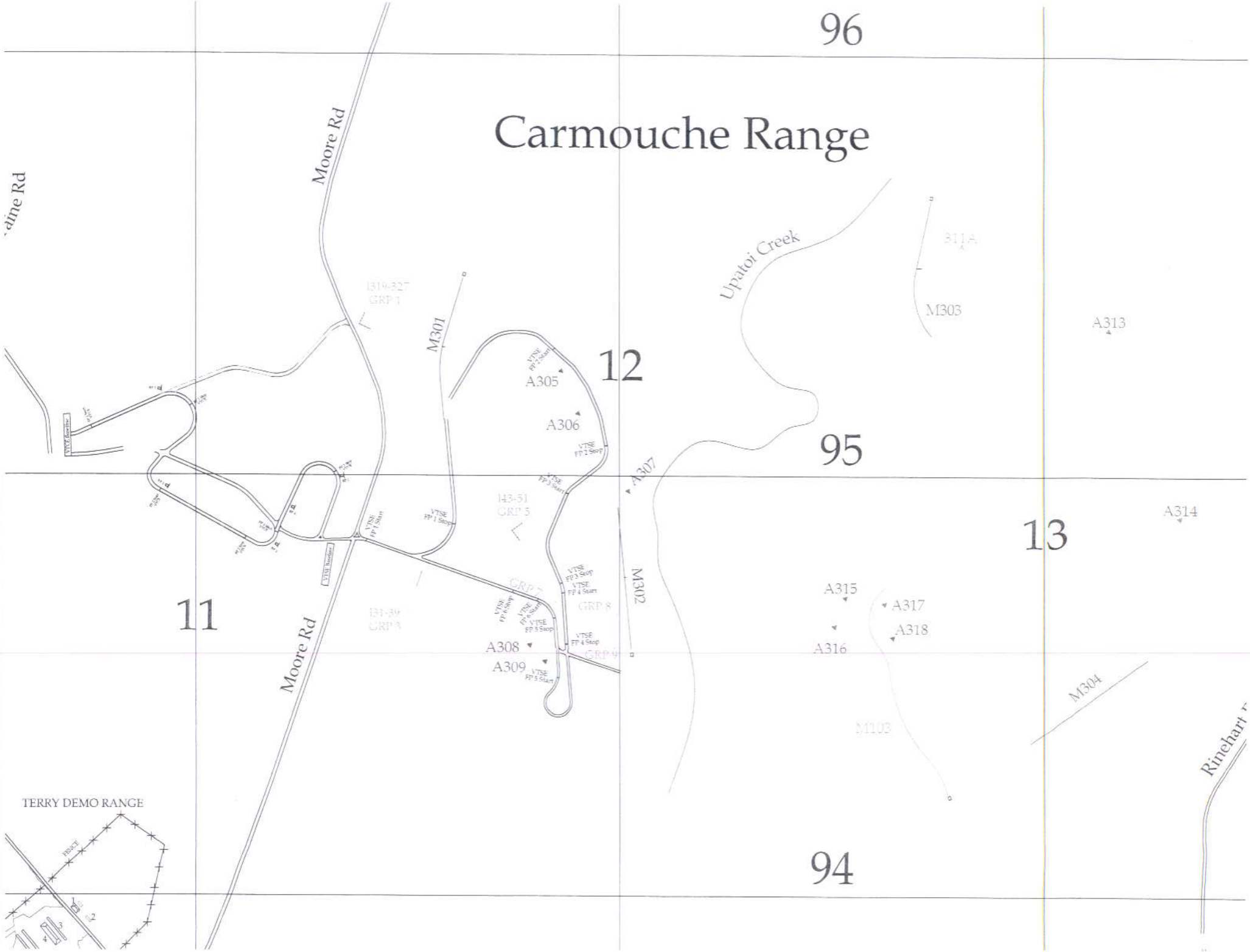
11

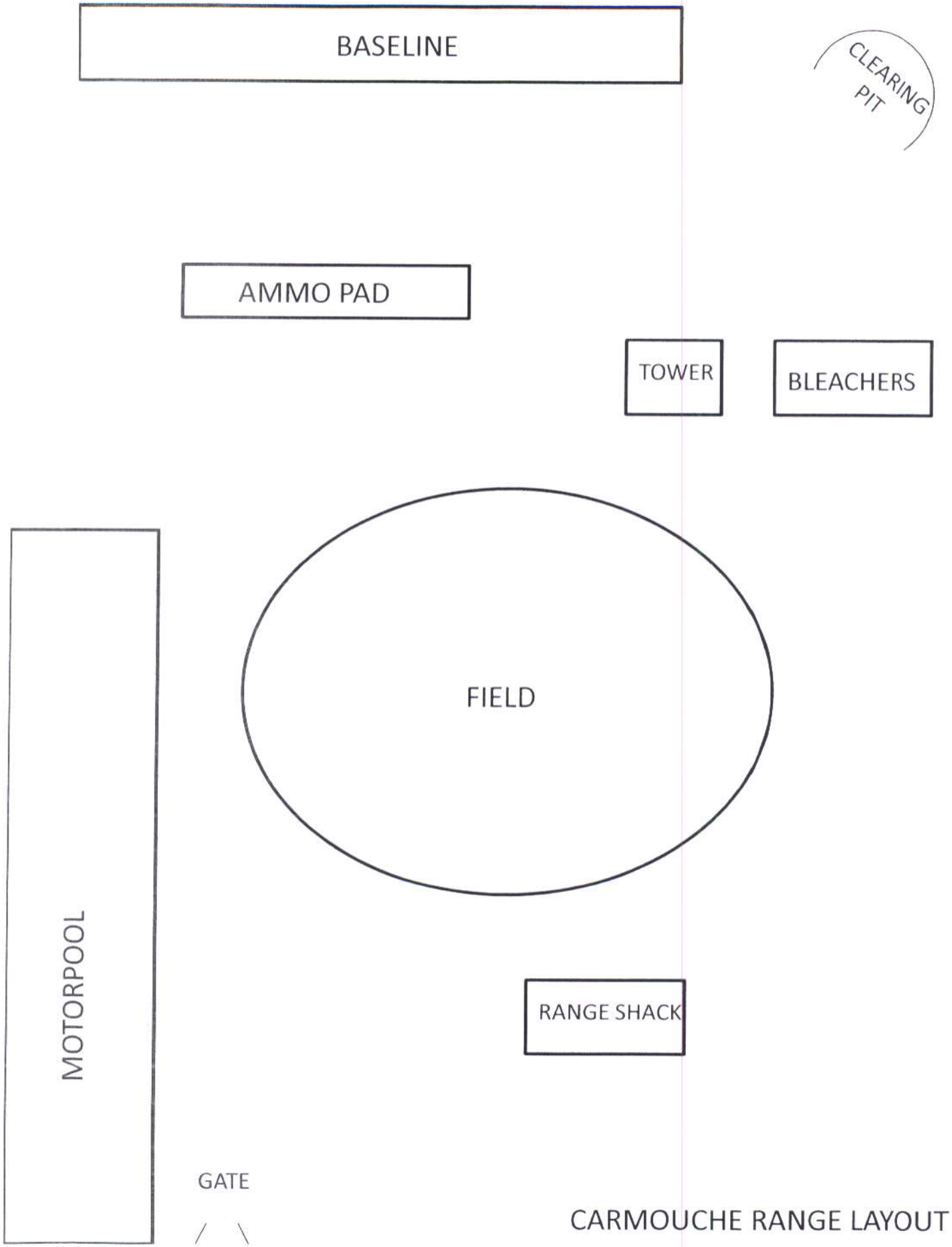
Rd

I31-3
GRP


12
M301
M302
A305
A306
A307
A308
A309
VTSE FP 2 Start
VTSE FP 2 Stop
VTSE FP 3 Start
VTSE FP 3 Stop
VTSE FP 4 Start
VTSE FP 4 Stop
VTSE FP 5 Start
VTSE FP 5 Stop
VTSE FP 6 Start
VTSE FP 6 Stop
VTSE FP 1 Start
VTSE FP 1 Stop
FP 3 Stop VTCE
FP 3 Start VTCE
FP 2 Stop VTCE
BP 5
BP 4
BP 3
VTSE Baseline
I43-51
GRP 5
GRP 7
GRP 8
GRP 9
I31-39
GRP 3
Moore Rd

Carmouche Range





CARMOUCHE RANGE LAYOUT

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

EMD Number: 922321 **Project#:** Unknown **Project Title:** Bradley Gunnery/Striker Gunnery/Tank Gunnery

Description of proposed action:

BFV live fire 25MM and 7.62MM fire on existing ranges. Admin support and maintenance as required. This FB 144 will be used to conduct bradley gunnery for mechanized leader course, bradley master gunnery course, and basic transition course gunnery. Bivouac in designated area. (ammunition to used-25MM TPT/TPDST,7.62MM,120MM,50CAL,240,249,MK19,M16,M60,M24,M203,9MM,M2 RAAWS.

Project Location:

Carmouche, Hastings, Ruth

Amount, Description, Location of Disturbance/Digging:

none

Number/Types of Vehicles:	Number of Personnel:	Type of Ammunition:	Number/Types of Trees:
15 M2A2/A3, 1 M88,2 M998,2 GSA,M880	25-150	see project description Live	none

Size of Project Area: 13,000-12,000-3,000Acres

Duration of Action: Start: 9/30/2009 Stop: 9/30/2010

Proponent: stacey.ballesteros 706-545-5677

Organization/Unit: Range Division

DECISION: **Concur with conditions**

This Action is adequately covered in the Existing EA titled: 'Ongoing Mission and siting Activities, USAIC, FT.Benning, GA.'

(NA): Training involving LIVE FIRE and tracked vehicles has NO CATEX -- "Ongoing Mission and Siting Activities, USAIC, Ft. Benning, GA."

APPROVED THROUGH 30 SEPTEMBER, 2010

Cultural Resources - Archeological **Conditions:** **Susanne Perry (706-545-1471), 8/20/2009**

The Gunnery Courses in Carmouche and Hastings Ranges should avoid the cultural sites on the attached maps. Ground disturbing activities are prohibited and subject to criminal and civil penalties. There are no issues with the training in Ruth Range.

Hazardous Materials/Waste **Conditions:** **Dudley Carson (706 545 7570), 8/14/2009**

Considerations for Dry Fire/Live Fire Training

Appropriate precautions must be taken to prevent hazardous material spills. Have adequate quantities of spill response supplies on hand. If a spill occurs use notification procedures as outlined in the Fort Benning Hazardous Waste Management Plan. Contain and clean up spill according to guidance provided by the Environmental Protection Management Branch. Any waste generated must undergo a waste stream analysis to determine appropriate management requirements to include weapons cleaning patches, rags, and swaps. If any hazardous waste is generated it must be managed in accordance with Federal, State, Army and Fort Benning regulations.

All excess, unused munitions (to include Defective, misfired, or otherwise unserviceable munitions.) must be returned to the Ammunition Supply Point after the field exercise is completed. A dud shall not be removed from the range; it will be marked, called into range control and will be properly disposed of by EOD personnel IAW/USAIC Reg. 210-4 -5-8, May 05.

Rubbish, empty containers and other waste (including used smoke canisters) should be removed from the training area after the exercise. Contact EPMB for detailed information on the proper disposal of waste products resulting from the exercise. Contact POC below for any questions or additional guidance.

Noise **Conditions:** **Ellis Leeder ((706) 545 1857), 8/12/2009**

This is normal training that must be conducted annually. If there are any complaints received, the Environmental Management Division will investigate by determining if the noise was detected by noise detection monitors, and then recommending noise mitigation actions to the appropriate personnel. If any assistance is needed please feel free to contact Ellis Leeder at 706.545.1857 or email ellis.leeder@us.army.mil

CWA - Training **Conditions:** **Jesse Taylor (706 545 0276), 8/12/2009**

Environmental Review: Caution within training areas and motor pools should be taken to protect all nearby waterways (including perennial, intermittent streams and wetlands); as well as ground surfaces and any other sensitive areas in the vicinity of the training areas. Potential spills/releases from this activity that may occur before and/or during the FTX include: 1. Discharge and/or improperly disposal of oil or hazardous substances into or upon land, water, or into ground water areas from storage, handling and/or transportation of hazardous materials/waste; 2. Vehicle/equipment/generators leaks; 3. Fuel loading/unloading/refueling operations; 4. Field mess facilities/equipment/operations, and/or 5. Ammunitions /explosives (as applicable, before and/or during the FTX).

General SPCC Requirements: Ensure all hazardous materials are properly storage to prevent spill/discharges, to meet safety requirements for storage, and that containers are not exposed to the weather. Have adequate spill response supplies available during exercise for any spills that may likely occur. Use drip pans under vehicles and provide secondary containment for any fueling activities and hazardous material/waste storage. Locate all refueling operations and storage of hazardous materials/waste away from waterways and sensitive areas. See attached section on prevention procedures and CHECKlist (Figure 6.9.1) to be used during training exercise to comply with SPCC plan requirements. Ensure all wastewater from field mess equipment/operations particularly those involving oil/grease are collected and dispose properly. Do not discharge any wastewater into storm drains or dispose of oil/grease waste directly into land.

General ISCP Requirements: In the event of a spill/discharge -- notify Range Control by radio or call 544-6291, and they will notify E-911 for Fire Department/HAZMAT Team assistance and/or notification of the EMD office. As appropriate, and if personnel are trained – REACT to minimize spill damages. Submit a spill report to the EPMB Spill Program Manager (use Spill Response Report attached). All spills reaching navigable water must be reported immediately. The unit is responsible for the final cleanup of any spill during this exercise. Coordination with this office is required for clearance of the site.

Natural Resources - RCW **None** **Michael Barron (706 544 7080), 8/11/2009**

Signature

John E Brown
NEPA Program Manager
Date 21 AUG 09

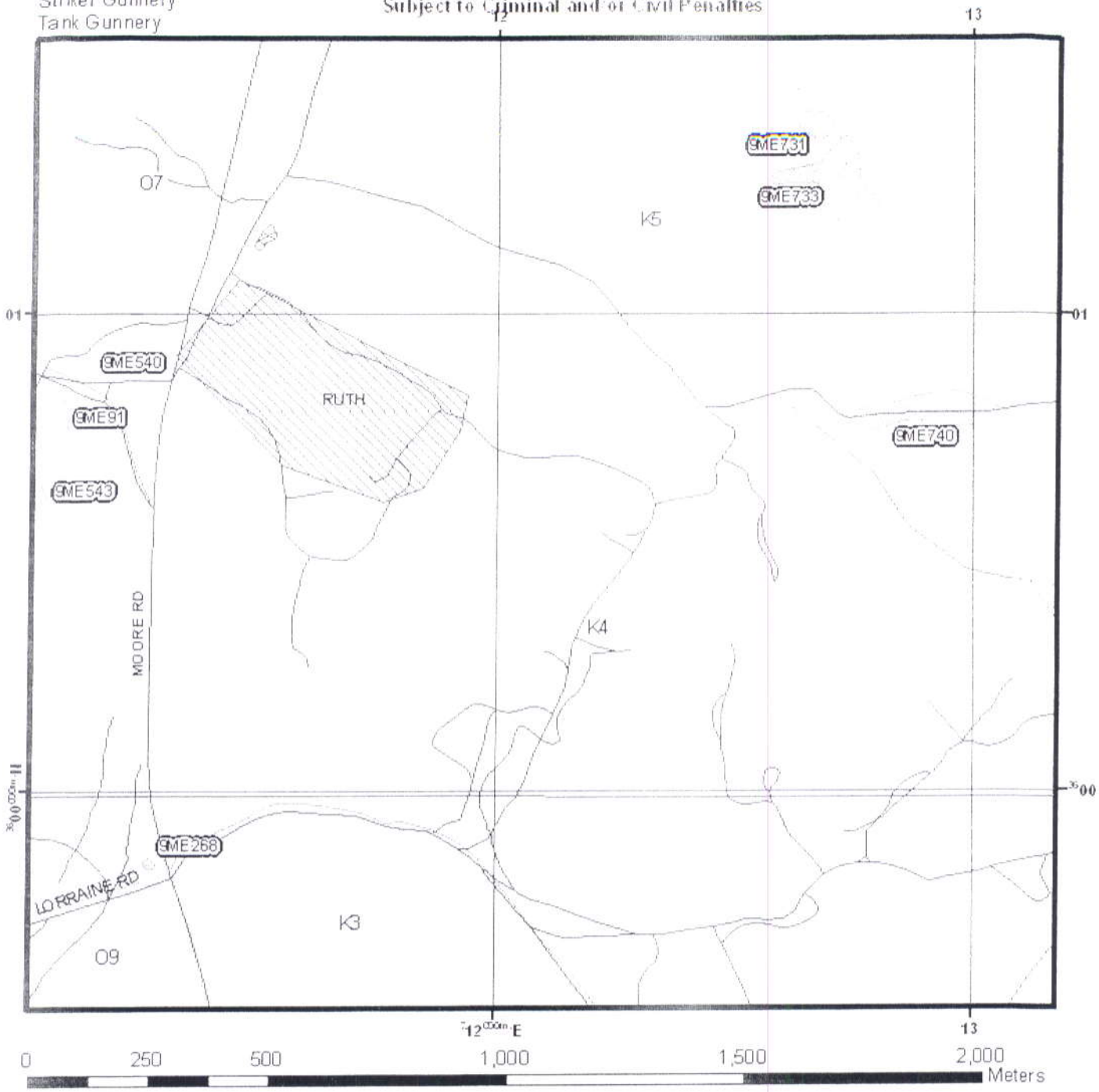
Signature

Christopher E. Hamilton, PhD
Acting EPMB Chief
Date 8-21-09

EMD# 922321-Ruth
Bradley Gunnery
Striker Gunnery
Tank Gunnery

For Official Use Only, Not for Public Release
Ground Disturbing Activity in Protected Sites
Subject to Criminal and/or Civil Penalties

NAD 83
Grid in Meters



historic_buildings

- <all other values>

STATUS

- Historic
- Historic/FRL
- Not Historic
- Not Eligible
- Not Evaluated
- Demolished
- Moved to New NIM
- Prgm Cmt
- Prgm Cmt/FRL

Historic Districts

Name

- Lawson Army Airfield
- Main Post
- Parachute Jump Tower

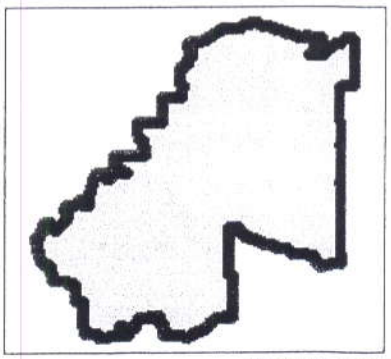
Cultural Resources

CRM

NREG_STT_D

- ELIGIBLE
- NHL
- RECOMMENDED

N

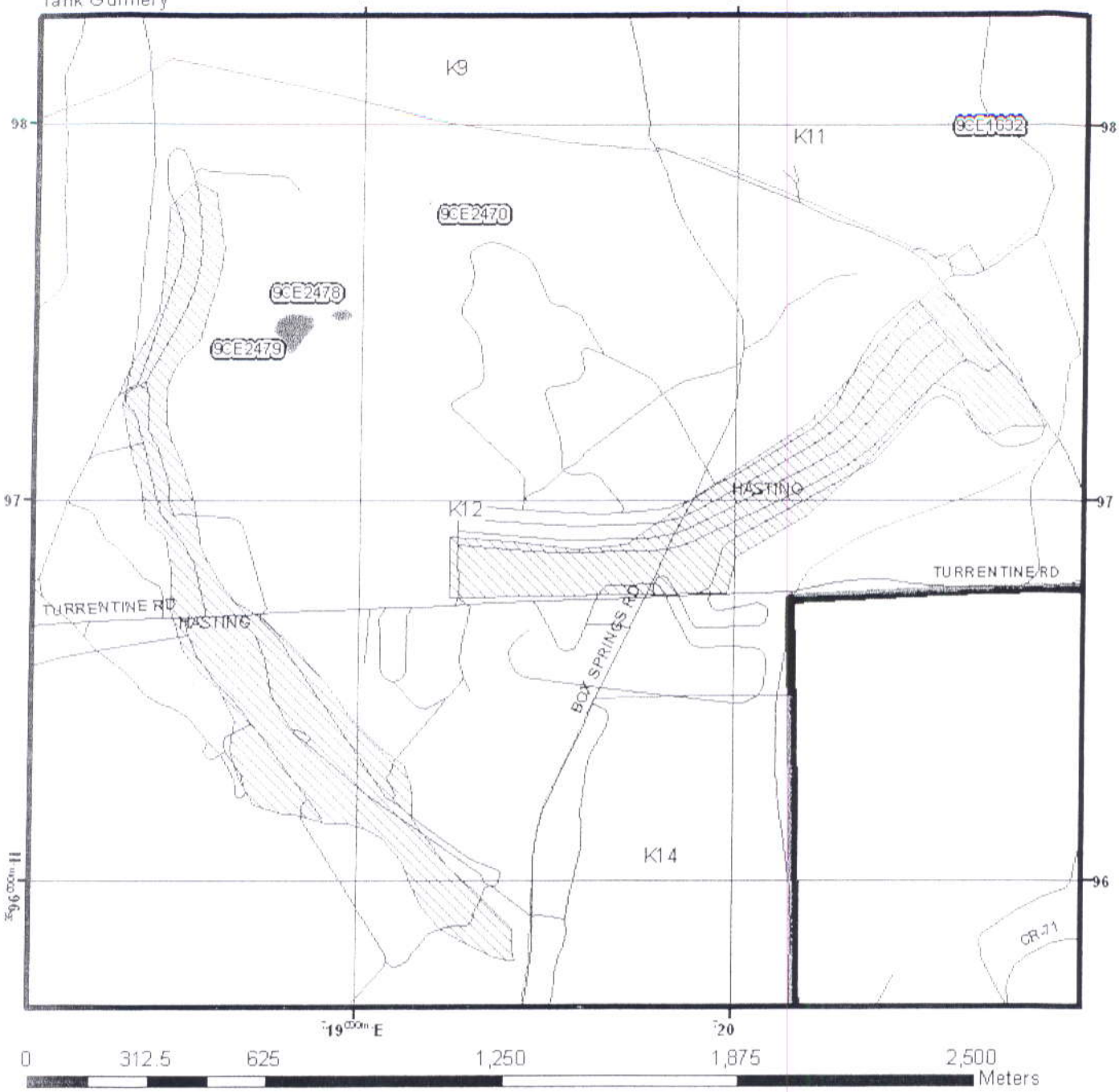


DPW-EMPB
Cultural Resources

EMD# 922321-Hastings
Bradley Gunnery
Striker Gunnery
Tank Gunnery

For Official Use Only, Not for Public Release
Ground Disturbing Activity in Protected Sites
Subject to Criminal and or Civil Penalties

NAD 83
Grid in Meters



historic_buildings

- <all other values>

STATUS

- Historic
- Historic/FRL
- Not Historic
- Not Eligible
- Not Evaluated
- Demolished
- Moved to New NIM
- Prgm Cmt
- Prgm Cmt/FRL

Historic Districts

Name

- Lawson Army Airfield
- Main Post
- Parachute Jump Tower

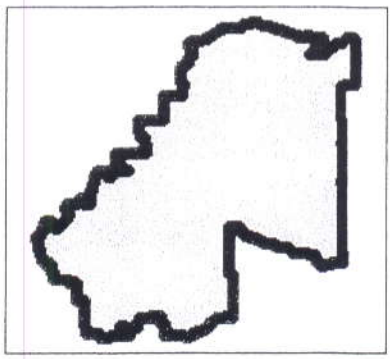
Cultural Resources

CRM

NREG_STT_D

- ELIGIBLE
- NHL
- RECOMMENDED

N

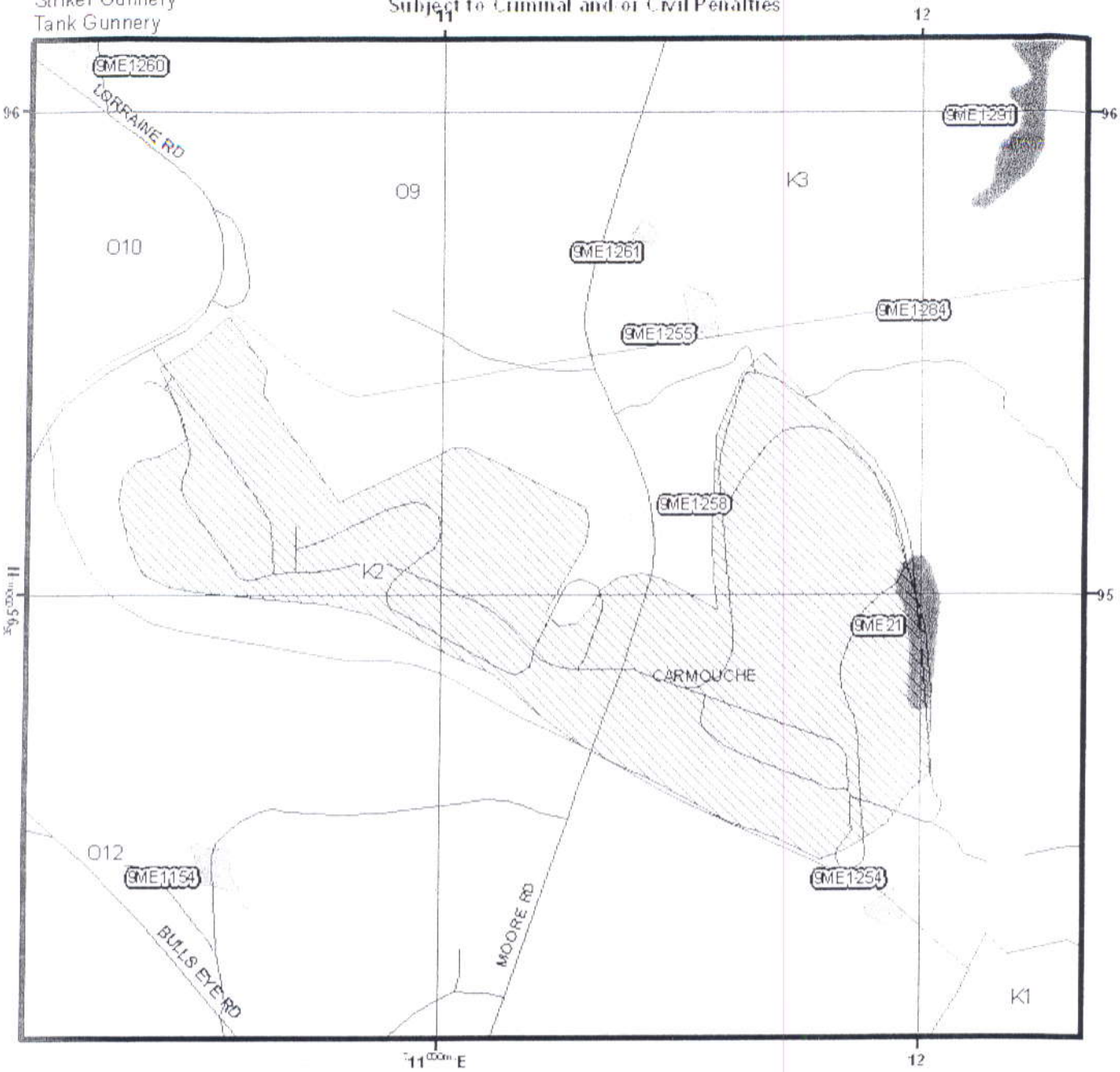


DPW-EMPB
Cultural Resources

EMD#922321-Carmouche
Bradley Gunnery
Striker Gunnery
Tank Gunnery

For Official Use Only, Not for Public Release
Ground Disturbing Activity in Protected Sites
Subject to Criminal and/or Civil Penalties

NAD 83
Grid in Meters



0 262.5 525 1,050 1,575 2,100 Meters

historic_buildings

- <all other values>

STATUS

- Historic
- Historic/FRL
- Not Historic
- Not Eligible
- Not Evaluated
- Demolished
- Moved to New NIM
- Prgm Cmt
- Prgm Cmt/FRL

Historic Districts

Name

- Lawson Army Airfield
- Main Post
- Parachute Jump Tower

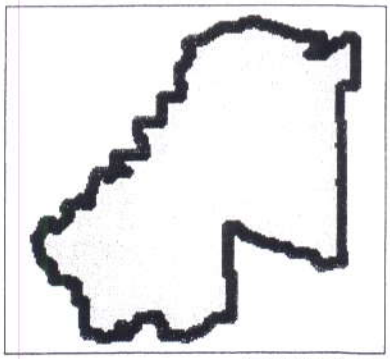
Cultural Resources

CRM

NREG_STT_D

- ELIGIBLE
- NHL
- RECOMMENDED

N



DPW-EMPB
Cultural Resources

FIELD TRAINING EXERCISES AND DEPLOYMENT
GENERAL SPCC CHECKLIST
Figure 6.9.1

Units should continually keep HM/HW areas clean and orderly by applying the principals of Monitoring and Housekeeping. Vehicle Maintenance and Fueling Points, HW Collection Points and HM Storage & Supply Areas may not be set up at your filed training area and/or deployment destination.

BEFORE you deploy, plan to pack drip pans, rags, plastic, dry sweep, absorbent, and pallets to prevent drips, spills, and leaks from seeping into the ground and contaminating soil and water resources.

Plan to build your areas to prevent HM accidents before they occur. An easy way to remember what to check, is to remember your **CHECK** list:

Containment:

___ Ensure that secondary containment is used and in good condition.

___ Empty water within secondary containment on a regular basis. If water is contaminated, dispose of it IAW the Unit Hazardous Waste Management Plan.

HM/HW locations:

___ Make sure the locations of your HM/HW are well chosen. Stay away from waterways, drainage, sensitive areas, living areas, bunkers, ammunition storage, fence lines and/or dining facilities. Place them near the areas where hazardous materials are used.

___ Put up warning signs and keep them clean and orderly.

Environmental Documentation:

___ Maintain MSDSs for each hazardous material and update Unit/Activity SOPs and Spill Response Plans regularly.

Containers:

___ Check condition of containers and keep containers of incompatible materials in proper order.

Kits:

___ Place Spill Kits, First Aid Kits, and Emergency Response Kits in the vicinity of the HM/HW areas.

___ Spill Kits should also be available on vehicles transporting hazardous material/waste.

SPILL RESPONSE RECORD

PHASE I - IMMEDIATE ACTIONS FOR EVALUTING AND REPORTING SPILLS:

IMMEDIATELY REPORT ALL SPILLS TO YOUR SUPERVISOR AND CALL 911

***BE PREPARED TO PROVIDE THE FOLLOWING INFORMATION TO 911 OPERATOR:*

During Duty Hours also Call Mr. Felix Seda, EPMB Spill Manager at 546-9879

1. DATE/TIME OF SPILL: _____

2. LOCATION: _____

3. MATERIAL SPILLED (include NSN and ingredients, if able): _____

4. HAZARD: FLAMMABLE _____ TOXIC _____ CORROSIVE _____
OXIDIZER _____ REACTIVE _____ UNKNOWN _____
OTHER (specify) _____

5. CAUSE OF SPILL: _____

6. DESCRIPTION OF SPILL QUANTITY, SIZE, AND TYPE OF AREA AFFECTED:
   a. Quantity Released and Size of Spill Area: _____
   b. Soil: _____
   c. Pavement: _____
   d. Vegetation: _____
   e. Storm or Sewer Drain: _____
   f. Name of Body of Water (River, Creek, Pond, Lake, Drainage Ditch): _____

7. HAS RELEASE BEEN STOPPED? _____

8. HAS RELEASE BEEN CONTAINED? _____

9. DID RELEASE CROSS INSTALLATION BOUNDARIES? (IF YES, DESCRIBE LOCATION) _____

10. TYPE AND EXTENT OF INJURIES, IF ANY: _____

**Provide a copy of this form to DPW EPMB Spill Program Manager or FAX to 545-4209

PHASE II - POST-SPILL RESPONSE AND CLEAN UP ACTIONS:

11. DESCRIBE CLEAN-UP METHOD AND CONTAINMENT PROCEDURES: _____

12. NAME OF CONTRACTOR INVOLVED IN CLEAN-UP: _____

13. ESTIMATED AMOUNT OF SPILL RESIDUE AND CONTAMINATED MATERIAL REMOVED: _____

FORT BENNING ENVIRONMENTAL REGULATIONS SUMMARY

ENSITIVE AREAS: Endangered species habitat or cultural resources. They are ıarked with steel pickets and white signs. Digging and vehicular traffic is prohibited.

OL/HAZMAT SPILLS: Report all spills through Range Control at 545-3474. If ssistance is required from the Fire Department/HAZMAT Team, Range Control will ıake notifications through E-911. For POL spills greater than 20 gallons on land or ny quantity on surface water, the Environmental Management Division (EMD) must e immediately notified through E-911 or 545-9879/4203. For POL spills less than 20 allons on land, a Spill Report Form must be submitted within 24 hours to the EMD Call 545-9879 and/or FAX 545-4209). After hours call the spill pager at 317-6584.

Init should begin spill control measurements (REACT) within their capabilities. If a pill occurs within a sensitive area; stop the source, contain, and absorb the spill ıaterial - do not dig until EMD personnel arrive at the site.

ie prepared to report:
- Time, grid location, and cause of spill.
- Type of product and amount spilled.
- Distance from flowing water.
- Action taken to combat spill.

ıee USAIC 210-4, Range and Terrain Regulations, for more detail.

ENVIRONMENTAL INCIDENT REPORT FORM

Unit: _____

OIC/NCOIC: _____

Training Area: _____

Grid Coordinates: _____

Date and Name: _____

Signature _____

FB (DPW) Form 31, 1 May 2004 PREVIOUS EDITION OBSOLETE

FORT BENNING ENVIRONMENTAL REGULATIONS SUMMARY

RED-COCKADED WOODPECKER (RCW): Cavity trees are identified by two white bands. Cluster boundaries extend 200 feet around each cavity tree, and are delineated by diamond-shaped signs. **WITHIN a cluster:**

- Personnel MAY NOT stay for more than 2 hours; NO BIVOUACS.
- The only digging allowed is BY HAND for hasty defense light infantry fighting positions. ALL other digging is prohibited.
- Within one half mile of a cluster, NO MECHANICAL DIGGING may be done within 20 feet of any mature pine tree (8 inch diameter or greater).
- Off-road vehicles MAY NOT come within 50' of any cavity tree.
- Use only .50cal and 7.62mm (or smaller) blank ammo; NO LIVE FIRE.
- CS gas, HC smoke, and noise generators MAY NOT be used.
- Incendiary devices (including trip flares) MAY NOT be used.
- Only hardwood may be cut for camouflage; CUT NO PINE.

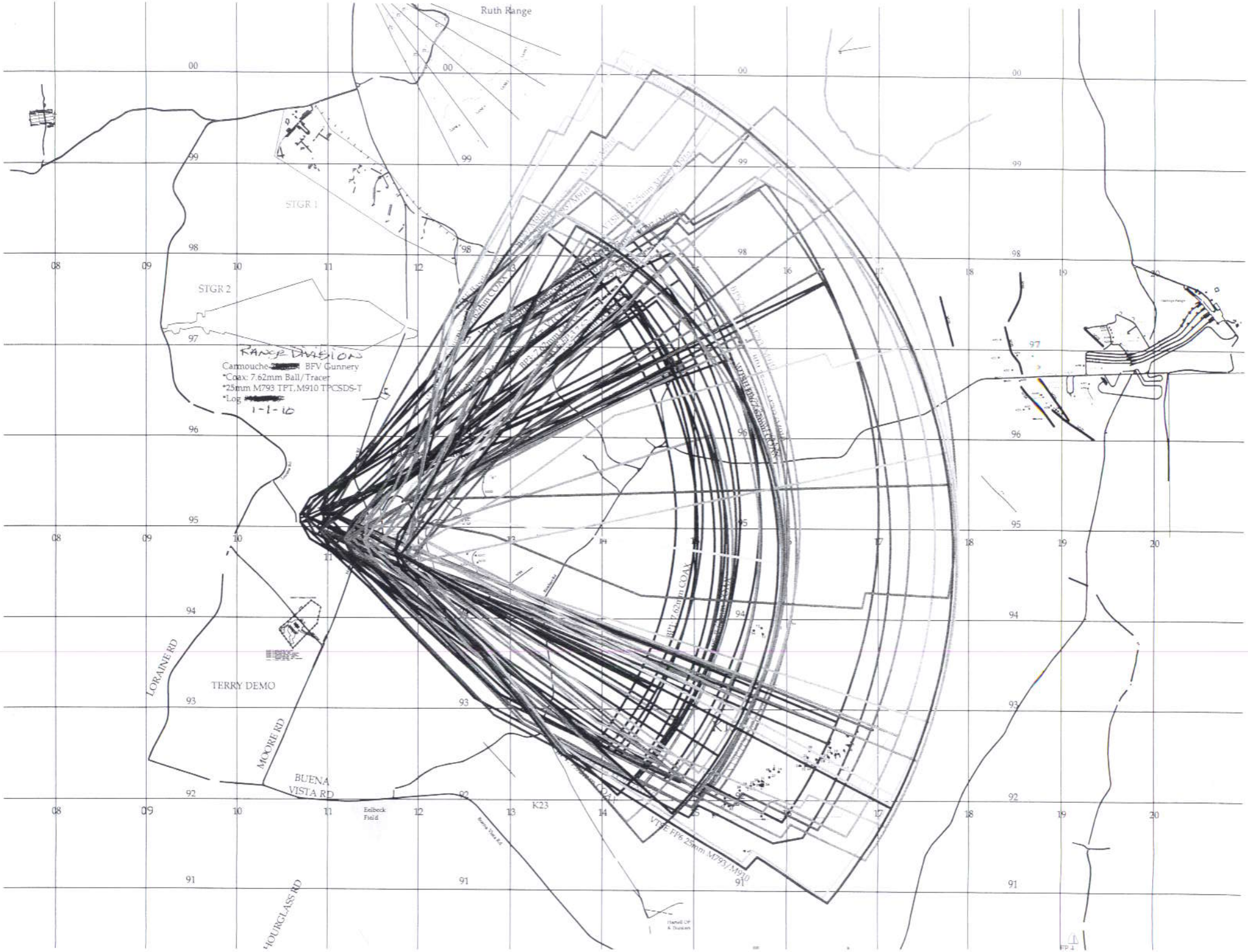
GOPHER TORTOISE: Inhabits burrows in high sandy areas. Some burrow: are marked by white 1" PVC pipe topped with reflective tape. Digging an vehicular traffic must be kept more than 50 feet away from burrows.

———————————— CUT HERE ————————————

ENVIRONMENTAL INCIDENT REPORT FORM

For your protection, company commanders are asked to document any environmer incidents by completing this card and forwarding it to the Chief, Environmer Management Division, Building 6, Room 307, or call 545-2180, within 24 hours incident. Check off incident and take corrective actions.

____ bivouacking in RCW cluster (Relocate bivouac site.)
____ off-road driving / parking within 50' of RCW cavity tree (Relocate.)
____ digging in RCW cluster [except individual hasty fighting positions] (Refill holes
____ scarring or felling of trees in RCW cluster (Contact EMD Conservation Branc through Range Control.)
____ digging or driving in Sensitive Area (Relocate, DO NOT refill holes.)
____ wildfire started (Begin suppression and contact Range Control.)
____ POL spill greater than 20 gallons on land or any quantity on water (Immediately contact Range Control and begin spill control – REACT.)
____ POL spill less than 20 gallons on land (Begin spill control - REACT; contact Range Control and submit a Spill Report Form to EMD within 24 hours.)


Ruth Range
STGR 1
STGR 2
RANGE DIVISION
Carmouche-[redacted] BFV Gunnery
*Coax: 7.62mm Ball/Tracer
*25mm M793 TPT, M910 TPCSDS-T
*Log [redacted]
1-1-10
TERRY DEMO
LORAINE RD
MOORE RD
BUENA VISTA RD
HOURGLASS RD
Eelbeck Field
K23
BPI 7.62mm COAX
VTSE FP6 25mm M793/M910