

FIRING/NONFIRING DATA

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

Log # 6-5-12

TO: Chief,
Range Division,
Directorate of Plans, Training, Mobilization and Security
Fort Benning, GA 31905

Date: 15 August 2012
Range: DMPRC
Title: Crew Gunnery
Problem No:

THRU: S-3, 3HBCT, 3rd ID
Fort Benning, GA 31905

FROM: S-3, 3-1 CAV, 3HBCT, 3rd ID
Fort Benning, GA 31905

SECTION I, TYPE OF TRAINING

a. Live Fire b. Non-live Fire CP/Controller Coordinates: GA 0986 8872 (Control Center)

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
See Weapon & Ammo List			

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
See Weapon & Ammo List	See Weapon & Ammo List	See Weapon & Ammo List	See Weapon & Ammo List	See Weapon & Ammo List

SECTION IV, LIVE FIRE EXERCISES Attach the following:

SECTION V, NON-LIVE FIRE TRAINING

<input checked="" type="checkbox"/> Scenario of training to be conducted: <input checked="" type="checkbox"/> Sketch of area: <input checked="" 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:
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Name/rank of requesting officer:

Nicholas L. McKearn, SSG, USA SQDN MG

Name/rank of Major Unit S3/Commander:

Laurence J. Christian, MAJ, AR SQDN S3

Nick McKearn

Laurence J. Christian DATE: 17 August 2012

SECTION VI, FOR RANGE DIVISION USE

TO: 3rd BDE, 3ID
Fort Benning, GA.

FROM: Range Division,
Directorate of Plans, Training,
Mobilization and Security
Fort Benning, GA 31905

- a. Roadblocks to be closed: See Roadblock List.
- b. Road(s) to be closed/road barrier locations:
- c. Remarks:
- d. This approval expires: 16 Aug 14

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

Brad S. Tuck

Firing Positions	Weapons	Ammunition	Left Limit, Mils Grid Azimuth	Right limit, Mils Grid Azimuth
BP 1A: 1019 8960	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	1010 0890	1495 1560
BP1B: 1175 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0700 0525	1505 1470
BP 1C: 1227 9122	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0780 0760	1320 1330
BP 2B: 1194 9054	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0535 0535	1370 1230
BP 2C: 1233 9097	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0450 0450	1165 1010
BP 3A: 1034 8928	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0775 0485	1415 1300
BP 3B: 1203 9041	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0475 0315	1385 1295
BP 3C: 1243 9084	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0470 0405	1225 1380
BP 3D: 1285 9115	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0180 0180	1110 0720
BP 4A: 1047 8908	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0590 0590	1270 1300
BP 4B: 1211 8986	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0345 0345	1285 1265
BP 4C: 1266 9038	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0520 0520	1435 1380
BP 4D: 1300 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0200 0200	1025 1090

Firing Positions	Weapons	Ammunition	Left Limit, Mils Grid Azimuth	Right limit, Mils Grid Azimuth
BP 5A: 1084 8858	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0385 0325	0810 1080
BP 5B: 1199 8958	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0615 0425	1175 1175
BP 5C: 1244 9011	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0435 0355	1325 1320
BP 6B: 1226 8936	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0430 0305	0965 0855
BP 6C: 1252 8990	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0375 0285	1260 1260
MB 1-1: Start 1020 8957 to Stop 1032 8962	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0785 0610	1355 1495
MB 1-2: Start 1174 9070 to Stop 1202 9076	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0650 0350	1345 1390
MB 1-3: Start 1231 9119 to Stop 1247 9112	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0455 0195	1300 1280
MB 2-1: Start 1197 9053 to Stop 1206 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0585 0430	1300 1410
MB 2-2: Start 1247 9112 to Stop 1235 9095	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0515 0195	1215 1080
MB 3-1: Start 1035 8925 to Stop 1060 8933	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0630 0630	1265 1235
MB 3-2: Start 1202 9047 to Stop 1231 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0495 0410	1420 1420
MB 3-3: Start 1246 9082 to Stop 1268 9103	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0330 0330	1340 1340

Firing Positions	Weapons	Ammunition	Left Limit, Mils Grid Azimuth	Right limit, Mils Grid Azimuth
MB 4-1: Start 1048 8905 to Stop 1067 8901	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0615 0430	1265 1270
MB 4-2: Start 1209 8989 to Stop 1233 9012	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0410 0340	1235 1295
MB 4-3: Start 1263 9043 to Stop 1275 9059	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0235 0275	1205 1380
MB 5-1: Start 1082 8860 to Stop 1108 8881	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0435 0355	0830 1215
MB 5-2: Start 1215 8977 to Stop 1239 9003	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0365 0415	1265 1225
MB 5-3: Start 1247 9008 to Stop 1286 9017	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0240 0295	1280 1235
MB 6-1: Start 1225 8939 to Stop 1239 8953	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0400 0295	1000 0905
MB 6-2: Start 1260 8988 to Stop 1283 8998	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	0225 0400	1215 1305



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

03 August 2012

MEMORANDUM FOR Commander, 3/1 Cavalry Squadron, Attn: SSG Nicholas McKearn, Fort Benning, GA 31905

SUBJECT: 3/1 CAV DMPCRC Crew Gunnery Concept and Safety Review

1. References:
 - a. 3/1 CAV DMPCRC Crew Gunnery Concept, 23 July 2012
 - 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 385-10, Army Safety Program, RAR 19 January 2010
 - e. Department of the Army Pamphlet 385-30, Mishap Risk Management, RAR 01 February 2010
 - f. Department of the Army Pamphlet 385-63, Range Safety, RAR 12 May 2009
 - g. Field Manual 5-19, Composite Risk Management, August 2006
2. Document received on 23 July 2012.
3. CONCUR w/comment.
 - a. CRMW. Recommend that you address up loading and down loading of ammunition.
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


JILL E. CARLSON
Director, MCOE Safety
Fort Benning Safety Office



DEPARTMENT OF THE ARMY
3RD SQUADRON, 1ST U.S. CAVALRY REGIMENT
3RD BRIGADE, 3RD INFANTRY DIVISION
FORT BENNING, GEORGIA 31905

AFZP-VIB-CDR-S3

16 August 2012

MEMORANDUM FOR Chief, Range Operations, Directorate of Plans, Training and Mobilization.

SUBJECT: Stabilized Gunnery on the Digital Multi Purpose Range Complex

1. **PURPOSE:** To establish a Concept of Operations for Bradley Live Fire on the DMPRC.
2. **APPLICABILITY:** This memorandum applies to all 3-1 CAV, 3ID units/activities using Bradley Fighting Vehicles on the DMPRC. All Officers in Charge (OIC), Non-Commission Officers in Charge (NCOIC) and Range Safety Officers (RSO) will be familiar with the contents of this memorandum and all other applicable references.
3. **REFERENCES:**
 - A. Army Regulation 385-63, Range Safety
 - B. DA PAM 385-63, Range Safety
 - C. Army Regulation 350-1, Army Training and Leader Development
 - D. MCoE Regulation 350-19, Range and Terrain Regulation
 - E. FM 3-23.30, Grenades and Pyrotechnic Signals
 - F. TM 9-1300-206, Ammunition and Explosives Standards
 - G. FM 3-20.21 HBCT Gunnery Manual
 - H. FM 3-21.71 Mechanized Infantry Platoon and Squad (Bradley)
4. The following Live Fire Exercise (LFX) outlines the scenario for 3-1 CAV Crew Gunnery. They will apply to the following weapon systems:
 - a. 25MM M242 Chain Gun
 - b. 7.62MM M240 Machine Gun
5. **Execution:**
 - A. 3-1 CAV will conduct live fire exercise in accordance with FM 3-20.21, Chapter 16, Stabilized Gunnery Tables II-VI, depending on the available resources and time allotted for the training event. These are crew qualification tables with the firing vehicle firing engagements in either stationary or moving posture with single and multiple targets (See Target List). This will be outlined by the Minimum Proficiency Levels, (MPL), and table development standards outlined in Chapter 16. Gunnery Tables II-VI will be conducted on Digital Multi Purpose Range Complex, DMPRC, with only one vehicle firing the course at any given time on any lane on the DMPRC (See Target List). Range Cadre/ Master Gunner will ensure that each soldier/ crew are aware of their left and right limits and do's and don'ts while on the range, which will be done through the means of a

detailed safety brief. After crews receive their briefing, they will complete and turn in their pre-fire checklist to the ammunition supply point in order to receive their ammunition. The Ammunition Supply Point will be located at range designated Ammo Holding Area, (AHA). Each crew drawing ammunition will not lock and load any weapon systems until they reach their first engagement area.

B. Units will utilize the “crawl-walk-run” methodology for all training. Leaders will conduct a risk assessment to outline all safety consideration, range fans, target scenarios, and sequence of events. Tables II day and night will be a dry-fire table and will give the Master Gunner, Safeties and Range Cadres an opportunity to ensure crews follow proper muzzle awareness before validating their ability to safely conduct Tables III, IV, 34, V and VI (live-fires tables) day and night. An additional control measure that the Squadron Commander, S-3 and Master gunner will take, will be to ensure that crews conduct GT II as many times as necessary as a confidence builder and as confirmation that crews are ready to fire live rounds.

C. The Master Gunner and Range Cadre will identify the designated start point and give specifics to all crews during the Initial Brief. Crews will be instructed to take all commands from the DMPRC Operations Center. Weapons utilized will remain cleared and unloaded until told by the DMPRC Operations Center. The first crew will then move to any lane they choose to start their live-fire exercise. Safeties will ensure weapons with rounds are always oriented downrange. The first crew will identify the left and right range limits and will be presented with targets so that they can confirm their zero when shooting live rounds. Targets presented for zeroing and gunnery will be selected from the Target List. Weapons will remain on electrical and manual safe when not engaging targets. At the end of each firing phase each crew will clear all weapon systems, place their weapons on electrical and manual safe, continue down range along the course road and then proceed towards the DMPRC Operations Center with all weapons pointing up and downrange. Once at the designated clearing point the vehicle commander will ensure that the required initials are submitted to the DMPRC Operations Center before that vehicle is cleared to move off the lane (See sketch).

D. All firing tables will be similar with the exception of one or two target changes to facilitate the various weapon systems, so that the minimum proficiency level (MPL) and Gunnery SOP requirements are met (See target list). All Qualification tables will be different from the practice tables (See target list). This is so that we can ensure that crews are challenged and are graded IAW 3-20.21 (HBCT Manual). The difference between the practice and qualification tables that were made mention of previously will be target types, target locations and target ranges. The flow of the range will be simple and smooth and will facilitate the layout of the range. Firing points (FP) and Maneuver boxes (MB) will be used and clearly marked so that they are easily identifiable by the crews during both the day and night phases (SEE TARGET LIST).

E. At the completion of each firing table, crew will first clear their weapons and then move along the course road and towards the DMPRC Operations Center to the designated clearing point where they will conduct a consolidated shake down prior to conducting their AAR (See sketch). Once the live fire exercise is complete, the Master Gunner and Range Cadre will conduct a consolidated shake down for brass and ammo and a final AAR at the Briefing Point. All remaining crews will follow the same procedures listed above.

F. After completion of the life fire exercise, the occupying unit will conduct an extensive clean up of the range. All equipment and trash brought to the range will be removed, and the proper closing codes will be obtained from range control. Any

unexploded ordinance that is found will be marked and immediately reported to EOD and Range Control.

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

- A. DA Form 7566, Risk Management Worksheet and Daily Risk Assessment
- B. FB Form 350-19-1-E-R, scenario, sketches, FB Form 144, and any specific enclosures as required.
- C. Training guidelines: All training will be conducted IAW this memorandum, applicable references listed in paragraph 3, and FB 350-19-1-E-R. Units are responsible for developing and submitting a new range packet if requested training deviates from approved range packets.
- D. Units will use the Range Facility Management and Scheduling System (RFMSS) when scheduling.

7. ADMINISTRATIVE:

A. The training unit shall clear the range in accordance with local policies and procedures established with Range Control. Units will be required to clean all buildings occupied during the training event. This will require that the unit supply the following: brooms, mops, buckets, and appropriate cleaning supplies.

B. All range fires will be suppressed and reported to Range Control IAW MCOE Regulation 350-19.

8. REQUIREMENTS: A specific operation 350-19-1-E-R / scenario package will be prepared by the units for the DMPCRC and approved by Chief, Range Division. All supporting documents, i.e. regulations, field manuals, TMs, etc. with an approved 350-19-1-E-R / scenario package will be onsite. All visiting 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 the approved FB Form 350-19-1-E-R / 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 cleared of all refuse generated. (i.e. pallets, ammo boxes and food packaging)

9. MEDICAL: Medical personnel and equipment on site will be IAW unit SOP and risk management worksheet risk level for the training conducted. MEDEVAC will be IAW MCOE Regulation 350-19. All incidents will be reported to Brigade HQ and Range Control.

10. VEHICLE CONTROL: POV and wheeled military vehicle parking is located in the vicinity of DMPCRC Operations building. (Located Vic GA 098 887)

11. AMMO POINTS:

A. There will be an ammo point. No open flames will be allowed within 50 feet and two 10lb bicarbonate fire extinguishers will be available at all times at the ammunition point. Ammunition Non-Commissioned Officer will control issue of live ammunition and monitor at all times. All ammunition will be issued and turned in to the Ammunition

NCO and logged. Ammo NCO will be Ammo Handler certified. Ammunition will be separated at all times by DODIC.

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

A. The unit will have in its possession the approved 350-19-1-E-R, overlays, Approved RFMSS Request summary, this concept document, and Unit risk assessment worksheet before occupation of the DMPRC. The OIC will call in to range control and request permission to occupy the range complex for which the unit is scheduled. Appropriate overlays will be posted upon arrival, the OIC and RSO will receive a briefing from the range site supervisor and WTAsupport contractor.

B. The unit will draw appropriate communication security (COMSEC), and ensure that all Force XXI Battle Command Brigade and Below (FBCB2) equipped platforms are configured properly, the correct COMSEC has been loaded and the vehicle has achieved connectivity to the Range Operations Center (ROC)

C. The Unit Master Gunner or representative will verify that the scenario data at the range complex is correct. They will also provide a final battle roster and firing order.

D. Vehicles will move to the designated vehicle instrumentation area adjacent with Range operations center on Hour Glass Road. The Instrumentation Specialists will install and test all instrumentation and other equipment that needs to be attached to the participating platforms/ personnel. To prevent injury or damage to equipment, at no time, are unit personnel to install, remove, adjust or otherwise tamper with the Instrumentation or video devices on the vehicle. If a piece should fail to function, the instrumentation on the vehicle must be checked out by qualified range personnel. Once a piece of equipment is installed on a unit, it becomes virtually 'tied' to that unit for the duration of the run or until it is removed by range personnel.

E. The Crew Evaluators will receive orientation training on the Crew Evaluator Workstation (CEWS) and instrumented after action review (IAAR) systems. They will also have the opportunity to assign user-defined events to certain keys on the execution control (EXCON) or system control (SYSCON) workstation keypad. Any scenario action can be a user-defined event. This is also where the Unit IAAR templates can be refined for the training table.

F. Unit will proof the range before firing.

G. The Unit Master Gunner or ammunition NCOIC will coordinate with the DMPRC target personnel for the sub-hand receipting of all pyrotechnic battlefield effects simulators M30, M31 devices. The DMPRC target personnel will draw the pyrotechnics, go down range, load the battlefield effects simulator (BES) devices and upon return from down range turn-in any residue or spare devices to the ammo NCOIC.

H. This will occur twice daily at a minimum, prior to, and after both mandatory Shutdown periods. The unit leadership must assign personnel to perform special duties such as road guards and fire fighting details IAW this memo, approved 350-19-1-E-R guard listing and applicable Fort Benning regulations.

13. CONDUCT OF EXERCISE: Tasks for conducting exercise follow:

A. The OIC:

(1) Controls exercise and ensures Vehicles will only fire at approved 350-19-1-E-R target listing.

(2) Maintains efficient throughput

(3) Maintains required communications

(4) Calls Cease Fire, notifies higher HQ and Range Operations of any incident

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). Ensures that the crew handles misfires IAW safety regulations.
- (2) Observes for any safety violations
- (3) Ensures Weapons Systems Remain down range at all times while negotiating the range
- (4) Clears each firing vehicle at end of each exercise in designated area ensuring that weapon systems are oriented in a safe direction down range during clearing process
- (5) Ensures Vehicles will only fire at approved 350-19-1-E-R target listing.

D. The Master Gunner:

- (1) Ensures the range adheres to the appropriate gunnery table
- (2) Ensures that crews boresight and zero correctly
- (3) Conducts onsite remedial training as needed
- (4) Supervises Vehicle Crew Evaluator
- (5) Helps safety personnel clear weapons when required
- (6) Helps maintenance personnel identify and correct malfunctions
- (7) Helps Commander determine and verify alibi conditions
- (8) Ensures Vehicles will only fire at approved 350-19-1-E-R target listing.

14. CLOSURE OF THE RANGE:

A. The OIC:

- (1) Notifies range control that firing has terminated
- (2) Debriefs unit personnel
- (3) Ensures vehicle crews adhere to approved task matrix/ scenerio during firing event
- (4) Ensures clearing of the range and training areas follows local regulations and SOP

B. The NCOIC:

- (1) Supervises ammunition and target details
- (2) Ensures range facilities have been policed

C. The Master Gunner:

- (1) Updates DA Form 2408-4 for each vehicle

D. The ammunition NCOIC:

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

15. Safety:

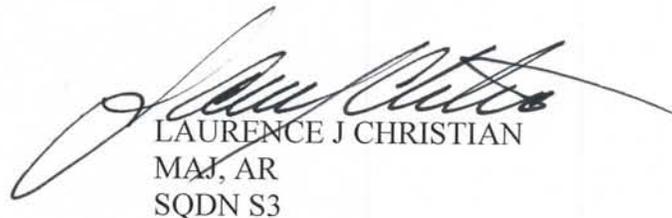
- A. During Gunnery operations all vehicles will maintain communications with Range Operations Center (Tower) at all times. If communications goes down all Movements and engagements will cease fire freeze until communications is restored.
- B. All commands come from the DMPRC Operations Center.
- C. All engagements will be cleared and authorized by tower personnel.
- D. Vehicles will only fire at approved 350-19-1-E-R target listing.
- E. 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 communications. The Master Gunner will notify OIC if required to go to vehicle location to assist.
- F. Vehicles that are running the course will be given weapon control status from the Tower and maintain weapons systems downrange until cleared by the Range Safety Officer.
- G. The emergency cease fire signal and E-911 medical evacuation procedures will be briefed during the range safety brief.
- H. A Field Litter Ambulance with qualified medics will be present through the duration of the gunnery.
- I. All vehicles be cleared onto and off execution line by Range Safety Officer or Master Gunner.
- J. LASER's: Laser Warning Signs will be in place prior to opening the range. Range safety briefing will include hazards using Lasers and NVD's.
- K. Communications: Unit will maintain continuous contact with Range Control at all times. If communications are lost the unit will go into a self induced check fire until communications are restored.
- L. 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 using unit's higher headquarters. OIC/RSO will take action as directed by Range Control. The cease fire will remain in effect until the problem is resolved and cleared through Range Control. If the incident results in an injury, the OIC/RSO will use the procedures outlined in the medical paragraph. The following information will be furnished by the OIC/RSO to Range Control:
 - a. Designation of unit.
 - b. Range and location
 - c. Type of weapon involved.
 - d. Type of ammunition involved.
 - e. Brief summary of what happened.
 - f. Personnel injuries and extent.
 - g. Full Name, SS#, Rank and unit of injured personnel.
 - h. Extent of property damage.
 - i. Intentions regarding an AR 15-6 investigation.
- M. 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 eyesight). MEDEVAC will be IAW MCoE Regulation 350-19 and USAIC 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.

N. Ammunition: There will be no de-linking or re-linking of any ammunition. Any ammunition that has been de-or re-linked is considered nonstandard and is prohibited from the range.

O. Weapons/Ammunition Malfunction Reports: When a malfunction is experienced, the OIC/RSO will suspend all firing and immediately notify Range Control. The weapons and all components and ammunition involved will remain in place. The cease fire will remain in effect until cleared through Range Control. An investigation is required and will be conducted by the ammunition and weapons inspection personnel and DOL.

14. The point of contact for this action is SSG McKearn, 3-1 CAV Squadron Master Gunner.



LAURENCE J CHRISTIAN
MAJ, AR
SQDN S3

AFZP-VI-T

SUBJECT: Concept of Operations Digital Multi Purpose Range Complex (DMPRC)

ENC 1

WEAPONS SAFETY AND CONTROL STATUS

1 Ammunition Status	
Item	
RED	Rounds loaded / Magazine Loaded
Yellow	Magazine loaded, chamber clear
Green	Magazine out, chamber clear
2 Weapons Control Status	
Item	
HOLD	Engage only if engaged (threat) or ordered to do so. Must have positive ID

AFZP-VI-T

SUBJECT: Concept of Operations Digital Multi Purpose Range Complex (DMPRC)

TIGHT	Can engage if target is positively identified as enemy
FREE	Can engage unless target is positively identified as friendly

*****Do not carry weapons on anything but safe - you will transition only when prepared to fire**

ENC 1

Weapon Type	Weapons Safety Posture		
	GREEN	AMBER	RED
M9	Weapon cleared and on safe; magazine out of weapon	Magazine in weapon; no round in chamber; weapon on safe	Magazine in weapon; round chambered; weapon on safe
M16	Weapon cleared and on safe; magazine out of weapon	Magazine in weapon; no round in chamber; weapon on safe	Magazine in weapon; round chambered; weapon on safe
M203	Weapon cleared and on safe; rounds carried	No round in the chamber; weapon on safe; ammo ready	Round chambered; weapon on safe
M249	Weapon cleared and on safe; ammo carried	Half cocked – bolt forward; weapon on safe, rounds in tray; no rounds in chamber	Weapon charged – open bolt position; ammo in feed tray; weapon on safe
M240/ M240B	Weapon cleared and on safe; ammo carried	Bolt forward; weapon on safe, rounds in tray, no rounds in chamber	Weapon charged – open bolt position; ammo in feed tray; weapon on safe
M60	Weapon cleared and on safe; ammo carried	Bolt forward; weapon on safe, rounds in tray; no rounds in chamber	Weapon charged – open bolt position; ammo in feed tray; weapon on safe
M2	Weapon cleared and on safe; ammo carried	Bolt forward; weapon on safe, rounds in tray; no rounds in chamber	Weapon charged; round in chamber; weapon on safe
MK19	Weapon cleared and on safe; ammo carried	Weapon on safe; no round in chamber; ammo in feed tray	Round on face of bolt; weapon on safe; charged open bolt position
TOW	No missile in tube; launcher in stowed position	Missile in tube; launcher in stowed position, system on electric safe	Missile in tube; launcher raised; system on electric safe
25mm	Weapon cleared and on electrical and mechanical safe; ammo stowed	Round in feeder; no ghost rounds cycled; electrical and mechanical safe	Ghost round cycled; electrical and mechanical safe
120mm	Breech closed; no round in tube; system on electrical and mechanical safe	Breech opened; system on electrical and mechanical safe; rounds stowed	Gun tube loaded; weapon on electrical and mechanical safe

ENC 1
WEAPONS SAFETY AND CONTROL STATUS

1 Ammunition Status	
Item	
RED	Rounds loaded / Magazine Loaded
Yellow	Magazine loaded, chamber clear
Green	Magazine out, chamber clear
2 Weapons Control Status	
Item	
HOLD	Engage only if engaged (threat) or ordered to do so. Must have positive ID
TIGHT	Can engage if target is positively identified as enemy
FREE	Can engage unless target is positively identified as friendly

*****Do not carry weapons on anything but safe - you will transition only when prepared to fire**



DMPRC Ammo Point

DMPRC Control Center

Hourglass Rd

DMPRC 31 CAV
Crew Gunnery

Lane 1

Lane 3

Lane 4

Lane 5

Designated Clearing Point

DMPRC, 3rd BDE, 3-1 CAV Crew Gunnery (Log #6-5-12) Target List Enclosure

Firing Positions	Weapons	Ammunition	Targets
BP 1A: 1019 8960	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 5, 6, 7, 8, 9, 11, 12, 17, 47. M: 101, 201. <u>(7.62mm)</u> T: 1, 9. SA: 4 - 6, 47.
BP1B: 1175 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 25, 27, 29, 32, 36, 37, 40, 43, 46, 48, 49, 53, 54, 55, 56, 57, 59, 61, 64. M: 102, 103, 104, 203, 204. <u>(7.62mm)</u> T: 14, 26, 30, 38, 52, 54. SA: 25, 27, 29, 64.
BP 1C: 1227 9122	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 36, 46, 54, 55, 56, 57, 59, 61. <u>(7.62mm)</u> T: 33, 39. SA: 23, 36, 46, 56. M: Right 1/2 M102
BP 2B: 1194 9054	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 25, 27, 32, 36, 37, 40, 43, 46, 48, 49, 53, 54, 55, 56, 57, 59, 61. M: 102, 103, 104, 203, 204. <u>(7.62mm)</u> T: 14, 26, 30, 52, 53. SA: 25, 27.
BP 2C: 1233 9097	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 36, 46, 54, 55, 56, 57, 59, 61. M: 102, 103, 104. <u>(7.62mm)</u> T: 14, 33. SA: 23, 36, 46, 56.
BP 3A: 1034 8928	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17, 18. M: 101, 201. <u>(7.62mm)</u> T: 1, 8, 10, 36. SA: 4, 5, 6, 18.
BP 3B: 1203 9041	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 32, 36, 37, 40, 41, 43, 46, 48, 49, 53, 54, 55, 56, 57, 58, 61. M: 102, 103, 104, 203, 204. <u>(7.62mm)</u> T: 14, 16, 26, 29, 30, 31, 52, 53. SA: 27, 32, 40, 58. M: Left 1/2 M202.
BP 3C: 1243 9084	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 36, 37, 46, 53, 54, 55, 56, 57, 59, 61. M: 102, 103, 104. <u>(7.62mm)</u> T: 29, 30, 33. SA: 36, 37, 53. M: Left 1/2 M203 & Left 1/2 M204.
BP 3D: 1285 9115	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 36, 46, 54, 55, 56, 57, 59, 61. M: 102, 103, 104. <u>(7.62mm)</u> T: 33. SA: 36, 46, 54, 56, 57, 61. M: 102, 103.
BP 4A: 1047 8908	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17, 21, 63. M: 101, 201. <u>(7.62mm)</u> T: 4, 8, 13, 36. SA: 4, 5, 6, 21, 63. M: Left 1/2 M301.
BP 4B: 1211 8986	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 22, 28, 30, 32, 33, 34, 36, 38, 37, 40, 41, 42, 43, 44, 46, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 65. M: 102, 103, 104, 202, 203, 204, 302, 303. <u>(7.62mm)</u> T: 20, 22, 24, 28, 52. SA: 222, 28, 30, 33, 58, 60, 65. M: 202.
BP 4C: 1266 9038	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 32, 38, 40, 41, 43, 44, 48, 49, 50, 53. M: 203, 204, Left 1/2 M302 & Left 1/2 M303. <u>(7.62mm)</u> T: 22, 31, 32, 37. SA: 21, 32, 40, 41, 43, 44, 48, 49, 53. M: 203, 204, Left 1/2 M303.
BP 4D: 1300 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 43, 48, 49, 53. M: 203, 204. <u>(7.62mm)</u> T: 37. SA: 43, 48, 49, 53. M: 203, 204.

DMPRC, 3rd BDE, 3-1 CAV Crew Gunnery (Log #6-5-12) Weapons/Ammo List Enclosure

Page 2 of 3

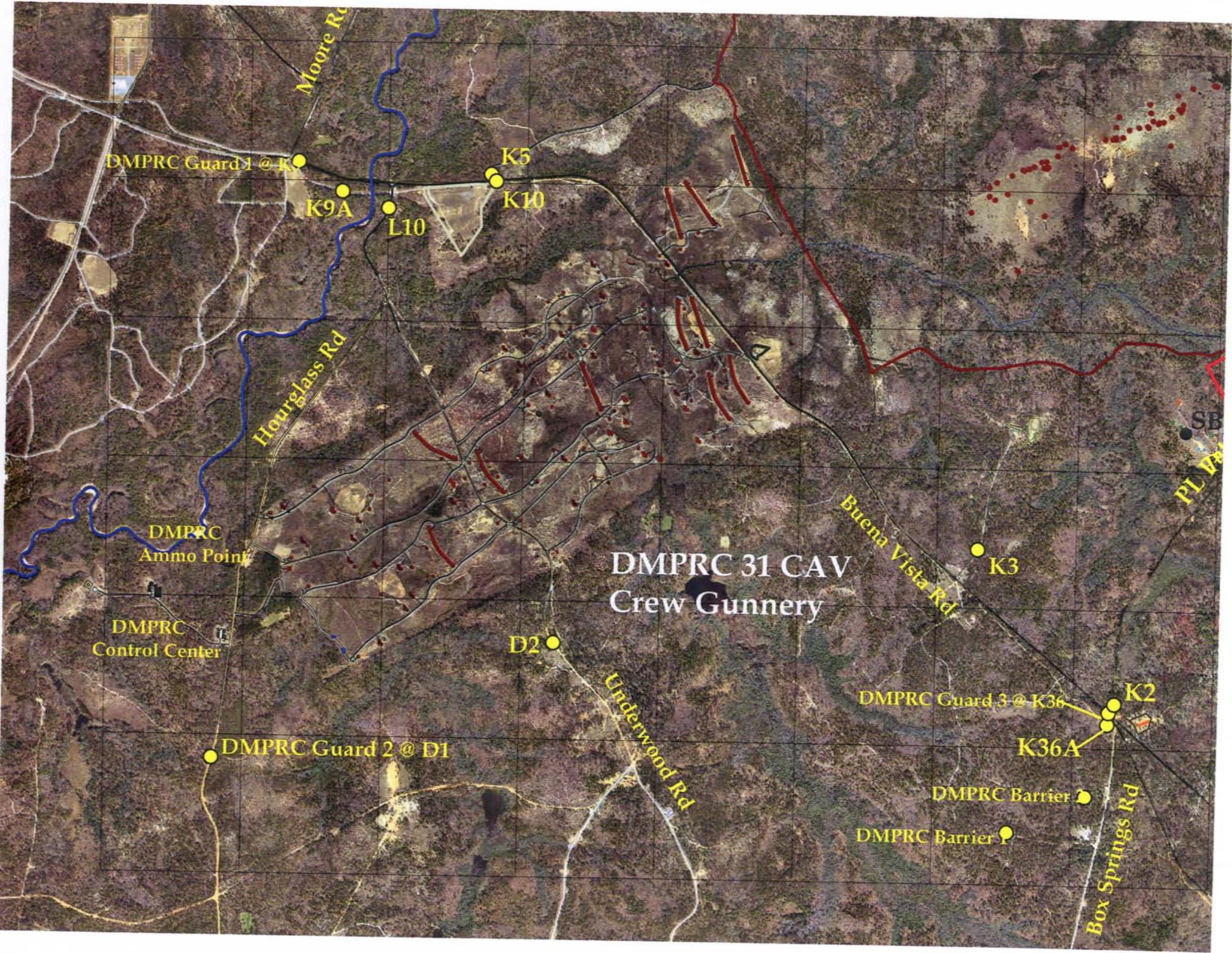
Firing Positions	Weapons	Ammunition	Targets
BP 5A: 1084 8858	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 1, 7, 8, 9, 10, 11, 12, 13, 17, 63. M: 201, 301. <u>(7.62mm)</u> T: 5, 6, 11, 15. SA: 1, 13, 62, 63. M: 301.
BP 5B: 1199 8958	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 22, 28, 32, 33, 34, 35, 38, 40, 41, 42, 43, 44, 48, 49, 50, 52, 53, 60, 65. M: 203, 204, 302, 303. <u>(7.62mm)</u> T: 19, 20, 24. SA: 22, 26, 28, 30, 33, 60, 65.
BP 5C: 1244 9011	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 32, 33, 38, 40, 41, 42, 43, 44, 48, 49, 50, 52, 53, 60. M: 203, 204, 303, Left 3/4 M302. <u>(7.62mm)</u> T: 22, 24, 28, 29, 31, 32, 34. SA: 28, 32, 33, 40, 41, 42, 60.
BP 6B: 1226 8936	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 22, 26, 32, 34, 35, 38, 40, 41, 42, 43, 44, 48, 49, 50, 52, 53, 60, 65. M: 203, 204, 302, 303. <u>(7.62mm)</u> T: 19, 24, 25, 40. SA: 22, 26, 60, 65.
BP 6C: 1252 8990	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 22, 32, 34, 35, 38, 40, 41, 42, 43, 44, 48, 49, 50, 52, 53, 54, 55, 57, 60, 65. M: 104, 203, 204, 302, 303. <u>(7.62mm)</u> T: 19, 22, 24, 28, 31, 32, 34, 35. SA: 22, 32, 34, 35, 42, 60, 65.
MB 1-1: Start 1020 8957 to Stop 1032 8962	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 6, 7, 11, 12, 47, (SA5 from start only). M: 101. <u>(7.62mm)</u> T: (1, 9, both from start only). SA: 5, 6, 47, (SA4 from start only).
MB 1-2: Start 1174 9070 to Stop 1202 9076	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 25, 27, 36, 37, 46, 53, 54, 55, 56, 57, 59, 61, (SA: 29, 64, both from start only). M: 102, 103, 104. <u>(7.62mm)</u> T: 14, 29, 30, 39, 53, (T: 38 from strat only). SA: 23, 25, 27, 29, 37, (SA: 64 from strat only).
MB 1-3: Start 1231 9119 to Stop 1247 9112	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 36, 46, 54, 55, 56, 57, 59, 61, (SA23 from start only). M: 102, 103, 104. <u>(7.62mm)</u> T: 33, (T39 from start only, T14 from stop only). SA: 23, 36, 46, 56, 57. M:102.
MB 2-1: Start 1197 9053 to Stop 1206 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 23, 36, 37, 46, 53, 54, 55, 56, 57, 59, 61. M: 102, 103, 104, Left 1/2 M203, Left 1/2 M204. <u>(7.62mm)</u> T: 14, 26, 29, 30, 39, 52. SA: 23, 25, 27, 37, 40.
MB 2-2: Start 1247 9112 to Stop 1235 9095	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 36, 46, 54, 55, 56, 57, 59, 61. M: 102, 103, 104. <u>(7.62mm)</u> T: 14, 33. SA: 36, 46, 56, 57, (SA23 from start only). M: 102.
MB 3-1: Start 1035 8925 to Stop 1060 8933	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 3, 4, 5, 6, 7, 8, 9, 11, 12, 17, 47, (SA18 from start only). M: 101, 102. <u>(7.62mm)</u> T: 8, 12, 36, (T1 from start only). SA: 4, 5, 6, (SA18 from start only).
MB 3-2: Start 1202 9047 to Stop 1231 9066	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 32, 36, 37, 40, 43, 46, 48, 49, 53, 54, 55, 56, 57, 59, 61. M: 102, 103, 104, 203, 204. <u>(7.62mm)</u> T: 14, 29, 30, 52, (T: 26, 31, 53 all 3 from start only). SA: 32, 37, 40, 43, 48, 49, 53, (SA58 from start only).
MB 3-3: Start 1246 9082 to Stop 1268 9103	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 36, 46, 54, 55, 56, 57, 59, 61, (SA: 37, 53 both from start only). M102, 103, 104, (left 1/2 M203, left 1/2 M204 both from start only). <u>(7.62mm)</u> T: 33, (T29 From start only). SA: 36, 46, 56, 57, (SA: 37, 53 both from start only). M: 102, (M: left 1/2 203, left 1/2 204 both from start only).

Firing Positions	Weapons	Ammunition	Targets
MB 4-1: Start 1048 8905 to Stop 1067 8901	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 3, 7, 8, 9, 11, 12, 17, 21, 63. M: 201 (right 1/2 M101, left 1/2 M301). <u>(7.62mm)</u> T: 4, 13, (T: 8, 36 both from start only). SA: 6, 21, 63, (SA: 4, 5 both from start only). M: 301 left 1/2 only.
MB 4-2: Start 1209 8989 to Stop 1233 9012	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 28, 32, 33, 36, 37, 40, 41, 42, 43, 44, 46, 48, 49, 50, 53, 54, 55, 56, 57, 59, 61, (SA: 30, 56, 58, 60 all 4 from start only). M: 103, 104, 203, 204 (left 1/2 M102, left 1/2 M303). <u>(7.62mm)</u> T: 22, 24, 28, 31, 32, 34, (T: 20 from start only). SA: 28, 32, 33, 40, 42, (SA: 30, 58, 60 all 3 from start only). M: right 1/2 M202.
MB 4-3: Start 1263 9043 to Stop 1275 9059	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 32, 36, 37, 40, 43, 46, 48, 49, 53, 54, 55, 57, 59, 61, (SA41 from start only). M: 103, 104, 203, 204, (right 1/2 M102). <u>(7.62mm)</u> T: 29, 31, 33, 37, (T22 from start only). SA: 32, 40, 43, 48, 49, 53, (SA: 41, 44 both from start only). M: 203, 204.
MB 5-1: Start 1082 8860 to Stop 1108 8881	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 1, 3, 8, 9, 10, 11, 12, 17, (SA: 13, 63 both from start only). M: 201, (right 1/2 M301 from start only). <u>(7.62mm)</u> T: 5, 6, 12, (T: 11, 15 both from start only). SA: 1, 63, (SA: 13, 62 both from start only). M: 301.
MB 5-2: Start 1215 8977 to Stop 1239 9003	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 28, 32, 33, 36, 37, 38, 40, 41, 42, 43, 44, 46, 48, 49, 50, 53, 54, 55, 56, 57, 59, 60, 61, (SA: 22, 65 both from start only). M: 103, 104, 203, 204, 303, (left 1/2 M302). <u>(7.62mm)</u> T: 22, 24, 28, 31, 32, 34, (T: 19, 20 both from start only). SA: 28, 32, 33, 40, 42, 60, (SA: 22, 65 both from start only).
MB 5-3: Start 1247 9008 to Stop 1286 9017	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 38, 41, 42, 43, 44, 48, 49, 50, 53, 54, 55, 57, 59, 61, (SA: 32, 33, 40, 60 all 4 from start only). M: 104, 203, 204, 303, (left 1/2 M302). <u>(7.62mm)</u> T: 32, 34, 37, (T: 22, 24, 28, 31 all 4 from start only). SA: 21, 41, 42, 43, 44, 48, 49, 50, 53, (SA: 32, 33, 40 all 3 from start only). M: 303, (left 1/2 M302).
MB 6-1: Start 1225 8939 to Stop 1239 8953	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 22, 26, 32, 34, 35, 38, 41, 42, 43, 44, 48, 49, 50, 52, 53, 60, 65. M: 203, 204, 302, 303. <u>(7.62mm)</u> T: 19, 22, 24, 25, 28, (T40 from start only). SA: 22, 26, 33, 60, 65.
MB 6-2: Start 1260 8988 to Stop 1283 8998	BFV M240C	25mm M793, M910 7.62mm Ball/Tracer	<u>(25mm)</u> SA: 21, 34, 35, 38, 41, 42, 43, 44, 48, 49, 50, 52, 53, (SA22 from start only). M: 203, 204, 302, 303. <u>(7.62mm)</u> T: 19, 25, 32, 34, 35, 37. SA: 21, 34, 35, 41, 42, 43, 44, (SA22 from start only). M: 302, 303.

DMPRC 3-1 CAV Crew Gunnery Roadblock List, Log #6-5-12, 17 August 2012							
BLOCK	GRID	LOCATION	TYPE	BLOCK	GRID	LOCATION	TYPE
K-2	163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate	K-38	201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Cable
K-3	153 894	Across entrance road leading to Concord OP 250m N. of its intersection with Buena Vista Rd.	Gate				
K-5	117 920	Across Shamanski Rd 25m N. of its intersection with Buena Vista Rd.	Gate	K-39	202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Cable
K9	103 921	On Buena Vista Road 50m East of its intersection with Moore Road.	Gate				
K9A	107 919	On Tank Trail approximately 220m East of Upatoi Creek.	Gate				
K10	118 920	Across Buena Vista Rd at K-5 road block.	Gate				
K-16	190 003	Across Rinehart Rd 100m W. of its intersection with Box Springs Rd.	Gate	K-41	192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Cable
K-28	191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Cable	K-42	194 956	Across Box Springs Rd 1200m N. of its intersection with Cactus Rd.	Gate
K29	189 888	Across un-named trail on Cactus Range approximately 290m West of Cactus Road.	Gate				
K-30	190 890	Across un-named trail on Cactus Range approximately 370m West of Cactus Road.	Gate	L-10	110 918	North on Hourglass road South of Buena Vista road 175 meters past tank trail.	Gate
K-32	192 915	Across Shamanski Rd 35m W. of its intersection with Cactus Rd.	Gate	D-1	098 878	On Hourglass Road, 700 meters north of 1st Division Road.	Gate
K-36	162 882	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd.	Gate	D-2	122 887	On Underwood road approximately 900 meters north of Underwood and Plymouth road intersection.	Gate
K36A	163 882	Across tank Trail 35m W. of its intersection with Box Springs Rd.	Gate				

DMPRC 3-1 CAV Crew Gunnery Roadguard List, Log #6-5-12, 17 August 2012					
Guard #1	On Buena Vista Road at 103 921 (K9 roadblock) blocking traffic going East on Buena Vista Road.		Guard #3	On Buena Vista Road at 1628 8822 (K36 Roadblock) blocking traffic going North-West on Buena Vista Road.	
Guard #2	On Hourglass Road at 098 878 (D1 roadblock) blocking traffic going North on Hourglass Road. OJC will coordinate with Mr Cribb (706-626-2678) to inform Guard to allow limited access to the DMPRC Control Center.				

DMPRC 3-1 CAV Crew Gunnery Barrier List, Log #6-5-12, 17 August 2012					
Barrier #1	On un-named trail at 1553 8738 blocking traffic going West.		Barrier #2	On un-named trail at 1608 8766 blocking traffic going West.	



DMPRC Guard 1 @ K

K9A

L10

K5

K10

DMPRC
Ammo Point

DMPRC
Control Center

DMPRC Guard 2 @ D1

D2

DMPRC 31 CAV
Crew Gunnery

DMPRC Guard 3 @ K36

K36A

DMPRC Barrier

DMPRC Barrier

K2

K3

SB

PL

Moore Rd

Hourellass Rd

Buena Vista Rd

Underwood Rd

Box Springs Rd

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM5-19; the proponent agency is TRADOC

1. MSN/TASK Gunnery LFX (DMPRC)	2a. DTG BEGIN 020800AUG2012	2b. DTG END 010800AUG2013	3. DATE PREPARED (YYYYMMDD) 20120627
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4. PREPARED BY:		
a. LAST NAME McKearn, Nicholas L.	b. RANK SSG	c. POSITION Squadron 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?
Conduct of Live Fire Exercise	Direct Fire Fratricide During Execution of Mission	M	1. Soldiers/Crews observe appropriate weapons safety posture and weapons control status as dictated by the tower. 2. Leaders request change to weapons safety posture and weapons control status through Range NCOIC/ MG. 3. Crews complete GST/GTI prior to execution of live fire training. 4. Crews complete TCPC prior to execution of live fire. 5. Crews able to identify range markers prior to day and night firing. 6. Safety briefing twice a day. 7. Range OIC/RSO enforces unit chain of command compliance with all range safety measures. 8. Medics on site.	L	Leader supervision of weapon clearing procedures, and safety briefings. FM 3-20.21, TC 3-20.21-1, DA PAM 385-63, Concept of Operations, Applicable weapon TM	All Leaders, OIC, RSO	

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

a. LAST NAME ANDREW C. HILMES	b. RANK LTC	c. DUTY POSITION SQUADRON COMMANDER	d. SIGNATURE 
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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 of Live Fire Exercise	Fratricide due to accidental discharge while loading/unloading weapons systems.	M	<ol style="list-style-type: none"> 1. Crews complete GST/GTI prior to live fire. 2. Crewmembers observe appropriate weapons safety posture and weapons control status. 3. Executing unit changes weapons safety posture only when directed to do so by Range NCOIC/MG 4. Upon completion, Vehicle Commanders inspect and report that all weapons systems are green and clear. 5. RSO inspection of weapons systems prior to vehicles returning to cantonment area. 6. Safety briefing twice a day. 7. Medics on site. 	L	Leader supervision of weapon clearing procedures, safety briefings, DA PAM 385-63, TC 3-20.21-1, FM 3-20.21, Applicable TM,	All Leaders, OIC, RSO	
	Fire inside crew compartment of Bradley Fighting Vehicle	M	<ol style="list-style-type: none"> 1. Crews complete prep to fire checks prior to firing. 2. Leaders complete PCIs prior to firing. 3. Crews conduct PMCS daily. 4. Crews complete rehearsals of crew EVAC drills daily prior to firing. 5. Loaders follow proper loading procedures. 6. Crews wear Nomex suit with balaclava, gloves, and spall vest while firing. 	L	Leader supervision of crew evacuation drills and briefings. Adherence to all proper loading procedures. TC 3-20.21, FM 3-20.21, Unit TACSOP	All Leaders, RSO, OIC	

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?
	Soldier struck by a vehicle.	M	<ol style="list-style-type: none"> 1. Ground Guides utilized IAW Range SOP and utilize proper hand and arm signals. 2. No vehicle authorized to move in reverse without rear ground guide present 3. Ground guides posted five meters to the right front and right rear of tracked vehicles when moving in cantonment areas. 4. All night ground guiding will be conducted with flashlights. 5. Chain of command enforces established speed limits. 6. Leaders maintain situational awareness of dismounted Soldiers operating around their vehicles and unit assembly areas. 7. Dismounted Soldiers carry flashlights or chem lights and maintain situational awareness of nearby and approaching vehicles, especially at night. 8. Bivouac areas are designated and marked w/ engineer tape and chemlights. 9. Medics on site. 	L	Leader supervision and briefings. TC 21-305, FM 21-60, Unit TACSOP	Unit leaders, OIC, RSO	
	Heat Injury	H	<ol style="list-style-type: none"> 1. Prior heat injuries will be identified prior to the training event. 2. Heat index will be monitored and work/rest cycle will be enforced. 3. Soldiers will hydrate continuously. 4. Leaders will monitor range control net for weather advisories. 5. Soldiers exhibiting signs of heat injury will be treated IAW FM 4-25.11 and BDE Heat Injury SOP. 6. Medics available on site. 	M	Leaders monitor Soldiers' water and food consumption. Designated rest area located in the shade provided to facilitate work/rest cycle. Heat casualties treated IAW MCOE and Brigade Heat Injury Prevention SOP.	First Line Supervisors, Vehicle Commanders, Platoon Sergeants	

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?
Execution of live fire exercise	Injury or damage due to a weapons misfire or malfunction	M	<ol style="list-style-type: none"> 1. Proper execution of crew drills. 2. Proper misfire procedures will be followed IAW -10 manuals for all weapons systems. 3. Operators and supervisors will inspect all ammunition for serviceability. 4. PMCS and pre-fire checks will be verified by TCs before firing. 5. Proper weapon control status observed at all times. 6. Leaders request change of weapon safety status from NCOIC/MG. 7. Medics on site. 	L	Leader supervision of clearing procedures and briefings, FM 3-20.21, TC 3-20.21-1, Range Concept of Operations, TACSOP	Unit Leaders, RSO, OIC	
	Detonation of stored ammunition	M	<ol style="list-style-type: none"> 1. No smoking within 50 meters of stored ammunition or military vehicle. 2. RSO ensures proper ammunition storage procedures are observed. 	L	Leader supervision and briefings. Leader inspections to ensure proper storage of ammunition. AR 71-9, AR 385-63	All Leaders, OIC, RSO, Ammunition NCO	
	Personnel forward of the firing line.	M	<ol style="list-style-type: none"> 1. Leaders maintain accountability of all assigned personnel. 2. Leaders ensure Soldiers use the buddy system to watch out for each other. 	L	Leader supervision and briefings. Assign and enforce buddy teams prior to live fire.	RSO, OIC, Vehicle Commanders, Platoon Sergeants	
	Cold Weather Injuries	M	<ol style="list-style-type: none"> 1. Prior cold injuries identified prior to the training event. 2. Warm up tents will be provided IAW Unit TACSOP. 3. PMCS conducted on all vehicle heating units prior to the training event. 4. Leaders will monitor range control net for weather advisories. 5. Soldiers inspected to ensure clean uniform and socks twice daily. 6. Cold Weather Packing List enforced during cold weather months. 	L	Leader supervision and inspection, Safety Briefings, FM 4-25.11, Unit TACSOP	All Leaders, RSO, OIC, 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?
Execution of live fire exercise	Laser rangefinder operation	M	1. Laser rangefinders will only be utilized when the range is in the appropriate direct fire status. 2. Lasers will be inspected by the RSO to ensure the proper status when exiting the range. 3. OIC will verify that no reflective materials are in the area surrounding targetry. 4. Laser ranger finders will only be used on approved targets with appropriate backstops.	L	Leader supervision and briefings. Leader inspection and verification of range scenario. AR 385-63	OIC, RSO, Unit Master Gunner	
	Animal bites and stings	M	1. Soldiers will receive a thorough safety brief concerning contact with local wildlife. 2. Personnel allergic to stings identified prior to the operation; leaders will ensure that these individuals carry sting kits to prevent anaphylactic shock and mark their uniform with white engineer tape to ensure other Soldiers and leaders are aware of their condition.	L	Leader supervision and briefings. Medics and CLS on site. FM 4-25.11	OIC, RSO, Unit Leaders	
	Hearing Loss	M	1. Soldiers will wear the appropriate hearing protection while operating vehicles and while operating on the range.	L	Leader enforcement. Hearing protection available for visitors. Unit TACSOP AR 40-501	Vehicle Commanders, RSO, OIC	



RECORD OF ENVIRONMENTAL CONSIDERATION (REC)



Date Submitted: 7/12/2012

EMD Number: 1219403 **Project#:** Unknown **Project Title:** Bradley live fire exercise

Description of proposed action:

Utilize lanes 1 thru 3 to qualify crews as a section. Total of 8 Bradleys going thru the lanes. They will be firing stationary and moving at stationary and moving targets. Beginning from the baseline of the DMPRC till LOA at Maneuver Box C.

Project Location:

Digital Multi Purpose Range Complex

Amount, Description, Location of Disturbance/Digging:

None

Number of Personnel:

70

Type of Ammunition:

25MM, 7.62MM Live

Number/Types of Trees:

None

Size of Project Area: N/A

Duration of Action: Start: 7/20/2012 Stop: 9/30/2012

Proponent: ismelsanchez 706-544-7339

Organization/Unit: Cco 1-29IN

Number/Types of Vehicles:

Number of vehicles: 8
Types of vehicles: M2A2, M2A3, HMMWV
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, 2012

Natural Resources RCW - BRAC Conditions:

Jonathan Neufeldt (706 544 7705), 7/16/2012

This type of training is covered in the 2004 DMPRC BA with associated BO. This 144R is identical to one submitted in 2010. If the training is the same as training conducted in 2010 (all vehicular traffic stays on DMPRC and all munitions impacts stay on DMPRC or impact in K15), then the RCW should not be impacted. Note: RCW Breeding season is in effect until 31 July, but RCWs within 0.5 mi of proposed training already have fledged young. Please outline the maneuver boxes on attached maps in the future.

Noise

Conditions:

NEPA Management (706 545 2400), 7/17/2012

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: 1219403

IJO# Unknown

Project Title: Bradley live fire exercise

CWA - Training

Conditions:

Jessica Taylor (706-604-4572), 7/13/2012

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.

Hazardous Materials/Waste

Conditions:

Ted Williams (706 545 7579), 7/13/2012

- Ensure personnel know the correct procedure for handling misfires at the range:
- Closed containers (ammunition can marked "MISFIRES") will be used for the collection of misfires at each firing range.
- The MISFIRE container will stay closed except to add or remove misfires.
- Misfires SHALL NOT BE COLLECTED in any open container or cardboard box.
- Ensure that all containers for collection of patches and swaps are kept closed unless weapons cleaning products are being added. Contact EPMB for detailed information on the proper disposal of waste products resulting from the 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.

Signature John E Brown

John E Brown

NEPA Program Manager

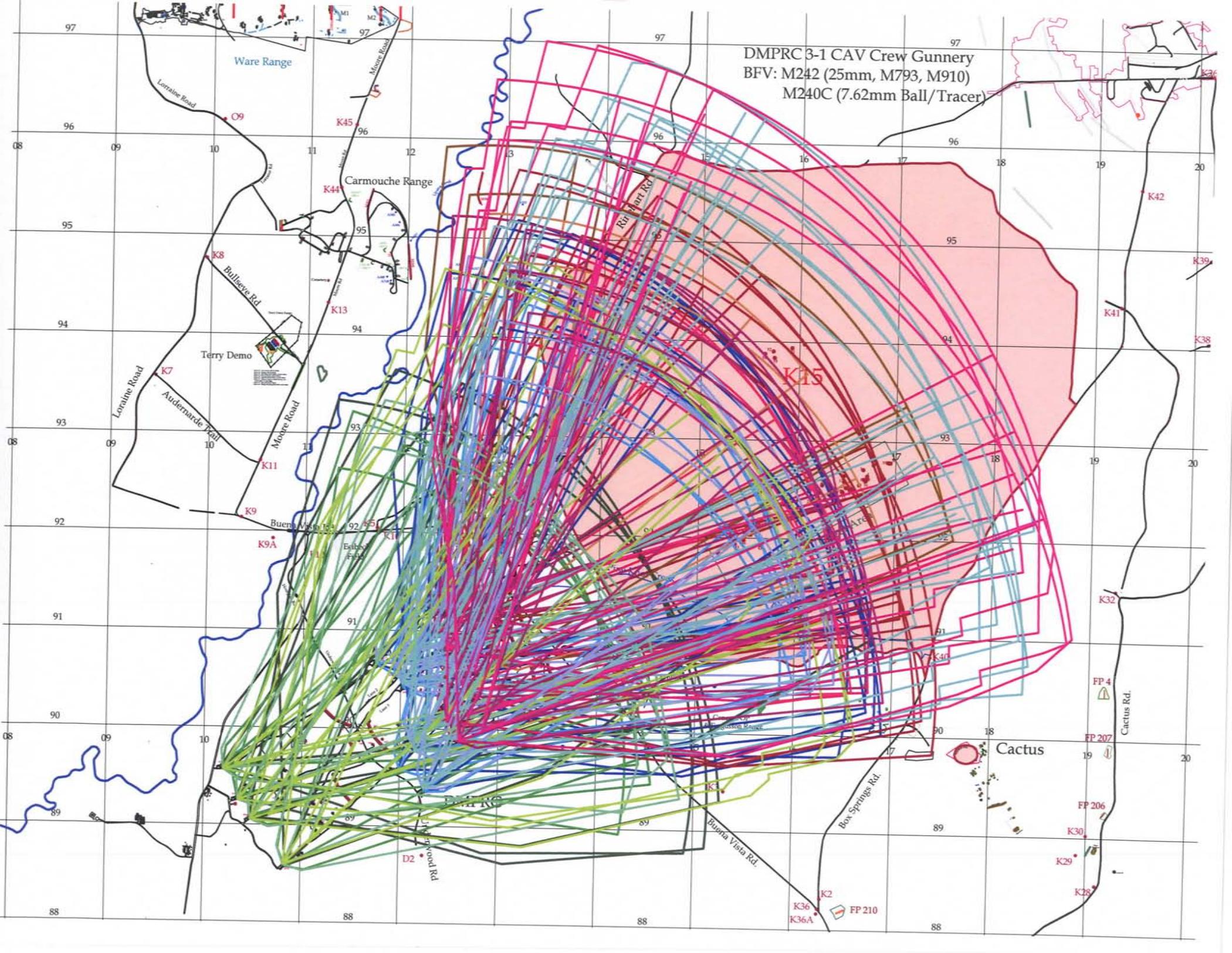
Date 19 July 2012

Signature Christopher E. Hamilton

Christopher E. Hamilton, PhD

EPMB Chief

Date 19 Jul 12



DMPRC 3-1 CAV Crew Gunnery
BFV: M242 (25mm, M793, M910)
M240C (7.62mm Ball/Tracer)

Ware Range

Carmouche Range

Terry Demo

Cactus

Lorraine Road

Moore Road

Bullseye Rd

Audemarde Trail

Moore Road

Buena Vista Rd

Wood Rd

Buena Vista Rd

Box Springs Rd

Cactus Rd

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