

FIRING/NONFIRING DATA

For use of this form see USAIC Regulation 350-19; the proponent agency is DPTMS

TO: Chief, Range Division, Directorate of Plans, Training, Mobilization and Security Fort Benning, GA 31905	Date: 23 Aug 2013 Range: Brooks Range Title: ABRAMS MASTER GUNNER COURSE Problem No:
THRU: 316 CAV BDE FT Benning, GA. 31905	FROM: 1st BN, 29th Infantry FT Benning, GA. 31905

Log 9-1-13

SECTION I, TYPE OF TRAINING

a. Live Fire
 b. Non-live Fire
 CP/Controller Coordinates:

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
	NONE		

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
See Weapon/Ammo Disclosure	M256 CANNON, 120mm	M831 TP-T; M865 TPCSDS-T; M1002 TP-T ; M1028 Cannister		
	AIMTEST 120-M256/Stryker TESS 105mm-M68 TM9-6920-921-10	CAL .50 SLAP-T M962 CAL .50 M20 APIT		
	M68 CANNON, 105mm	M490A1 TP-T; M1040 Cannister; M467A1-TP-T		

SECTION IV, LIVE FIRE EXERCISES Attach the following:

SECTION V, NON-LIVE FIRE TRAINING

<input type="checkbox"/> Scenario of training to be conducted: <input type="checkbox"/> Sketch of area: <input type="checkbox"/> Risk Assessment: <input type="checkbox"/> Attach FB Form 350-19-2-E-R if Mortar or artillery is being fired:	Training area(s) to be occupied: <input type="checkbox"/> Scenario of training to be conducted: <input type="checkbox"/> Sketch of area(s) to be occupied: <input type="checkbox"/> Risk Assessment:
Name/rank of requesting officer: Richard J. Surowiec/LTC, IN/Commanding	Name/rank of Major Unit S3/Commander: Michael D. Bajema/ MAJ, AR/ BDE S-3

SECTION VI, FOR RANGE DIVISION USE

DATE: 31 JAN 14

TO: 1st BN, 29th Infantry FT Benning, GA. 31905	FROM: Range Division, Directorate of Plans, Training, Mobilization and Security Fort Benning, GA 31905
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a. Roadblocks to be closed: _____
 b. Road(s) to be closed/road barrier locations: _____
 c. Remarks: _____
 d. This approval expires: **Indef**

K: 5, 12, 14, 15, 16A, 16B, 17, 41, 45, 47. O: 9, 18

Chief, Range Division
Directorate of Plans, Training, Mobilization and Security

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ATSH-INA-M

DEPARTMENT OF THE ARMY
1ST BATTALION, 29TH INFANTRY REGIMENT
BLDG 5142, 13TH ARMORED REGIMENT ROAD
FORT BENNING, GA 31905

31 January 2014

MEMORANDUM FOR: CHIEF, RANGE OPERATIONS, FORT BENNING, GEORGIA, 31905

SUBJECT: Brooks Range, Abrams Master Gunner Range Training

1. REFERENCES:

- a. FM 3-20.21, Heavy Brigade Combat Team Gunnery Manual, 3 September 2009
- b. FM 3-20.13, Mobile Gun System (MGS) Gunnery
- c. AR 385-63, Range Safety, 30 January 2012
- d. DA PAM 385-63, Range Safety, 30 January 3012
- e. MCOE Regulation 350-19, Installation and Terrain Regulation, March 2013
- f. Composite Risk Management, 12 December 2013

2. PURPOSE: IAW guidelines identified in DA PAM 385-63, Range Safety, this memorandum explains the scheme of maneuver, day and night at Brooks Range during B CO 1-29 IN Gunnery Training

3. SCHEME OF MANEUVER:

- a. Day 1 (Modified GT V (M1) / Modified GT VI (MGS) (Sub-Caliber)). This day includes boresighting the tanks, installation of the 120mm Advanced Inbore Marksmanship Training Enhancement System for Tanks (AIMTEST) into one tank and 1 MGS and conduct of a modified GT V (tank) and modified GT VI (MGS) utilizing .50 Caliber SLAP-T ammunition fired from a single stationary tank or MGS with the AIMTEST.

- (1) **Phase 1 (Range set up):** The day will begin with non tactical movement of the tanks from the HETT drop point to the range. Tanks will be ground guided front and rear and will be staged at the front center of the baseline with a maximum of 5 tanks and 2 MGS on the baseline at one time. Once set all gun tubes will be elevated and oriented down range, with proper flags displayed.
- (2) **Phase 2 (Safety brief day 1):** Upon arrival of students all personnel on the range will receive a safety brief from the student RSO. Immediately following the safety brief the student Master Gunner on the range will give a Conduct of the Range brief. A cadre member will be present to ensure the safety brief is complete IAW MCoE reg 350-19.

Note: When moving to the baseline or from the vehicle line to the ammunition location two ground guides will be used (front and rear ground guides).

- (3) **Phase 3 (Boresighting tank/MGS)** Student crews will conduct boresighting procedures IAW FM 3-20.21 Appendix A for tanks and IAW FM 3-20.13 for MGS. All tanks and MGS' are equipped with eye safe lasers and boresighting should take no more than one hour.
- (4) **Phase 4 (AIMTEST tank):** Students will install the AIMTEST device into 1 tank, under the supervision of the Training Devices instructor. Once installation is complete the tank will be uploaded with enough .50 Cal SLAP-T ammunition to zero the AIMTEST and conduct the modified GT V for approximately 6 crews. Ammunition will be handled and stored on tanks IAW -10 procedures. One 3 man student crew will remain on the tank and the baseline will be cleared of all additional personnel. The crew will zero the AIMTEST from the stationary tank on the baseline, at 1200m and taking all commands from the tower.

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Note: All crews will conduct fire evacuation and roll over drill prior to beginning AIMTEST shoot. The crew's performance and safety will be monitored thru FM and visually by all cadres present for training. This same procedure will be followed during the MGS AIMTEST.

- (5) **Phase 5 (Modified GT V tank):** Once the AIMTEST is zeroed, the same crew will conduct a modified GT V, utilizing engagement scenarios developed by the class during the Plan & Conduct Tank Gunnery Ranges portion of their training. The students will fire from the baseline and tailor the engagements IAW FM 3-20.21 and the Range Control approved Weapons/Ammo and approved target list.

Note: All crews will fire from the same position and the tank will not move during this phase of training (i.e. if the class develops target scenarios to be fired from center of the baseline, all engagements and all crews will fire from the center of the baseline). All crews will conduct fire evacuation and roll over drill prior to beginning AIMTEST shoot. The crew's performance and safety will be monitored thru FM and visually by all cadres present for training. This same procedure will be followed during the MGS AIMTEST

After each crew has completed their engagements the RSO will clear the vehicle weapons systems and the next student crew will man the tank. The crews will continue to rotate through until complete. At no time during this phase will more than one vehicle be firing at a time. During all live fire operations the proper flags will be displayed on the tank, gun tubes will remain oriented within the range fans, personnel will remain in the proper uniform and the firing vehicle will remain stationary throughout the entire engagement and take all commands and prompts from the tower. Master Gunner Cadre in the tower will visually ensure that the firing vehicles weapon systems remain oriented downrange and within the L/R limits of fire at all times.

- (6) **Phase 6 (AIMTEST MGS):** MGS students will install the 105mm AIMTEST device into 1 MGS, under the supervision of the Training Devices instructor. Once installation is complete the MGS will be uploaded with enough .50 Cal SLAP-T ammunition to zero the AIMTEST and conduct a modified GT VI for approximately 4 crews. Ammunition will be handled and stored on tanks IAW -10 procedures. One 2 man student crew will remain on the MGS and the baseline will be cleared of all additional personnel. The crew will zero the AIMTEST from the stationary MGS on the baseline, utilizing target located at 1200m and taking all commands from the tower.
- (7) **Phase 7 (Modified GT VI MGS):** Once the 105mm AIMTEST is zeroed, the same crew will conduct a modified GT VI, utilizing engagement scenarios developed by the class during the Plan & Conduct MGS Gunnery Ranges portion of their training. The students will fire from the baseline and tailor the engagements IAW FM 3-20.13 and the Range Control approved Weapons/Ammo and approved target list.

Note: All crews will fire from the same position and the MGS will not move during this phase of training. All crews will conduct fire evacuation and roll over drill prior to beginning AIMTEST shoot. The crew's performance and safety will be monitored thru FM and visually by all cadres present for training. This same procedure will be followed during the MGS AIMTEST

After each crew has completed their engagements the RSO will clear the vehicle weapons systems and the next student crew will man the MGS. The crews will continue to rotate through until complete. At no time during this phase will more than one vehicle be firing at a time. During all live fire operations the proper flags will be displayed on the MGS, gun tubes will remain oriented within the range fans, personnel will remain in the proper uniform and the firing vehicle will remain stationary throughout the entire engagement and take all commands and prompts from the tower. Master Gunner Cadre in the tower will visually ensure that the firing vehicles weapon systems remain oriented downrange and within the L/R limits of fire at all times.

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Note: In the event the AIMTEST is unable to function and crews cannot conduct a modified GT VI utilizing sub caliber ammunition, Phase 13 (see day 2) will be conducted during this phase.

- (8) **Phase 8 (Refuel & Refit day 1):** Upon completion of all training vehicles will be refueled at the baseline (Tailgate) and will remain stationary for the evening. Non essential personnel will return to the rear and the range will go into guard status with the guard force stationing personnel at the ammo pad and baseline throughout the night. There will be no training conducted or movement of vehicles during night time.
- b. **Day 2 (Screening and Advanced Conduct of Fire (ACOF) gunnery M1/MGS).** This day consists of boresighting, screening tanks and MGS and an ACOF shoot to demonstrate to students the capabilities and functions of the fire control system. Tanks and MGS will be pre-staged at the baseline from the previous day and all gun tubes will be elevated and oriented downrange with the proper flags displayed.
 - (9) **Phase 9 (Safety brief day 2):** Upon arrival of students all personnel on the range will receive a safety brief from the student RSO. Immediately following the safety brief the student Master Gunner on the range will give a Conduct of the Range brief. A cadre member will be present to ensure the safety brief is complete IAW MCoE reg 350-19.
 - (10) **Phase 10 (Boresighting day 2):** Student crews will conduct boresighting procedures IAW FM 3-20.21 Appendix A for tanks and IAW FM 3-20.13 for MGS. On this day 1 tank will be boresighted using the alternate string method. All tanks and MGS' are equipped with eye safe lasers and boresighting should take no more than one hour.
 - (11) **Phase 11 (Tank Screening):** Once boresighting is complete tanks will be uploaded with 4 rounds Sabot (M865) and 4 HEAT (M831) per 3 man crew. Ammunition will be handled and stored on tanks IAW -10 procedures. One 3 man student crew will remain on the first tank and the baseline will be cleared of all additional personnel. The first crew will conduct a Live Fire Accuracy Screening Test (LFAST) from the baseline utilizing screening panels located at 1500m IAW the Range Control approved Weapons/Ammo and approved target list. Once the first crew is complete the RSO will clear the vehicles weapon systems and the next crew will move to their vehicle and prepare to LFAST. The crews will continue to rotate through until complete. The last to LFAST will be the tank that boresighted using the alternate string method. This tank will conduct a Marine Corps standard 500m zero firing from the center of the baseline to panels located at 500m IAW the Range Control approved Weapons/Ammo and approved target list. **At no time during this phase will more than one vehicle be firing at a time.** During all live fire operations the proper flags will be displayed on the tank, gun tubes will remain oriented within the range fans, personnel will remain in the proper uniform and the firing vehicle will remain stationary throughout the entire engagement and take all commands and prompts from the tower. **At all times there will be a minimum of 70 meters from the gun target line between vehicles for the discarding sabot hazard area. At no time will personnel be on the firing line while the vehicle is firing unless in an armored vehicle. If students are in and armored vehicle it must be buttoned up (see SABOT Pedal Hazard area sketch).** Master Gunner Cadre in the tower will visually ensure that the firing vehicles weapon systems remain oriented downrange and within the L/R limits of fire at all times.
 - (12) **Phase 12 (ACOF Shoot):** During this phase Tank Master Gunner students will be located at a central observation point away from the baseline with the ACOF instructor who will direct a crew of Master Gunner instructors, in a stationary tank located at the center of the baseline, to conduct a series of firings, while the students predict and observe the impact points of the rounds. The firing tank will utilize targets IAW the Range Control approved Weapons/Ammo and approved target list.

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Phase 13 (MGS 500m zero and Familiarization Fire): During this phase the MGS' will be ground guided from the baseline to the ammunition point and uploaded with enough Heat (M467A1) to zero 3 crews and conduct a 6 round familiarization fire per student. The MGS' will then be ground guided back to the **right front corner** of the baseline where they will remain stationary for the remainder of the exercise. Under the direction of the tower both MGS' will conduct a 500m zero utilizing targets IAW the Range Control approved Weapons/Ammo and approved target list. Once both vehicles are complete with zeroing, each student will have the opportunity to fire 6 rounds Heat for familiarization. After each iteration the RSO will clear the firing vehicles weapons systems and the crews will rotate out. At no time during this phase will more than one vehicle be firing at a time. During all live fire operations the proper flags will be displayed on the tank, gun tubes will remain oriented within the range fans, personnel will remain in the proper uniform and the firing vehicle will remain stationary throughout the entire engagement and take all commands and prompts from the tower. Master Gunner Cadre in the tower will visually ensure that the firing vehicles weapon systems remain oriented downrange and within the L/R limits of fire at all times.

(13) **Phase 14 (Canister shoot):** During this phase 2 ea. 120mm canister rounds (M1028) and 2 ea. 105mm canister rounds (M1040) will be fired by a crew of cadre, from a stationary tank and stationary MGS located at the center of the baseline. Both platforms will be engaging troop target groups utilizing target groups authorized in the Range Control approved Weapons/Ammo and approved target list. At no time during this phase will more than one vehicle be firing at a time. During all live fire operations the proper flags will be displayed on the tank, gun tubes will remain oriented within the range fans, personnel will remain in the proper uniform and the firing vehicle will remain stationary throughout the entire engagement and take all commands and prompts from the tower. Master Gunner Cadre in the tower will visually ensure that the firing vehicles weapon systems remain oriented downrange and within the L/R limits of fire at all times.

(14) **Phase 15 (Refuel, re-fit, pre-staging and pre-clearance):** Upon completion of live fire operations all weapons and tanks will be cleared by the RSO and Master Gunner. Tanks will be refueled at the baseline (Tailgate) and then ground guided to a staging area, near the ammo pad, for HETT operations the following day. Personnel on the range will begin pre-range clearance procedures. Once all vehicles are staged a guard force will be posted for the remainder of the evening and the range will go into guard status.

- c. Day 3 (HETT & Range Clearance). OIC and range support unit OIC will oversee HETT operations to ensure all vehicles are cleared from the range; simultaneously range clearing procedures will be finalized so the unit can clear the range once all vehicles are removed.

4. Safety:

- a. **LASER'S:** Class III A lasers are not eye safe on dual low mode within 25 meters. PEM-A1 is not a tactical laser and must be used within 25 meters. Laser Warning Signs will be placed prior to opening the range. Range briefing will include lasers using lasers and NVD's.
- b. **Communication:** Unit will maintain continuous contact with Range Control at all times. If communications are lost the unit will go into a self induced check fires until communications are restored.
- c. **Incident:** When an incident occurs on the range, regardless of injury or not, the OIC/RSO will immediately call a cease fire and report it to Range Control and the unit using unit's higher headquarters. OIC/RSO will take action as directed by Range Control. If the accident results in an injury, the OIC/RSO will use the appropriate procedures outlined in the medical paragraph. The following information will be furnished by the OIC/RSO to Range Control:

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- (1) Designation of unit
 - (2) Range and location
 - (3) Type of weapon involved
 - (4) Type of ammunition involved
 - (5) Brief summary of incident
 - (6) Personnel injuries and extent
 - (7) Full name, SSN, rank and unit of injured personnel
 - (8) Extent of property damage
 - (9) Intentions regarding an AR 15-6 investigation
- d. **Medical:** In the event of an accident, injury or illness, the OIC/RSO will immediately call a cease fire then call 911 using the standard 9 Line MEDEVAC to determine what type of evacuation is the most appropriate for the injury (loss of life, limb or eye sight). MEDEVAC will be IAW MCoE Regulation 350-19 and MCOE 40-2. Landing zone for MEDEVAC aircraft will be established prior to use and will be marked appropriately. Range Control will be notified in this event. The cease fire will remain in effect until cleared through Range Control.
- e. **Ammunition:** There will be no de-linking or re-linking of any ammunition. Any ammunition that has been de-linked or re-linked is considered nonstandard and is prohibited from the
- f. **Weapons/Ammunition malfunction reports:** When a malfunction is experienced the OIC or RSO will suspend all firing and immediately notify Range Control. The weapon and all components and ammunition involved will remain in place. The cease fire will remain in effect until cleared by Range Control. An investigation is required and will be conducted by the ammunition and weapons inspection personnel and DOL.
5. POC for this memorandum is the Abrams Master Gunner Gunnery Team Chief travis.l.tait.mil@mail.mil; 706-626-7909.


JOHN W. SWALLEY
SFC, USA
Team Chief

Brooks Range 3rd CAV BDE, 3rd SQD 16th CAV Abrams MGC (Log #9-1-13) Weapons/Ammo & Target List

Firing Positions	Weapons	Ammunition	Left Limit Mils, Grid Az	Right Limit Mils, Grid Az
Right Front Corner Baseline Screening: 1055 9929	Aimtest Inbore (STRYKER MGS) STRYKER MGS M68	M962 SLAPT, .50 cal APIT 105mm M490A1 TPT, M467A1 TPT	2005 2250	2095 2390
Baseline Gunnery: 1064 9939 to 1055 9929	M1 Tank M256 STRYKER MGS M68 STRYKER MGS M68 Aimtest Inbore (M1 & STRYKER MGS)	120mm M831/M865 105mm M490A1 TPT 105mm M467A1 TPT (See Note Below) M962 SLAPT, .50 cal APIT	1965 1965 2250 2100	2470 2470 2470 2470
Baseline: 1064 9939 to 1055 9929 See Note Below	M1 Tank M256 STRYKER MGS M68	120mm Canister M1028 105mm Canister M 1040	2190 2190	2640 2640

Firing Positions	Weapons	Ammunition	Targets
Right Front Corner Baseline Screening: 1055 9929	Aimtest Inbore (STRYKER MGS) STRYKER MGS M68	M962 SLAPT, .50 cal APIT 105mm M490A1 TPT, M467A1 TPT	Panels IVO 211 (1200m) Panels IVO 204 (500m)
BP 1: 1073 9943 BP 2: 1068 9938	M1 Tank M256 STRYKER MGS M68 STRYKER MGS M68 Aimtest Inbore (M1 & STRYKER MGS)	120mm M831/M865 105mm M490A1 TPT 105mm M467A1 TPT M962 SLAPT, .50 cal APIT	206 - 208, 210 - 223, M1, M2. 206 - 208, 210 - 223, M1, M2. 206 , 208, 212, 214 - 221, 223, Right 1/2 M1 & M2. 206 - 208, 210 - 223, M1, M2.
Baseline Canister: 1064 9939 to 1055 9929 See Note Below	M1 Tank M256 STRYKER MGS M68	120mm Canister M1028 105mm Canister M 1040	201 - 205, Grp: 1, 2, 4, 5. 201 - 205, Grp: 1, 2, 4, 5.

NOTE! **Baseline Gunnery:** Only one weapon system will fire at a time. The MGS will only fire from the right front corner of Baseline. The 120mm will screen from the baseline at targets/ panels 222 & 215 at 1500m. **Baseline Canister:** Primary Direction of Fire (PDF) for canister ammunition is 2370 mils (133 deg's) with 180 mils (10 deg's) left & right of the PDF. Only the targets from the list above that are to the immediate front of the weapon position on the baseline will be engaged with canister ammunition. All directions of fire are grid azimuth.

Lorraine Rd

Mortar Pool

Ammo Point

Tower
Bleachers

Baseline

BP1

BP2

FP1

FP2

FP3

FP4

FP5

FP6

FP7

FP8

FP9

FP10

FP11

FP12

FP13

FP14

FP15

FP16

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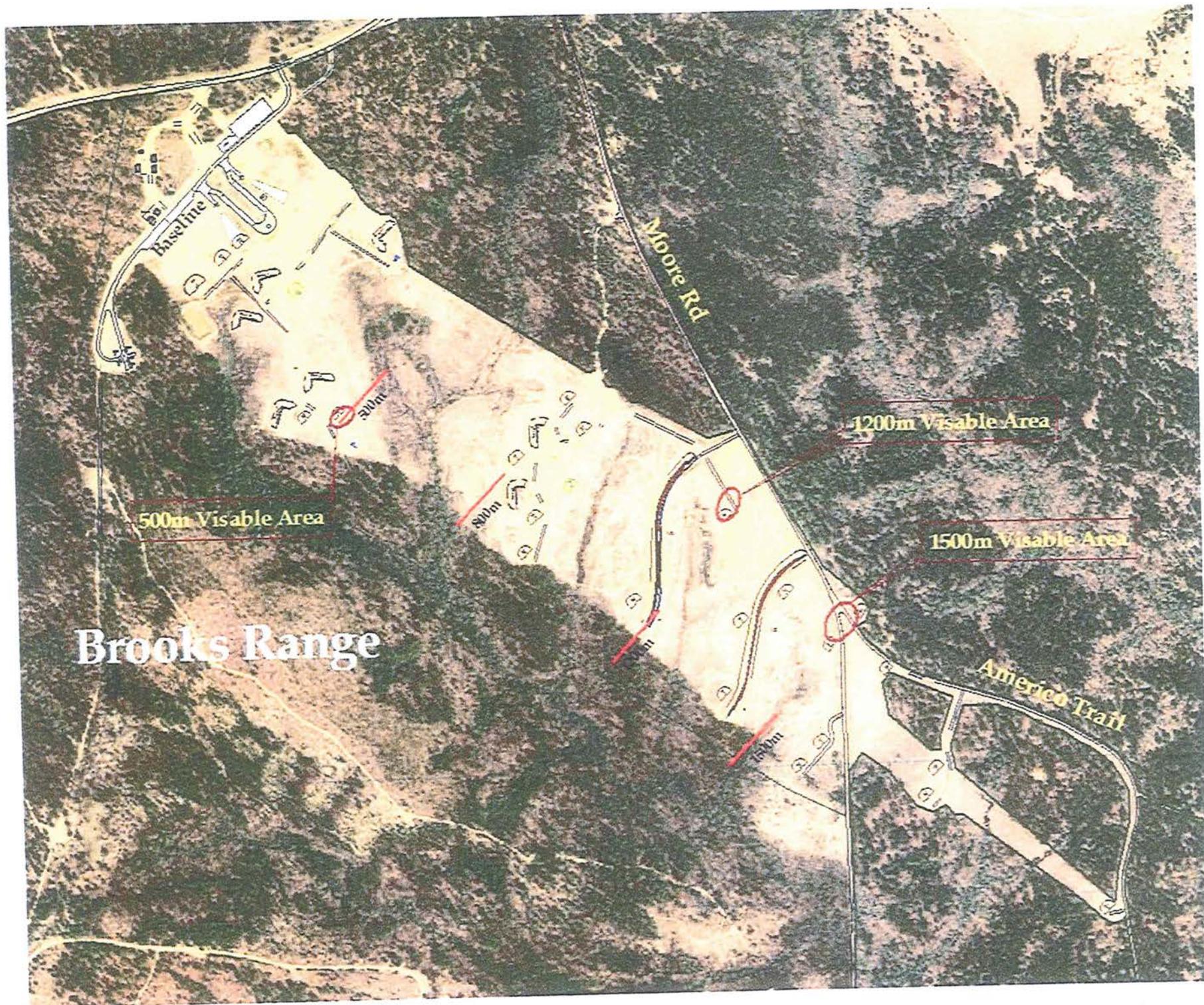
FP312

Brooks Range

Group 1



Brooks Range



500m Visible Area

800m

1200m Visible Area

1500m Visible Area

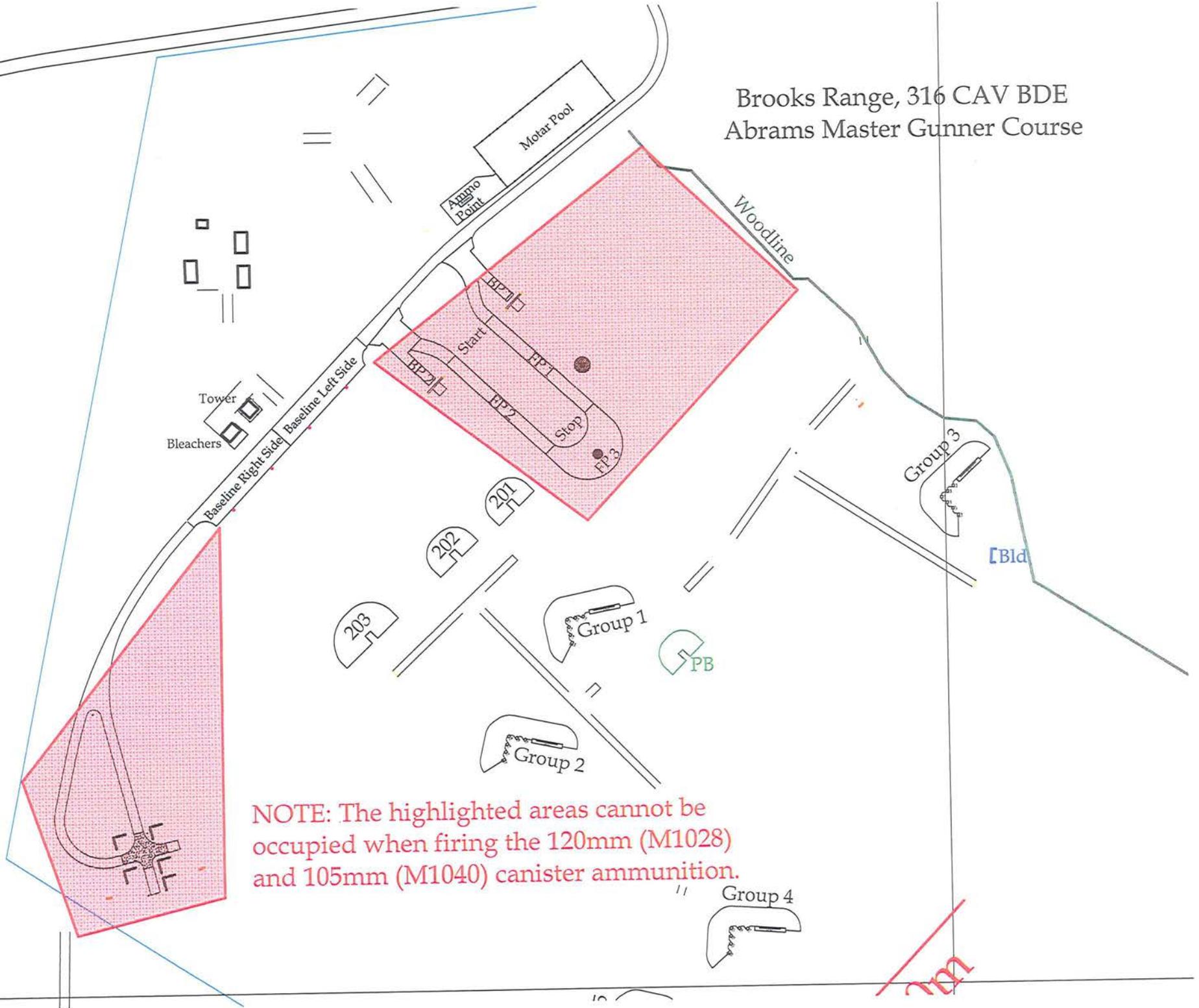
Brooks Range

Baseline

Moore Rd

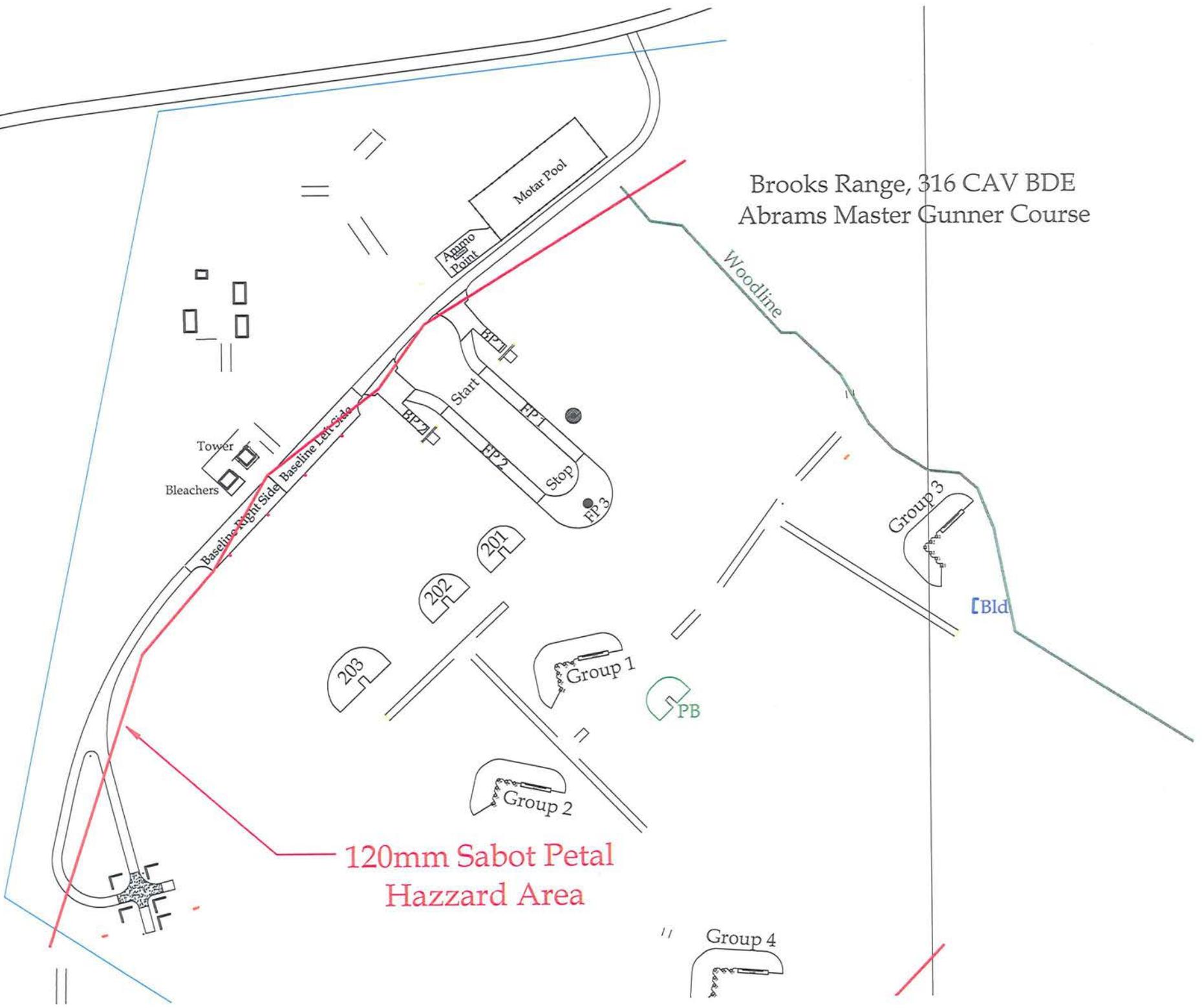
Americo Trail

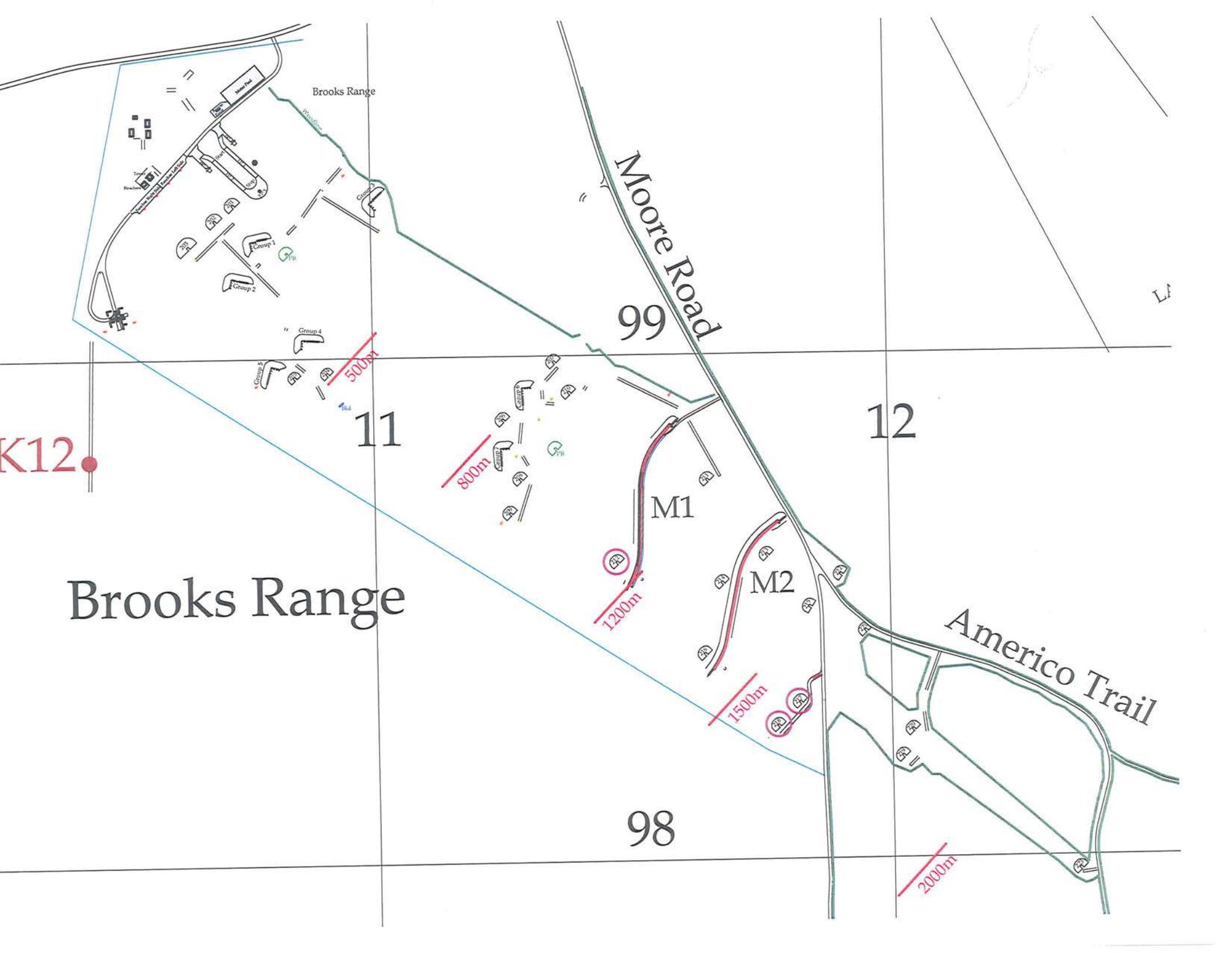
Brooks Range, 316 CAV BDE
Abrams Master Gunner Course



NOTE: The highlighted areas cannot be occupied when firing the 120mm (M1028) and 105mm (M1040) canister ammunition.

Brooks Range, 316 CAV BDE
Abrams Master Gunner Course





Brooks Range

Moore Road
99

12

11

K12

Brooks Range

M1

M2

Americo Trail

98

Group 5
Group 4
Group 3
Group 2
Group 1

800m

1200m

1500m

2000m

Brooks Range 316 CAV AMG Course (Log #9-1-13) Roadblocks 01 Oct 2013

#	GRID	LOCATION	TYPE	#	GRID	LOCATION	TYPE
K-2	GA 163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate	K-26	GA 201 949	Across Boundry Road 1800m S of its intersection with Turrentine Road	Gate
K-3	GA 153 894	Across entrance road leading to Concord OP 250m N. of its intersection with Buena Vista Rd.	Gate	K-27	GA 207 968	Across Turrentine Rd 600m E. of its intersection with Boundary Rd.	Gate
				K-28	GA 191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Gate
K-5	GA 117 920	Across Shamanski Rd 25m N. of its intersection with Buena Vista Rd.	Gate	K-29	GA 189 888	Across un-named trail on left side of Cactus Range 300m W of Cactus Road	Gate
K-7	GA 109 937	Across Moore Rd 15m N. of its intersection with Bullseye Rd.	Cable	K-30	GA 190 890	Across un-named trail on right side of Cactus Range 250m W of Cactus Road.	Gate
K-8	GA 099 947	Across Bulls Eye Rd 50m E of its intersection with Lorraine Road.	Gate	K-32	GA 192 915	Across Shamanski Road 35m W of its intersection with Cactus Rd.	Gate
K-9	GA 103 921	Across Buena Vista Rd 40m E of the intersection with Moore Rd (Road Guard Location)	Gate	K-36	GA 163 883	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd. (Road guard location).	Gate
K-9A	GA 106 919	Across tank trail 200m W of the Upatoi Creek ford site.	Gate	K-36A	GA 163 882	Across Tank Trail 50m W. of its intersection with Box Springs Rd.	Gate
K-10	GA 118 920	Across Buena Vista Rd at K-5 road block.	Gate	K-38	GA 201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Gate
K-11	GA 105 927	Across Moore Rd 20m N. of its intersection with Audernarde Trail. Entrance to Terry Demo Rng. (Road guard location)	Gate	K-39	GA 202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Gate
K-12	GA 104 988	Across Old Lorraine Road 600m S of the tower on Brooks Range.	Gate	K-40	GA 174 908	Across Box Springs Rd 30m S. of Pine Knot Creek.	Gate
K-13	GA 112 943	Across Moore Rd 680m N. of its intersection with Bullseye Rd.	Gate	K-41	GA 192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Gate
K-14	GA 113 998	Across Moore Rd 10m S. of its intersection with Lorraine Rd.	Gate	K-42	GA 193 944	Across Box Springs Rd 10m N. of its intersection with Cacltus Rd.	Gate
K-15	GA 114 999	Across course road leading out of Ruth Range 50m E. of its intersection with Moore Rd.	Gate	K-43	GA 203 978	Across the northern boundary range road approx 20m N-W. of the old Hastings Range upper baseline.	Gate
K-16	GB 190 003	Across Rinehart Rd 130m W. of its intersection with Box Springs Rd.	Gate	K-44	GA 113 955	Across Moore Rd on the N. side of Carmouche Range maneuver box.	Gate
K-16A	GA 172 989	Across Rinehart Rd 20m S. of its intersection with the northern boundary range road.	Gate	K-45	GA 115 961	Across Moore Rd 300m S. of its intersection with the old Ware Range course road.	Gate
K-16B	GA 171 990	Across un-named trail 20m S. of its intersection with the northern boundary range road.	Gate	K-46	GA 119 979	Across Moore Rd 725m S. of its intersection with Americo Trail	Gate
K-17	GB 116 013	Across unnamed trail 15m E. of Moore Rd and 300m N. of Ruth Range tower.	Gate	K-47	GA 176 963	Across Turrentine Rd 1000m W. of mover 4 on Hastings Range	Gate
K-19	GB 121 023	Across unnamed trail 220m N-E. of Oscar Range Complex Road and 30m S of the northern boundary range road.	Gate	K-50	GA 195 988	Across Box Springs Rd 60m N. of its intersection with the northern boundary range road.	Cable
K-20	GB 141 021	Across unnamed trail 550m S of the northern boundary range road.	Cable	O-9	GA 101 962	Across unnamed trail 10m E of its intersection with Lorraine Rd.	Gate
K-21	GB 139 027	Across the northern boundary range road Aprox 250m East of Cox Creek bridge.	Gate	O-18	GA 093 979	800m N of Ware Rng Entrance on right side of Lorraine Rd	Gate

COMPOSITE RISK MANAGEMENT WORKSHEET

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

1. MSN/TASK FRAAC/FRABC022/FRACC020 MG Live Fire Range Training	2a. DTG BEGIN 100900SEP2013	2b. DTG END 091700SEP2014	3. DATE PREPARED (YYYYMMDD) 20130822
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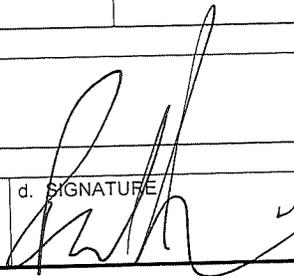
4. PREPARED BY		b. RANK		c. POSITION	
a. LAST NAME TAIT		SFC		ABRAMS MASTER GUNNER GUNNERY TEAM CHIEF	

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 EFFEC-TIVE?
Conduct Abrams Master Gunner Range Training	Range/General Situational Awareness	H	The Range Officer in Charge (OIC) and Range Safety Officer (RSO) will: Read and Review the Composite Risk Management Worksheet.	M	MCoE PM 386-6-14, FM 5-19, FM 31-70 MCoE 350-6-2	OIC, RSO, Training Device Primary, Medics	
			Ensure both OIC and RSO are RSO qualified. Ensure Training Company conducts daily Risk Assessment.			SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	
	Injury to Soldiers	H	Ensure Combat Lifesaver is present and certified. Ensure a Combat Lifesaver's Bag is present and has been inventoried by the Training	M	MCoE PM 386-6-14, FM 5-19, FM 31-70	OIC, RSO, Master Gunner Instructors, vehicle commander, Medics	
			Consult with the Training Company IOT identify potential problem Soldiers (Suicidal or homicidal intent, gestures, or a demonstration of serious emotional problems).			SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	
	Soldier Experiences Heat Illnesses during VCE/ LFAST MG operations	H	All Crewman will have a water source with them at all times on or off the tank. A water buffalo will be on site at the DFAC area. The Student Tower(TENT) and bleachers will	M	MCoE Reg 40-14, MCoE PM 386-6-14, FM 5-19, FM 31-70	OIC, RSO, Master Gunner Instructors, Medics	
			be used for shade. IF any SOLDIER shows signs, they will move directly to the RANGE TOWER were A/C is available and be evaluated by MEDICS. During all			SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	

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

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

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH

14. RISK DECISION AUTHORITY		d. SIGNATURE	
a. LAST NAME SUROWIEC	b. RANK LTC	c. DUTY POSITION 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?
			operations MEDICS will maintain the cooler filled with ICE and WATER and ice sheets. Ensuring cooler's ice does not melt.				
	Soldier Suffers from a Cold Illness	M	Identify previous cold weather injuries and mark Soldier and Equipment. Ensure Soldiers have proper cold weather clothing.	L	MCoE PM 386-6-14, FM 5-19, FM 31-70	OIC, RSO, MG Instructors SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	
Conduct M1A2 SEP Gunnery Live Fire Training	Soldier Encounters Wildlife such as Snakes and wild pigs	H	Individuals will stay within designated areas of the range and are not permitted to walk in the woods. If found the OIC will be immediately notified, All personnel will move away, Range	M	MCoE Reg 350-19, MCoE Reg 210-5, FM 5-19	OIC, RSO, Master Gunner Instructors	
			Control will be notified to remove wildlife. Soldiers will be ordered to stay clear of wildlife			SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	
	Soldier Encounters Biting Insects	H	All Soldier with an allergic reaction will be identified by OIC and MEDICS and those Soldiers will have an EPIPEN or other source of self aid	M	MCoE Reg 350-19, MCoE Reg 210-5, FM 5-19	OIC, RSO, Master Gunner Instructors	
			All Soldiers will be briefed of Georgia Wildlife Hazards and will be notified if any biting insects are around			SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	
Conduct M1A2 SEP Gunnery Live Fire Training	Soldier Struck by lightning	H	NCOIC OR SAFETY OFFICER WILL DO THE FOLLOWING: 1. Suspend all training during electrical storms or IAW guidance from range control.	M	MCoE Reg 115-1 MCoE Reg 210-5 FM 5-19	OIC, RSO, Master Gunner Instructors	
			2. Brief students on electrical storm plan for each range and point out location for evacuation and accountability. 3. Ensure instructors understand their individual		Execute Electrical Storm SOP	SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	
			responsibilities in case of an electrical storm. INSTRUCTORS WILL DO THE FOLLOWING: Ensure that students ground their individual			OIC, RSO, Master Gunner Instructors	
			equipment and don their wet weather gear. 2. Ensure that all students move IAW electrical storm plan. Take accountability of all students once there.			SFC Tait, SFC Ramirez, SFC Wainwright, SFC Gallegos	

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?
Conduct M1A2 SEP Gunnery Live Fire Training	Soldier hits head or is struck by equipment inside crew compartment	M	Soldiers will wear CVC while operating inside the tank for the TC, Gunner, Loader and Driver. The ACH will be worn when on top or off the tank as per the Range Uniform	L	AR 385-10, MCoE PM 385-6-14, FM 5-19 TM 9-2350-388-10, TM 9-2355-321-10	OIC, RSO, Master Gunner Instructors SFC Tait, SFC Ramirez, SFC Gallegos	
			Cadre will monitor radio communication and observe vehicle actions at all times				
Conduct M1A2 SEP Gunnery Live Fire Training	Soldiers Hit by a vehicle	M	All vehicles moving on the range will use a front and rear ground guide. Only one vehicle will be moved at a time until clear then others can start to move. During limited visibility	L	AR 385-10, DODI 6055.4, MCoE PM 385-6-14, FM 5-19	OIC, RSO, Master Gunner Instructors and Vehicle Commanders.	
			all Soldiers will have chemlight on ACH and a chemlight or flashlight to ground guide with. Ground guides will offset their ground path to the outside of the vehicle.			SFC Tait, SFC Ramirez, SFC Gallegos	
Conduct M1A2 SEP Gunnery Live Fire Training	Soldier Injured in a Tank roll over	M	No offensive operations are conducted during this training. All vehicles are stationary while firing. While the tanks are being placed on HET'ed on and	L	AR 385-10 MCoE 385-6-14 FM 5-19	Tank Commanders, OIC, RSO, NCOIC of support unit.	
			off the range, the driver will be properly licensed and trained prior to HET operations. The Driver will pay close attention to the ground guide. Ensuring the tank is in low gear.		DODI 6055.4, MCoE PM 385-6-14, FM 5-19	OIC, RSO, Master Gunner Instructors and Vehicle Commanders.	
Conduct M1A2 SEP Gunnery Live Fire Training	Soldiers Limbs Crushed by Weapon.	M	PMCS will be conducted prior to firing on all guards and screens. All vehicles go through the prep to fire checks by instructors prior to vehicle	L	TM 9-2350-388-10, TM 9-2355-321-10	SFC Tait, SFC Ramirez, SFC Gallegos and Vehicle Commanders	
			leaving motor pool. Vehicle will have the elevation and traverse lock on if any maintenance needs to be conducted with turret power on. VC will ensure crew is free and			OIC, RSO, Master Gunner Instructors and Vehicle Commanders.	
			clear of breech before each round fired				
Conduct M1A2 SEP Gunnery Live Fire Training	Soldier Injured by Falling, or tripping off a vehicle	M	Brief students on tripping hazards. i.e. rocks, branches, ect.	L	MCoE Reg 350-19 MCoE PM 385-6-14 DODI 6055.4	OIC, RSO, Master Gunner Instructors and Vehicle Commanders	

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?
Conduct M1A2 SEP Gunnery Live Fire Training			Brief students to maintain three points of contact while on the vehicle. Enforce students are adhering to three point of contact rule			OIC, RSO, Master Gunner Instructors and vehicle commanders	
	Soldier Experiences a Loss of hearing and/ or eyesight	M	All Soldiers are required to have hearing protection while vehicle is running and firing. A box of foam ear plugs will be provided. Any VIP's will be required to adhere.	L	MCoE Reg 210-5 MCoE 385-6-14 FM 5-19	OIC, RSO, Master Gunner Instructors and each individual	
			A CVC is considered hearing protection. Military approved Eye protection will be part of the uniform while on the range.			SFC Tait, SFC Ramirez, SFC Gallegos	
	Soldier is Injured due to lifting Ammunition or equipment	M	Team work will be enforced when uploading or downloading ammunition. No one will walk from ammo pad to tank. They will carefully hand ammunition from one Soldier to another	L	AR 385-63, FM 9-13, FM 4-30.13, MCoE PM 385-6-14, DODI 6055.4	OIC, RSO, Master Gunner Instructors	
			and from hull to turret and turret to loader. Two or more man lift will be enforced when lifting heavy equipment.			SFC Tait, SFC Ramirez, SFC Gallegos	
	Soldier hits head or is struck by equipment inside crew compartment	M	Soldiers will wear CVC while inside the tank for the TC, Gunner, Loader and Driver. The ACH will be worn when on top or off the tank as per the Range Uniform	L	AR 385-10, MCoE PM 385-6-14, FM 5-19	OIC, RSO, Master Gunner Instructors	
	Restricted or suspended ammunition on range	M	OIC and RSO will inspect all ammunition with the Ammo NCO to ensure the proper ammunition has been placed on the range. IAW the Fire/Nonfire Data. DODICS that will be	L	FM 9-13 FM 4-30.13, TM TM 9-2350-388-10	SFC Tait, SFC Ramirez, SFC Gallegos	
			fired are as follows: 120mm-C784 HEAT (M831A1), C785 SABOT (M865), CA38 CANNISTER (M1028), CA37, TPMP-T(M1002).		TM 9-2355-321-10 TB 9-1300-385	OIC, RSO, Master Gunner Instructors SFC Ramirez, SFC Gallegos	
			105mm-HEP(M467A1), C511 HEAT(M490), CA40 CANNISTER(M1040). .50 Cal-AA38, SLAP-T(M962).			Tank Commander, Gunner, OIC, RSO, Master Gunner Instructors	
Conduct Master Gunner (MG) Range Training with AIMTEST	Soldier is Injured by aa Accidental discharge, weapon malfunction or misfires	L	Training Device Primary Instructor will ensure that the bolt assembly, receiver assembly and barrel assembly serial #'s match prior to installation.	L	TM 120-M256-10, MCoE Reg 350-19	OIC, RSO, Master Gunner Instructors and Vehicle Commanders	

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?
Conduct Master Gunner (MG) Range Training with AIMTEST			All Fires' will follow misfire procedures. The VC and gunner will verify that FCS is in trigger safe, and that the safe arm handle is in safe position between each		AR 385-63, policies and procedures for Firing Ammunition for Training	Tank Commander, Gunner, OIC, RSO, Master Gunner Instructors	
			engagement, all safety guards are in place, crew is in proper uniform and follow all instructions from the Tower.		MCoE PM 386-6-13, MCoE PM 386-6-14	OIC, RSO, Master Gunner Instructors	
Conduct MG Range Training LFAST/500m Zero	Soldier is Injured by an Accidental discharge, weapon malfunction or misfires	M	All Prep to Fire and Armor Accuracy Checks are conducted on each tank prior to live fire. Prep to Fire, Fire Circuit Test and Boresighting will be complete prior to firing. All misfire	L	MCoE Range and Terrain Regulation 350-19, AR 385-63, MCoE PM 386-6-13, MCoE PM 386-6-14	SFC Tait, SFC Ramirez, SFC Gallegos SFC Wainwright	
			procedures will be followed IAW FM 3-20.21 and ST 3-20.13-2. The VC and gunner will verify that FCS is in trigger safe, and that the safe arm handle is in safe position between			OIC, RSO, Master Gunner Instructors	
			each round being fired. All safety guards are in place, crew is in proper uniform and will follow all instructions from the tower.			OIC, RSO, Master Gunner Instructors	
	Civilians and contractors on the range	M	Report any non DOD civilian personnel on the range. Contractors are required to sign a waiver with range control if present to perform official business on platforms.	L	MCoE PM 385-6-14 MCoE Range and Terrain Regulation 350-19	SFC Tait, SFC Ramirez, SFC Gallegos SFC Wainwright	
Conduct M1A2 SEP Gunnery Live Fire Training	Soldier crushed by vehicle	M	All vehicles moving on the range will use a front and rear ground guide. Only one vehicle will be moved off the baseline at a time until clear then	L	AR 385-10, MCoE PM 385-6-14, DODI 6055.4	OIC, RSO, Master Gunner Instructors and Vehicle Commanders	
			others can start to move. During limited visibility all Soldiers will have chemlight on ACH and a chemlight or flashlight to ground guide with.			OIC, RSO, Master Gunner Instructors and vehicle commanders	
	Soldie is Exposed to Firing outside Limited Fire Markers (Range Fans)	M	All Soldiers are required to pass GST/GT 1 and AGTS, signed by their Company Commander and any waivers signed by commandant are kept in student packets.	L	AR 385-63, FT 120-D-2, FT 105-A-4	Tank Commander, Gunner, OIC, RSO, Master Gunner Instructors	
			The Gunnery Team chief verifies and proofs the target location from vehicle, that all firing is within the Limit of Fire Markers. All firing is approved by Range control			SFC Tait, SFC Ramirez, SFC Gallegos SFC Wainwright	

5



RECORD OF ENVIRONMENTAL CONSIDERATION (REC)



Date Submitted: 8/12/2013

EMD Number: 1322407

Project#: Unknown

Project Title: Tank Range Training

Description of proposed action:

M1A1/M1A2 and MGS live fire gunnery familiarization training. This will be two days of live fire training where the tanks and MGS will be stationary from the battle positions, firing points or from the concrete pad in front of the tower. They will be firing the 120mm, 105mm main guns and small caliber machine gun at the targets down range. All movement on the range will be on gravel that is around the concrete firing line and down the hill to the ammunition point. The other environmental concerns are re-fueling operations which will be conducted on the concrete base line. A Spill kit and a hazmat certified NCO will be present on the range in the event of a vehicle leak or spill occurs during refueling operations. The Hazmat NCO will take any required actions to ensure compliance with local regulations in the event of a spill or leak. Ammo used: 120mm=M831, M865, M1028. 105mm=M490A1, M467A1, M1040; .50 Cal=M962, A621; 7.62mm A131

Project Location:

Brooks Range

Amount, Description, Location of Disturbance/Digging:

None

Number of Personnel:

40

Type of Ammunition: Number/Types of Trees:

120mm, 105mm, .50 Cal and 7.62mm Live None

Size of Project Area: 6Kilometers

Duration of Action: Start: 10/1/2013 Stop: 10/31/2014

Proponent: travis tait 5125250319

Organization/Unit: M Troop 3-16 Cav

Number/Types of Vehicles:

Number of vehicles:2
Types of vehicles: TMP, LMTV
No-Vehicles will be going off road.

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."

REC APPROVED THROUGH 30 SEPTEMBER, 2014

Cultural Resources - Archeological

None

Edward Howard (706 545 1898), 8/19/2013

Noise

Conditions:

Ellis Leeder (706 545 2400), 8/13/2013

This is training operations that must be conducted. If there is any noise complaints received, the Environmental Management Division Installation Operational Noise Monitoring Program (IONMP) and or Public Affairs Office (PAO) programs will investigate and then recommending operational noise mitigation actions to the appropriate personnel for the training actions. In accordance with the Army's policy on environmental noise management, all efforts shall be made to minimize noise annoyances to the highest extent practicable with training operations without interfering with the proposed missions. Please follow the fly friendly program avoiding no fly zones. Please follow good smoke management practices not allowing smoke or dust to travel off Installation boundary into public areas or roads. Please increase distance between vehicles when dust conditions are extreme, see Table 5-3. CS gas use should be utilized in designated areas only, contact Range Control for a listing of approved sites. If any assistance or a copy of MCoE Regulation 350-19 or the IONMP noise plan is needed for review, please feel free to contact Ellis Leeder at 706.545.2400 or email ellis.p.leeder.civ@mail.mil or visit the Range Control Website for the updated version of MCoE Regulation 350-19

EMD Number: 1322407

IJO#

Project Title: Tank Range Training

Hazardous Materials/Waste

Conditions:

Ted Williams (706 545 7579), 8/15/2013

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. If any hazardous waste is generated it must be managed in accordance with Federal, State, Army and Fort Benning regulations.

Defective, misfired, or otherwise unserviceable munitions must be managed IAW/MCOE Reg.350-19-5-10, Para 9-2 (Proper management of Misfired munitions). All excess, 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/MCOE Reg. 350-19, 23 Jul 2010.

Rubbish, empty containers and other waste (including used smoke/C2 canisters) should be removed from the training area after the training is completed. 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.

CWA - Training

Conditions:

Jessica Taylor (706 604 4572), 8/13/2013

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 (Example Unit/Activity SOP for Training and Deployment) 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 (Spill Beeper 706-317-6584). 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.

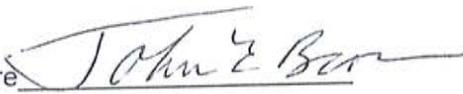
SPECIAL NOTE: See attached Unit/Activity SOP for Training and Deployment with recommendations during training exercise. For refueling, maintenance and/or hazardous material/waste storage areas - recommended a distance of approximately 100 (30 meters) from any water ways.

Natural Resources - RCW

None

Michael Barron (706 544 7080), 8/12/2013

Signature



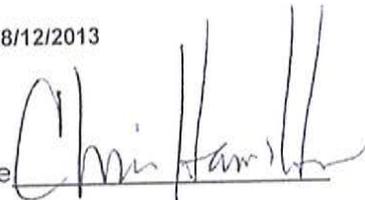
John E Brown

NEPA Program Manager

Date

20 AUG 2013

Signature

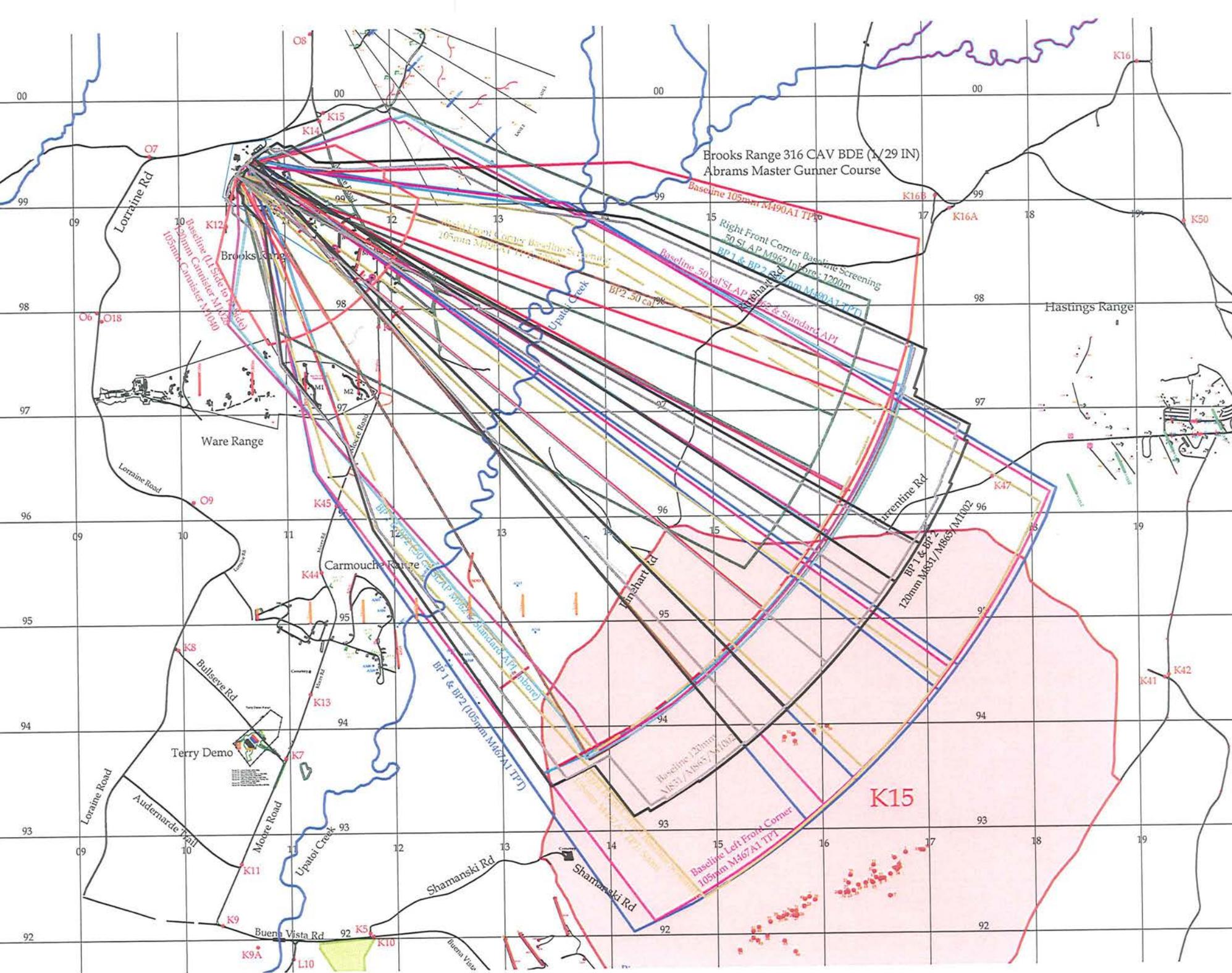


Christopher E. Hamilton, PhD

EPMB Chief

Date

21 Aug 13



Brooks Range 316 CAV BDE (1/29 IN)
Abrams Master Gunner Course

Baseline 105mm M490A1 TPT

15 Right Front Corner Baseline Screening
50 cal AP M962 Inshore 1200m

Baseline 50 cal SLAP
BP 1 & BP 2

Baseline 120mm
M831/M863/M100

Baseline Left Front Corner
105mm M467A1 TPT

Baseline (L5 Side to Right)
105mm Canister M100

Ware Range

Carmouche Range

Hastings Range

K15

Lorraine Rd

Lorraine Road

Lorraine Road

Buena Vista Rd

Terry Demo

Audemarde Trail

Moore Road

Buena Vista

Upatoi Creek

Upatoi Creek

Shamanski Rd

Shamanski Rd

Finchard Rd

Varenthine Rd

Moore Rd

Bullseve Rd

Buena Vista

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K13
K7
K11
K9
K9A
L10
K5
K10

K16
K16B
K16A
K50
K47
K41
K42



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE
1 KARKER STREET
FORT BENNING, GEORGIA 31905-5000

REPLY TO
ATTENTION OF
ATZB-SO

08 February 2013

MEMORANDUM FOR Commander 3/16 CAV, Attn: SFC Travis Tait, Fort Benning, GA 31905

SUBJECT: 3/16th CAV Abrams Master Gunner Course on Brooks Range Concept and Safety Review

1. References.

a. 3/16th CAV Abrams Master Gunner Course on Ware Range , 21 August 2013.

b. Army Regulation 385-10, The Army Safety Program, 24 August 2007

c. Army Regulation 385-63, Range Safety, 19 May 2003

d. Department of the Army Pamphlet 40-501, Hearing Conservation Program, 10 December 1998

e. Department of the Army Pamphlet 385-10, Army Safety Program, RAR 19 January 2010

f. Department of the Army Pamphlet 385-30, Mishap Risk Management, RAR 01 February 2010

g. Department of the Army Pamphlet 385-63, Range Safety, RAR 12 May 2009

h. Field Manual 5-19, Composite Risk Management, August 2006

i. MCoE Regulation 350-19, Range and Terrain Regulation, 23 July 2010

j. MCoE Policy Memorandum 385-6-14, Composite Risk Management, 22 October 2012

2. Document received on 22 August 2013.

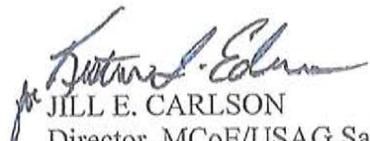
3. Concur w/comment.

a. RMW, Block 8, pg 4. "Soldier Experiences a Loss of hearing and/or eyesight", recommend strict adherence to TM 9-2350-264-10-1, page h. Impulse noise area greater than 103 dBA TWA and up to and including 108 dBA TWA, personnel must wear double hearing protection.

ATZB-SO

SUBJECT: 3/16th CAV Abrams Master Gunner Course on Brooks Range Concept and Safety Review

4. Point of contact is Mr. Michael W. Risher II, MCoE/Fort Benning Safety Office, Comm. (706) 545-8278, Govt. Cell. (706) 604-7249, michael.w.risher.civ@mail.mil


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