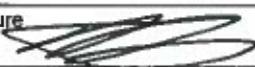


FIRING/NONFIRING DATA		1. DATE OF REQUEST	
For use of this form, see MCoE Regulation 350-19; the proponent is DPTMS, Range Division.		14 Jan 2016	
2. TO Chief, Range Division, Directorate of Plans, Training, Mobilization, and Security Fort Benning, GA 31905		3. RANGE: DMPRC	
		4. TITLE: PLT Live Fire CALFEX	
		5. PROBLEM NO: LOG # 01-02-16	
6. THRU (Unit/Activity) TF 1-28 IN. Fort Benning, GA. 31905		7. FROM (Unit/Activity) TF 1-28 IN. Fort Benning, GA. 31905	
SECTION I, TYPE OF TRAINING			
a. Live Fire <input checked="" type="checkbox"/>	b. Non-live Fire <input type="checkbox"/>	c. CP/Controller Coordinates 1025 8925	
SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS			
a. Coordinates	b. Type	c. Model/DODAC	d. Size of Charges
See weapons/ammo list	See weapons/ammo list	See weapons/ammo list	N/A
SECTION III, WEAPONS/AMMUNITION REQUESTED			
a. Coordinates of Weapons Position	b. Type Weapon/Model Number	c. Type Ammunition	d. Left Limit <input type="checkbox"/> deg <input checked="" type="checkbox"/> mil
			e. Right Limit <input type="checkbox"/> deg <input checked="" type="checkbox"/> mil
See Weapons and Ammo List	See Weapons and Ammo List	See Weapons and Ammo List	See Weapons and Ammo List
SECTION IV, LIVE FIRE EXERCISES (Attach the following)		SECTION V, NON-LIVE FIRE TRAINING	
a. <input checked="" type="checkbox"/> Scenario of training to be conducted	a. Training area(s) to be occupied		
b. <input checked="" type="checkbox"/> Sketch of area	b. <input type="checkbox"/> Scenario of training to be conducted		
c. <input checked="" type="checkbox"/> Risk Assessment	c. <input type="checkbox"/> Sketch of area(s) to be occupied		
d. <input type="checkbox"/> Attach FB Form 350-19-2-E-R if mortar or artillery is being fired	d. <input type="checkbox"/> Risk Assessment		
e. Name/Rank of Requesting Officer Buller, Thomas T. CPT.	e. Name/Rank of Major Unit S3/Commander Kain, Jeffery M. MAJ.		
Signature 	Signature 		
SECTION VI, FOR RANGE DIVISION USE		a. DATE 22 Jan 16	
b. TO TF 1-28 IN. Fort Benning, GA. 31905		c. FROM Range Division, Directorate of Plans, Training, Mobilization, and Security Fort Benning, GA 31905	
d. Roadblocks to be closed: See Road Block Enclosure			
e. Road(s) to be closed/road barrier locations: See Road Block Enclosure			
f. Remarks: Laser warning signs will be in place prior to there use.			
g. This approval expires: 21 JAN 16		h. DATE 22 Jan 16	
i. Approving Official Chief, Range Division Directorate of Plans, Training, Mobilization, and Security		Signature 	

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 1 of 9

Firing Positions	Weapons	Ammunition	Target List
OP 1: 1025 8925	M110	7.62 match/.300 WINMAG	T36
ABF 1 (BP 1A) 1019 8960	M2 M240	.50Cal 7.62mm	T9 SA47/SA5/SA6/T9
SQD Meet Engagement 1100 8913 to 1108 8910	M4/M320/M249	5.56mm/40mm TPT	T15
The Following Pyrotechnics Will be Used on The Engagements Above			
HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116). Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.			

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 2 of 9

Firing Positions	Weapons	Ammunition	Target List
SBF 1 1140 8950 to 1135 8952	M4/M240	5.56mm/7.62mm	Troop TGT 1-2 1) 1145 8989 2) 1150 8980 3) SA8
SBF 1a (Shift Fire) 1140 8950 to 1135 8952	M4/M240	5.56mm/7.62mm	Troop TGT 1-2 1) 1134 9005 2) 1128 8980 3B) 1137 8980
ABF 3 1085 8995	M240	7.62mm	Troop TGTs 4-5 4) 1135 9041 5) 1137 9038

The Following Pyrotechnics Will be Used on The Engagements Above

HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116).
 Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 3 of 9

Firing Positions	Weapons	Ammunition	Target List
SBF 2 1151 8970	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 10-11 10) 1163 8979 11) 1165 8975
Breach 1147 8973	M1A1 Bangalore Torpedo	2x M1A1 Bangalore Torpedo (22lbs Net Explosive Weight) M026	Wire Obstacle
Clear OBJ 1150 8984	M4	5.56mm	Trench Targets
ABF 3 Gun Trucks to LOA 1142 9037	M2/M240	.50Cal/7.62mm	T38, T54, SA64, SA25
Hasty BP1 1170 9005	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 8-9 8) 1190 9007 9) 1183 9018
Hasty BP2 1190 8980	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 6-7 6) 1208 8965 7) 1214 8972 T40

The Following Pyrotechnics Will be Used on The Engagements Above

HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116). Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 4 of 9

Firing Positions	Weapons	Ammunition	Target List
<p align="center">SBF 1 1140 8950 to 1135 8952</p>	<p align="center">M240/M4</p>	<p align="center">7.62mm/5.56mm</p>	<p align="center">Troop TGT 1-2 1) 1145 8989 2) 1150 8980 3) SA8</p>
<p align="center">SBF 1a (Shift Fire) 1140 8950 to 1135 8952</p>	<p align="center">M240/M4</p>	<p align="center">7.62mm/5.56mm</p>	<p align="center">Troop TGT 3 3) 1134 9005 3A) 1128 8980 3B) 1137 8980</p>

The Following Pyrotechnics Will be Used on The Engagements Above

HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116).
 Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 5 of 9

Firing Positions	Weapons	Ammunition	Target List
SBF 2 Local SBF 1151 8970 (T-12)	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 1-2 1) 1145 8789 2) 1150 8980 SA8
SBF 2a Displace/Shift Fire 1151 8970	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 10-11 10) 1163 8979 11) 1165 8975
Clear OBJ 1150 8984	M4	5.56mm	Trench Targets
Hasty BP1 1170 9005	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 8-9 8) 1190 8965 9) 1183 9018

The Following Pyrotechnics Will be Used on The Engagements Above

HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116).
Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 6 of 9

Firing Positions	Weapons	Ammunition	Target List
ABF 1 (BP 4c) 1265 9037	M2/M240	.50Cal 7.62mm	T 31 SA 40, SA 32
ABF 2 (BP 3c) 1238 9085	M2/M240	.50Cal/7.62mm	T 29 SA 37
ABF 3 (BP 4d) 1300 9065	M2/M240	.50Cal/7.62mm	T37 SA 49, SA 43
ABF 4 (BP 3d) 1285 9115	M240	7.62mm	SA 56, SA 46, SA 57

The Following Pyrotechnics Will be Used on The Engagements Above

HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116).
 Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.

DMPRC, TASK FORCE CALFEX Target List Enclosure Page 7 of 9

Firing Positions	Weapons	Ammunition	Target List
ABF 5 (BP 3d) 1285 9115	M240/M4	7.62mm/5.56mm	SA 46, SA 54, SA 56, SA 57, SA 61
SBF 1 1351 9060	M240/M249/M4/M320	7.62mm/5.56mm/40mm TPT	Troop TGT 12-13 12) 1340 9114 13) 1345 9110
SBF 2 1332 9085	M240/M249/M4	7.62mm/5.56mm	Cannot engage targets due to enviromental concerns

The Following Pyrotechnics Will be Used on The Engagements Above

HG, Practice Fuse (G878); HG, Smoke Green (G940); Red Star Cluster (L306); White Star Cluster (L307); Pen Gun M185 (L116).
 Various LASERS, AN/PEQ-15, etc... will be used. LASER Warning Signs Will be in Place Prior to Use.



**DEPARTMENT OF THE ARMY
1ST BATTALION, 15TH INFANTRY REGIMENT
3RD BRIGADE COMBAT TEAM, 3RD INFANTRY DIVISION
FORT BENNING, GA 31905-5900**

AFZP-VIA

23 November 2015

MEMORANDUM FOR CHIEF, RANGE OPERATIONS, DPTMS, FORT BENNING, GA
31905

SUBJECT: Scenario for Digital Multipurpose Range Complex (DMPRC) Platoon Live
Fires / CALFEX

1. **PURPOSE:** To outline the scenario for the Platoon Live Fires / CALFEX to be conducted on the DMPRC. This information is provided in accordance with MCoE Regulation 350-19 and will train and evaluate Platoons with selected enablers on the collective and individual tasks listed below. This training will support the Infantry Battalion Task Force as it prepares for a Certifying Training Event (CTE) and deployment in support of worldwide operations. Task Force Leaders will be given sufficient time to prepare and formulate a plan for the training exercise (OPORD) which will outline and give a detailed description of their mission, task organization, execution, direct, indirect, and air asset fire control measures along with other safety considerations. The Task Force will conduct deliberate leader certification in advance of the exercise to include TEWT's, leader's reconnaissance, professional development on range policies, procedures, and safety, and a formal range walk. All units will execute full force rehearsals to include dry blank and live iterations. All units will ensure required training gates are met prior to LFX including weapons qualification, team LFX, squad LFX, and crew qualification for Mounted Machine Gun (MMG) and Convoy Protection Platforms (CPP). All leaders will conduct direct liaison with enabler elements to include mortars, field artillery, engineers, snipers, and aviation. All range cadre to include master gunners, safeties, OC's, RSO's, medical teams, and OIC's will conduct an LFX/OC academy where they will be briefed detailed duties and responsibilities, contingency plans, risk mitigation, and the overall scheme of maneuver for the exercise. Upon conclusion of the Platoon LFX/ CALFEX, the BN will be able to deploy with lethal and agile platoons and squads, leaders will have a mastery of direct and indirect fires integration and detailed planning, and the Task Force will emerge a more capable and hardened force prepared for CTE's.

2. **APPLICABILITY:** This memorandum applies to TF 1-28 subordinate units / activities using the DMPRC. All Officers in Charge (OIC, Non-Commissioned Officers in Charge (NCOIC), Range Safety Officers (RSO), and Observer / Controllers (OC's) medical teams , and master gunners will be familiar with the contents of this memorandum and all other applicable references.

3. **References:**

- a. Army Regulation 385-63 and DA PAM 385-63, Range Safety
- b. Army Regulation 350-1, Army Training

- c. MCoE Regulation 350-19, Range and Terrain Regulation
- d. FM 3-23-30, Grenades and Pyrotechnic Signals
- e. DA PAM 385-10, Army Safety Program
- f. ATP 5-19, Deliberate Risk Assessment Work Sheet
- g. TC 3-21.8, Infantry Rifle Platoon and Mechanized Platoon Collective Task Publication
- h. TC 7-9, CHG 1, Infantry Live Fire Training
- i. TC 25-8, Training Ranges
- j. TC 3-20.0, Integrated Weapons Training Strategy
- k. TC 3-20.21-1, Individual and Crew Live-Fire Prerequisite Training
- l. TC 3-20.31, Training and Qualification, Crew
- m. TC -4-11.46, Convoy Protection Platform Gunnery
- n. TM 9-1300-206, Ammunition and Explosives Standards
- o. FM 3-21.12, The Infantry Weapons Company
- p. FM 3-21.8, The Infantry Platoon and Squad
- q. FM 3-34, Engineer Operations

4. COLLECTIVE TASKS:

- a. Conduct Troop Leading Procedures (07-2-5081)
- b. Conduct an Attack (07-2-9001)
- c. Synchronize Fires (06-1-5076)
- d. Conduct Tactical Movement (07-2-1342)
- e. Conduct Action on Contact (07-3-9013)
- f. Employ Snipers (07-2-3018)
- g. Breach of a Mined Wire Obstacle (07-3-D9412)
- h. Enter a Trench to Secure a Foothold (07-3-D9410)
- i. Clear a Trench line (07-3-9021)
- j. Treat Casualties (08-2-0003)
- k. Evacuate Casualties (08-2-0004)
- l. Perform Vehicle Recovery (43-2-0001)
- m. Conduct Convoy Security (19-3-2007)
- n. Engage Multiple Machinegun Targets from a Vehicle (17-5-5969)

5. AMMUNITION:

- a. HMMWV: .50 Cal (A557), 7.62 (A131), 40mm TP (BA30)
- b. M16/M4: 5.56mm (AA33, A059, A063)
- c. M249: 5.56 (A064)
- d. M240L: 7.62mm (A131)
- e. Miscellaneous Pyrotechnics and Smoke
- f. Blank Ammunition: .50 Cal, 7.62mm, 5.56mm

6. CONCEPT OF OPERATIONS:

a. General. Task Force 1-28 will be conducting a six phase Combined Arms Live Fire Exercise (CALFEX) on DMPCRC to certify all platoons on collective tasks prior to execution of a CTE. The six phases are: Certification (1), Prepare for Combat (2), Rifle Platoon Day and Night LFX (3), Rifle Platoon Daytime squal to include: Convoy Live Fire Exercise, mass casualty sequel, and vehicle recovery sequel (4), Sapper Platoon Breach LFX (5), and recovery (6). Rifle platoons will task organize to include the use of snipers, company mortars, a sapper squad, and attached weapons company gun truck sections. The sapper platoon will task organize to include the use of two attached gun truck sections for the weapons company. The distribution platoon will participate in a rifle platoon live fire, conducting a resupply at the LOA. The medical and maintenance platoons will execute collective tasks not involving the firing of weapons systems as part of rifle platoon live fires. All Task Force elements will plan to include the use of close air support, close combat attack, organic mortar and artillery fires to echelon fires IAW the Task Force Commander's training guidance.

1) Certification: The Task Force will conduct range, unit, and leader certifications in the weeks and months prior to execution of the LFX. These certifications will ensure that all Task Force elements are familiar with the requirements of this range packet, and to ensure the safe and efficient execution of live fire training.

- a. Range Certification: Based on the Task Force Commander's training guidance the staff developed the concept of operations and developed a scheme of maneuver to support those objectives. The Task Force conducted two leader's reconnaissance operations, a range control leader professional development, and briefed a draft concept to the Chief of Range Operations. The Task Force will conduct two additional rehearsals for leaders and range support personnel, and proof the range with the Task Force Master Gunner.
- b. Unit Certifications: All units conducting the live fire will conduct a deliberate and progressive train up prior to execution. For rifle platoons, all Soldiers will zero and qualify with assigned weapons within 6 months of execution. Additionally, platoons will have certified subordinate maneuver elements through fire team live fires, squad live fires, weapons squad live fires, and conducted situational training exercises on collective tasks. All mounted machine gun platforms will have certified at the crew, section, and platoon levels. The artillery battery supporting the exercise will have certified through platoon level prior to supporting the exercise. Full force

rehearsals under dry and blank conditions will be required of all maneuvering and supporting elements and treated as gates to progress to live iterations. The Task Force Commander retains sole authority, as the senior trainer, to allow units to progress to live iterations. Retraining as recommended by safeties, OIC's, or any leader will be conducted before progressing to live iterations. Aviators supporting the operation will be current rated aviators that have completed aerial gunnery certification required to support maneuvering ground units. All units executing explosives will conduct demolitions certifications and execute unit demolition training prior to participating in live breaches.

- c. **Leader Certifications:** Subordinate leaders participating in training will be certified through the live fire progression and unit training. Leaders enabling training such as RSOs, OIC's, and safeties will execute a leader academy in support of this live fire that will include credentialing to serve as RSO's or OIC's, and credentialing to handle, use, and certify demolitions. Leaders will participate in all leaders' reconnaissance, reduced force, and full force rehearsals. Range cadre will internally rehearse contingencies such as medevac, check fires, misfires, and dud procedures prior to allowing training units onto the range.
- 2) **Prepare for Combat:** Units executing training will arrive at the DMPCR and begin the execution of troop leading procedures (TLPs). During the execution of TLPs the range cadre will brief all participants the left and right limits of all engagements, positively identify the range fans, brief safety considerations and contingency plans, and ensure all maneuver and fire support control measures are understood. All task organized units will participate in TLPs and rehearsals with the training platoon.
- a. At coordinated times the platoon will move to the ammunition supply point (ASP) and draw their allocation of blank or live ammunition depending on iteration. Blank firing adapters (BFA's) will be checked at the ASP and by all leaders prior to blank iterations. The removal of BFA's will be checked prior to issuing live ammunition. Mounted weapons will draw from an ASP located at the vehicle start point following similar procedures. Demolitions will only be issued to certified demolition card holding combat engineers, and demolitions are initiators will be kept separate until their use during live breaching operations.
 - b. Once all ammunition is drawn for the iteration each element will occupy their starting position according to the scheme of maneuver. The rifle and sapper platoon will occupy an attack position, snipers will occupy an observation post, gun trucks will remain at the start point, and any sequel enablers will occupy the start point with the gun truck sections. Weapons will be oriented down range and in a safe direction at all times and units will not load until instructed to do so by their safety.
 - c. Supporting mortars and artillery, at FP 207 and FP 602 respectively, will have occupied their firing points and sighted all weapons systems per SOP and will be

ready to fire. Prior to conducting live missions each crew will ensure rounds are fused correctly and that the correct ammunition is available.

d. Supporting aviation units will execute dry runs along with maneuvering ground units and will only arm once cleared to conduct live fires. Lawson Air Field will be used as a forward arming and refueling point (FARP). The FARP will be certified by an aviation safety officer before use and the supporting aviation unit will occupy and maintain the FARP during CCA operations. Supporting aviation will laager at ACP 2 in accordance with the scheme of fires.

3) Rifle Platoon Day and Night Live Fires: All Rifle Platoons will begin their iterations in the attack position during the day or in the assault position at night. A safety, equipped with radio will be located with each squad element. The Company Commander, 1SG, Task Force Commander, and range OIC will move with the platoon leadership. Additionally safeties will be located with each supporting element and positive communication will be maintained with the fire support element at Cactus OP and any aircraft. Each iteration will be run dry, and blank before progressing into live iterations.

- a. Platoon day iterations will begin with the sniper element engaging a troop target set simulating an enemy OP. Following this engagement, supporting aircraft, either rotary or fixed wing will engage approved targets in the K15 impact area once called by the platoon leader.
- b. No direct fire engagements will take place while aircraft are in the air near the DMPCRC. Once the airspace is clear the platoon leader will clear supporting gun trucks to move up and occupy a battle position and conduct an attack by fire on targets to the north of the platoon's axis of advance.
- c. The platoon will begin movement along the axis through the first phase line that will cease gun truck fires and initiate 105mm suppressive fires from FP 602 into K15. All fires will be observed by the fire support element at Cactus OP and tracked by Q36 radar located at Lee Field.
- d. The platoon will continue movement east along the axis of advance until presented with a troop set target simulating a meeting engagement. The lead squad will engage the troop set target which will be set to single hit to avoid target over kill. The platoon leader will call for immediate suppression from the mortar platoon at FP 207 into K15. Based on the location of Cactus OP and to ensure rounds land on intended targets, only K15 targets 9 and 10 will be used for the exercise. The platoon will continue movement to the assault position under these supporting fires.
- e. Once in the assault position, the platoon leadership will task organize into support, breach, assault, and reserve elements. The first element to move will be the platoon weapons squad. The weapons squad will move up to the nearby mover berm over watching the objective and

establish support by fire (SBF) 1. The SBF will maintain suppressive fires on troop targets located near the OBJ while the remainder of the platoon moves to the east on direction of attack (DOA 1).

- f. When the lead element of the platoon crosses phase line 3, SBF 1 will continue suppression on the objective area.
- g. Upon reaching phase line 3a the platoon leadership will call for obscuration fires. The supporting 105mm platoon at FP 602 will fire an obscuration fire mission into the K15 impact area between targets 9 and 10. The platoon leader will then call for cease fire from SBF 1 allowing both continued movement on DOA 1 to the objective and the attached gun trucks to move to the east and initiate attack by fire (ABF) 2.
- h. The gun trucks will move up to the ABF 2 position and initiate fires to the north east on added troop set targets near the road intersection of Underwood Road and lane 1. The lead squad from the platoon will occupy a knoll over watching the objective and initiate a local SBF 2, **SBF 2 will not engage any targets at this location** Attached Sappers will move up to breach obstacles on the objective.
- i. While SBF2 continues over-watch, sappers will place 2 Bangalore torpedoes at 16SFA 1147 8979 that will have a net explosive weight of 22 pounds. Once the charge is set a senior combat engineer safety will certify the beaching change and all elements will move to defilade. SBF 2 will retrograde to the defilade Position (See Enclosure) and remain in defilade with the remaining two rifle squads. The weapons squad will move behind the berm SBF 1 was located on, and the sapper squad will retrograde to the defilade Position (See Enclosure) with SBF 2 and the remainder of the platoon. Once all elements have been accounted for the OIC will give permission to the sapper squad to initiate the breach. "Fire in the hole" will be announced on all nets before detonation. The charges will be dual primed and in the event of a misfire or dud the unit will execute misfire and dud procedures as briefed in the safety brief and outlined in the risk assessment.
- j. Following successful detonation, SBF 2 will reoccupy their position on the knoll and continue over-watch to the east. The sapper squad will proof and mark the lane before assault elements continue through to the objective. The senior combat engineer will ensure full detonation with appropriate effects before allowing the sapper squad to call forward the assault element
- k. Once the lead assault elements cross phase line 4, ABF 2 will cease fire allowing the platoon to maneuver on to the objective. The lead squad will enter the trench on the objective and begin clearing from south to north. Only 5.56mm weapons will be used in the trench and only three targets will be located in the trench to ensure fires are

oriented north. The targets will be silhouettes with positive feedback, such as a balloon, to ensure there is no target overkill.

- i. With the trench clear, the platoon leadership will consolidate and reorganize to continue movement to the limit of advance (LOA) to defeat a counter attack. All platoon elements will either remain on the objective or move to one of two battle positions located on the north and south sides of mover berm 201. The attached gun truck section will move up to the intersection of Underwood Road and lane 1 to occupy ABF position 3. The counter attack engagement will begin once all elements are in place. All targets will be to the east of the LOA and RFLs will ensure fires from battle positions remain oriented to the east.
- m. Once in contact on the LOA, the platoon leadership will call for 105mm final protective fires (FPF). The 105mm platoon will shoot an FPF mission between K15 targets 9 and 10. This will terminate the live day live fire and all elements will be cleared by their leadership and safeties before moving back to the attack position to conduct and after action review and prepare for follow on iterations.
- n. The night iteration will follow the same engagement scenario with the following modifications to increase safety: the only supporting elements will be the mortar platoon, 105mm platoon, and attached sapper squad. No gun trucks, snipers, CAS/CCA, will be used during night live fires. Further, to limit the possibility of a misfire and keep throughput steady, the breach will be mechanical only during night fires. The platoon will begin at the attack position for night blank and live fires, with all direct fire engagements remaining the same. Indirect fire engagements at night will be shot as coordinated illumination where the mortar platoon fires illumination and the 105mm platoon fires high explosive (HE) at the same K15 impact area targets.

4) Convoy Live Fire and Sequels: Platoons executing sequels during day time live fires will include planning for these sequels in their TLP's and rehearsals. All sequels will be following successful clearance of the objective and establishment of the LOA.

- a. The convoy live fire sequel will begin with the Task Force distribution platoon in a six vehicle convoy located at the start point of lane 1. Upon the call from the platoon leadership to conduct an immediate resupply at an logistics rally point (LRP) near the objective the convoy will begin movement south on the baseline road. The convoy will turn left heading north on the lane 5 road towards check point (CP) 1. At CP1 the southern rifle platoon battle position will cease fire and retrograde west of Underwood Road. The convoy's weapons will be in hold status oriented to the east. Once the convoy passes CP 2 the northern platoon battle position will cease fire and retrograde to the west of Underwood Road. The convoy will enter a weapons tight orientation and begin engaging targets once passing CP 3. All engagements will be off the right flank of the vehicle and mounted safeties will ensure RFL's in place are obeyed at all times to prevent overlapping of fire. The weapons company

gun truck section will remain on Underwood Road at ABF 3 which becomes CP 6 for this sequel. The lead convoy gun trucks will stop at CP 5 to allow two supply trucks to execute the resupply. Trail gun trucks will remain at CP 3 and continue to engage targets in their sector. Once the resupply is complete the convoy will move in its original order of March north on Underwood road. All elements will cease fire once the first gun truck passes CP 5. The weapons company gun trucks will link up with the convoy's lead gun trucks, and all elements will lock and clear weapons at CP 6. The convoy with weapons company section will move west back to the start point with weapons oriented to the north east once locked and cleared and checked by the mounted safety.

- b. The medical platoon will execute a non-firing sequel once the rifle platoon clears the objective area. The OIC of the exercise will assess a fire team as casualties and safeties will ensure they are locked and cleared. The platoon leader will call for medevac while continuing to the LOA while the platoon sergeant will execute casualty collection operations IAW unit SOPs. The medical platoons ambulance squads will move to occupy training AXPs on the lane 2 road. An element of the platoon will move casualties from the CCP to the AXP while the remainder of the platoon engages targets to the east along the LOA in battle positions. This sequel terminates once FPFs are fired and casualties are collected at the start point of the lane 1 road.
 - c. The maintenance platoon will execute a non-firing sequel once the rifle platoon clears the objective area. The OIC of the exercise will assess one of the supporting weapons company gun trucks as a mobility kill. Mounted safeties will ensure weapons are locked and cleared and oriented in a safe direction. The platoon leadership will call for vehicle recovery at the coordinated unit maintenance collection point (UMCP). The gun trucks, rendered safe will self-recover to the UMCP and wait for the maintenance contact team to arrive. The platoon will continue to engage targets to the east of the LOA in battle positions. Once the contact team reaches the vehicles, they will begin recovery operations back to the simulated company trains command post (CTCP). The sequel terminates once FPFs are fired and vehicles are collected at the start point of the lane 1 road.
- 5) Sapper Platoon Live Fires: The Task Force sapper platoon will execute the final live fire of the exercise. The platoon will consolidate sapper squads 24 hours prior to execution to refit, conduct TLPs, rehearsals. The sapper platoon will have two attached gun truck sections from the weapons company that will conduct TLPs and rehearsals with the platoon. The mortar platoon and the 105mm battery will provide supporting fires from FP 207 and 503 respectively. CAS and CCA will support the engagement with fires into the K15 impact area.
- a. The sapper platoon live fire will begin east of where the rifle platoon live fires occurred with an objective area east of Buena Vista Road. The platoon will begin in an attack position west of the mover 202 berm with attached gun truck sections on the lane 3 and 4 roads.

- b. The first engagement will begin with CCA/CAS attacking targets 9 and 10 in the K15 impact area. Once the engagement is complete and the airspace is clear, the gun truck sections will bound up to DMPRC battle positions 3c and 4c.
- c. From these battle positions the two sections of gun trucks will initiate fires as ABF 1 and 2 on targets to the east. Following this engagement the sections will bound up by section to BP 4d and 3d. Once the sections cross PL1, the platoon will initiate movement to the east on the axis of advance.
- d. The gun truck sections will engage additional targets to the east and north of BPs 4d and 3d respectively. As the platoon crosses PL1, the platoon leadership will call for suppressive fires supported by both the mortar platoon and the battery. The gun trucks at BP 4d will cease fire when the platoon crosses PL1 and link up with the lead elements to direct the unit into the assault position.
- e. Once the platoon is in the assault position it will task organize into breach and support elements while gun trucks at BP 3d continue to engage targets to the north. Two sapper squads will move on DOA 1 and 2 to occupy SBF 1 and 2 respectively. The SBF1 will be located on the mover 303 and will begin to engage added target sets to the north. SBF 2 will be located on the 204 berm and will provide an over-watch to the east.
- f. When all elements have passed PL2, the platoon leadership will call for obscuration fires supported by the 105mm battery while the mortar platoon fires HE in support of continued suppression.
- g. Breach squads will move under obscuration and suppression to the first sets of obstacles. Upon reaching the obstacles the breach squads will mechanically breach the wire, mark, and proof the lane and continue towards the second set of obstacles. An RFL will separate the obstacles and ensure no fires from SBF's impact near the breach zone.
- h. Upon reaching the second set of obstacles, the 2 breach squads will be reinforced with additional teams carrying 2 sets of 2 Bangalore torpedo tubes. The breach will set and certified by a senior combat engineer. All elements will retrograde back through the lanes to Mover 303 and Mover 204 berms outside the MSD of the Bangalore torpedoes. Bangalore 1 will be placed at a 40 degree angle and Bangalore 2 will be placed at a 55 degree angle. The net explosive weight of this blast will be 44 pounds and the seats of the explosion will be located at 16SFA 1357 9095 and 16SFA 1368 9085.
- i. This breach will be conducted as a simultaneous detonation. Prior to detonation, the OIC will ensure accountability of all personnel and announce "Fire in the Hole" on all nets. All personnel will be in defilade positions and all misfires or duds will be handled IAW the risk assessment and range control procedures.

- j. Once the breach is conducted the exercise will terminate and all elements will be locked and cleared and return to the attack position for AAR or return to the baseline for ammo inspection and preparation to conduct recovery operations.
- 6) Recovery: All elements will conduct a brass and ammo shakedown following execution of bank and live iterations. Platoons will walk the lanes following the last live fire to police spent brass and ammo and return to the ASP for accountability. Following the final rifle platoon live fire the unit will tear down the rifle platoon objective area and return the area to the original state before the live fire. Following the sapper live fire, the unit will tear down the sapper live fire objective area and ensure the area is returned to pre-exercise conditions. The Task Force will retrograde from the DMPRC recovering all dunnage and unspent ammo and turning that class V back to the ASP. Once the range is cleared, the range support personnel will retrograde the life support area class I and IV materials back to the unit motor pool. Upon clearance from range control the unit will close the range and submit closure reports as required. The Task Force will then execute recovery operations IAW the Task Force Recovery SOP.
7. SAFETY:
 - a. The "Crawl-Walk-Run" method of training will be the standard method used for this LFX. A detailed leader's TEWT will outline all range fans, restrictions, and safety considerations. Company rehearsals and day / night dry fire exercises will be conducted prior to units receiving clearance to participate in any LFX. All iterations will have dedicated safeties assigned to every maneuver or shooting element .
 - b. The evaluators for the LFX will consist of the Task Force Commander, Company Commander, Company 1SG, Fire Support Officer, and Senior Non-Commissioned Officers / Company Grade Officers serving as safeties. These leaders will position themselves with all command and control, maneuvering, and firing elements.
 - c. Target Reference Points (TRP's) will be placed on the range and briefed prior to the start of the exercise.
 - d. An immediate cease fire will be called and Alpha Base will be notified if a round out of impact occurs.
 - e. Alpha Base will be notified if any UXO is discovered while conducting operations on the range.
 - f. An immediate report will be submitted to Alpha Base and Brigade Headquarters if any incident resulting in an injury occurs while conducting training. The following information will be reported to Alpha Base:
 - 1) Unit Designation
 - 2) Range and Location

- 3) Type of Weapon Involved
- 4) Type of Ammunition Involved
- 5) Brief Summary of the Incident
- 6) Personnel Injuries and Extent
- 7) Full Name, SSN, and Rank of Injured Personnel
- 8) Extent of Property Damage
- 9) Intentions regarding AR 15-6 Investigation

g. **LASER Safety:** Class III LASERs are not safe on dual low mode within 25 meters. PEM-1A is not a tactical LASER and must be used within 25 meters. LASER warning signs will be in place prior to opening the range. Master Gunners will ensure that all laser targets have appropriate backstops and their surrounding area is clear of specular materials. Range safety briefings will include hazards using LASERs and NVD's. A designated LASER safety officer will ensure LASER safety is followed IAW the risk assessment at all times.

h. **Range Limits / Miscellaneous:**

- 1) Range Safeties will ensure that all weapons systems are oriented and firing within the range limits as specified in FB 350-19-R.
- 2) Unit leadership will conduct a terrain walk with the OIC and Range Safeties prior to execution of the range to verify understanding of range limits.
- 3) Dry, blank, and live fire scenarios will be the same for each executing unit.
- 4) Individuals will be briefed on the necessity of positively identifying their targets prior to engaging, especially when during limited visibility.
- 5) All live fire participants will be thoroughly briefed on phase lines, checkpoints, and all other maneuver and fire support control measures. Elements will report when they have executed phase lines and are set at battle positions using PACE plans established during TLPs and validated by safeties.
- 6) Dismounts will be marked / tracked by individual tracking units or phoenix beacons when away from vehicles during limited visibility.
- 7) **Weapons and Ammo Check:** Leaders will conduct a shakedown at the end of each iteration to verify that all ammunition has been turned in. Ammunition will be checked prior to the start of each iteration to verify that there is no mix of blank and live and that BFAs are removed for live iterations.

8. **SIGNAL:**

- a. Communications will be maintained between all key maneuvering elements and OC's at all times. This includes element to element, element to OC, and OC to

RSO. A cease fire will be given if any element loses communication at any time. Positive communication between ground controllers and air craft are required at all times when supporting aircraft are in the area.

- b. Primary method of communication is FM. Alternate method will be ICOM radios. The Task Force retrans section will set up to enable long range communications between elements on DMPCRC, CACTUS OP, and firing points/FARP
 - c. Emergency cease fire signals will be briefed prior to the start of all training exercises and will consist of Red Smoke (day) and Red Star Cluster (night).
 - d. Communications will be maintained between observers and mortars and / or artillery while conducting indirect fire. No unobserved firing will be conducted. The Task Force Q36 Radar Section will assist in tracking rounds from Lee Field.
9. MEDICAL: Medical personnel and equipment on site will be IAW unit SOP and risk level for the training being conducted. Field Litter Ambulance (FLA) will be located IAW Commander / OIC guidance and not adjacent to the mess area. The Medical Air Evacuation (MEDEVAC) point will be IAW MCoE Regulation 350-19. All incidents will be reported to Brigade Headquarters and Range Operations.
10. AMMUNITION:
- a. The Range Ammunition NCO will sign for all ammunition.
 - b. Blank and live ammunition will be held in separate field ASP's. Demolition charges will be held in a separate ASP 300m away from all personnel, buildings and equipment. Initiators will be held in a separate ASP away from demolition charges. The ASP's will be secured with triple strand concertina wire and guarded by at least two personnel at all times. Two 10lb BC fire extinguishers will be located at each ASP.
 - c. The ASP will issue each element enough ammunition for one iteration at a time.
 - d. Each element will return all unexpended ammunition to the ASP at the end of its iteration.
 - e. Blank Firing Adapters will be used during all blank firing iterations and removed prior to conducting the live fire exercise. This will be confirmed before every iteration by the range cadre.
 - f. There will be an ammunition shakedown before and after every iteration.
 - g. Delinking and relinking ammunition is not authorized.
 - h. Weapon / Ammunition Malfunction Reports: The OIC or RSO will suspend all firing and immediately notify Alpha Base when a malfunction is experienced. The

weapon and all components will be retrained in place for an investigation by the DOL.

- i. All hangfires / misfires / duds will be cleared IAW Misfire Alpha Base procedures and are outlined in the risk assessment.

11. RESPONSIBILITIES:

- a. Unit will provide necessary range personnel and equipment.
- b. Units receiving training will ensure that all elements conducting the exercise has completed all prerequisites prior to execution.
- c. The unit will maintain continuous radio communications with Alpha Base at all times. If communications are lost, the unit will go into a self-imposed check fire until communications are restored.
- d. Communications will be maintained between the OIC, RSO, and all guard posts at all times.
- e. The unit will ensure that the entire range complex is cleared upon the completion of the training event.
- f. Roadblocks, barriers, and gates will be closed and manned IAW the Roadblock / Road Guard enclosure.

- 12. The point of contact for this action is MAJ Jeffrey Kain and can be reached at (706)-544-2921 jeffrey.m.kain.mil@mail.mil


JEFFREY KAIN
MAJ, IN
Task Force Operations Officer



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

21 January 2016

MEMORANDUM FOR Commander, Task Force 1-28th IN, Attn: MAJ Jeffery Kain, 7917 Dawson Street, Bldg. 2944, Fort Benning, GA 31905

SUBJECT: TF 1-28th IN Platoon Live Fire (CALFEX) at DMPC CONOP and DRAW Review

1. References.

- a. Army Regulation 385-10, The Army Safety Program, 27 November 2013.
- b. Army Regulation 385-63, Range Safety, 30 January 2012.
- c. Department of the Army Pamphlet 40-501, Hearing Conservation Program, 10 December 1998.
- d. Department of the Army Pamphlet 385-10, Army Safety Program, RAR 19 January 2010.
- e. Department of the Army Pamphlet 385-30, Risk Management, 02 December 2014.
- f. Department of the Army Pamphlet 385-63, Range Safety, 16 April 2014
- g. Army Techniques Publication 5-19, Risk Management, 14 April 2014
- h. MCoE Regulation 350-19, Range and Terrain Regulation, 01 March 2013

2. Document received on 14 January 2016.

3. Concur w/comment.

- a. Scenario, paragraph 5, pg. 3. The ammunition list is incomplete.
- b. Scenario, paragraph 6(1)(b), pg. 4. Supporting AH-64D aircrews will be Readiness Level (RL) 1 or 2 for this mission support set.
- c. Scenario, paragraph 6(2)(d), pg. 5. Forward Area Refueling/Rearming Point (FARP) will be inspected by a qualified Aviation Safety Officer and the checklist / certification will remain on site for inspection.

ATZB-SO

SUBJECT: TF 1-28th IN Platoon Live Fire (CALFEX) at DMPRC CONOP and DRAW Review

d. Scenario, paragraph 6(3)(h), pg. 6. Unstabilized gunnery from the "gun trucks" must maintain the mandatory 15° separation between the maneuvering forces and the SBF fire.

e. DRAW, Block 2, pg. 1. The dates should be formatted with a start and end date, eg. 02/08/16 – 02/19/16.

f. DRAW, Blocks 6 & 9, pg 2. "Range/General Situational Awareness" is evaluated as a Residual Risk Level of "LOW". Recommend that the risk level be elevated to HIGH, based upon the experience level (maturity) of unit, duration (day & night) of the drill, and overall complexity (mortars and air assets).

g. DRAW, Block 7, pg. 3. "Eye/hearing loss", recommend that all special effects demolitions not be detonated no closer than 35M, IAW TC 3-23.30.
DRAW, Block

h. DRAW, Block 7, pg. 9. "Ammunition" will not be broken open until that specific training iteration is to be executed and establish two separate ammunition-holding areas. This prevents the mixing of live and blank ammunition.

i. DRAW, Block 6 & 9, pg. 12. "Fratricide", simply due to the nature of the act, the severity of the intended or unintended act, and the inaugural event begin conducted recommend that the Initial and Residual Risk Levels should be elevated to "EXTREMELY HIGH" and "HIGH".

j. DRAW, Block 7, pg. 13. "Primer or charges ignites due to mishandling or mortar ammunition", recommend that excess charges be stored in an air tight container, behind the firing line, until the time is set to destroy the excess charges.

k. DRAW, Blocks 6 & 9, pg. 14. "Body part not clear of muzzle", recommend the Initial and Residual Risk Levels be elevated to "HIGH" and "MODERATE" to accurately reflect the loss of the appendage left in front of the muzzle and the permanent disability which will result.

l. DRAW, Block 7, pg. 15. "Burning of propellants", recommend that excess charges be stored in an air tight container, behind the firing line, until the time is set to destroy the excess charges.

m. DRAW, Block 7, pg. 16. "Misfire from aerial platform", in the case where the ordinance cannot be jettisoned in the K15 or K20 impact areas the aircrew will follow all guidance in the Fort Benning local flying rules.

ATZB-SO

SUBJECT: TF 1-28th IN Platoon Live Fire (CALFEX) at DMPRC CONOP and DRAW Review

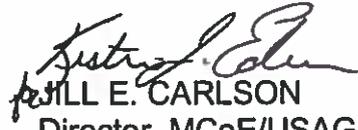
n. DRAW, Blocks 6 & 9, pg. 18. Injury due to premature detonation of blasting caps during handling/preparation of charges", recommend that the Initial and Residual Risk Levels be elevated to "HIGH" and "MODERATE" to reflect the catastrophic effect of the event.

o. DRAW, pgs. 19-24. These pages appear to be duplicates.

p. DRAW, Block 10, pg 25. The Overall Residual Risk Level needs to be elevated to "HIGH", of all recommendations are accepted.

q. DRAW, Block 12, pg. 26. The Risk Approval Authority is the first Colonel/O6 in the Chain of Command to accept the "HIGH" risk level in accordance with FORSCOM Regulation 385-10.

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/USAG Safety

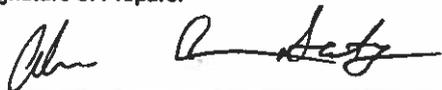
DELIBERATE RISK ASSESSMENT WORKSHEET

1. MISSION/TASK DESCRIPTION TASK FORCE CALFEX	2. DATE (DD/MM/YYYY) 11/23/2015
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3. PREPARED BY

a. Name (Last, First Middle Initial) TORRE SANTIAGO, ALEXIS	b. Rank/Grade CPT/O3	c. Duty Title/Position A/S3- TRAINING
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d. Unit TF 1-28 IN	e. Work Email alexis.torresantiago.mil@mail.mil	f. Telephone (DSN/Commercial (Include Area Code)) 706-544-2921
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g. UIC/CIN (as required) WAR0AA	h. Training Support/Lesson Plan or OPORD (as required) TASK FORCE CALFEX OPORD	i. Signature of Preparer 
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Five steps of Risk Management: (1) Identify the hazards (2) Assess the hazards (3) Develop controls & make decisions
(4) Implement controls (5) Supervise and evaluate (Step numbers not equal to numbered items on form)

4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
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	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; display: flex; align-items: center; justify-content: center;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; display: flex; align-items: center; justify-content: center;">-</div>	Conduct of Live Fire Exercise	Range/General Situational Awareness	M	<p>The range Officer in Charge (OIC) and range Safety Officer (RSO) will:</p> <ol style="list-style-type: none"> 1. Read and review the risk assessment. 2. Ensure combat lifesavers and a dedicated evacuation vehicle is available at all times. 3. Identify Soldiers with high risk behavior, illness, previous hot/cold weather injuries and maintain awareness on Soldier well-being. 4. Review evacuation procedures and reporting requirements for serious incidents. 5. Implement lightning lockdown in case of severe weather. All severe weather calls will be enforced. 6. OIC/RSO will direct an Air MEDEVAC when risk to life, limb, or eyesight exists. 7. Conduct a daily safety brief in the morning and night prior to the execution of training. 8. Disseminate weather information for timely planning and precautionary action. 9. All vehicles will move with a ground guide when entering troop assembly areas. 	<p>How: Daily safety brief MCoE Range and Terrain Regulation 350-19 AR 385-63, policies and procedures for Firing Ammunition for Training, Target Practice, and Combat, and DA PAM 385-63, Range Safety Range certified OIC/RSO Medic aid bag inventory Published AXP/CCP Maintain communication to the lowest levels</p> <hr/> <p>Who: OIC/RSO All Soldiers Leaders at all levels</p>	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Weather Injuries (Dehydration, Hypothermia, Chilblains, Frostbite, Trench Foot, etc.)	M	1. All Soldiers with previous weather injuries will be identified and closely monitored through the buddy system, company leadership, and team leader checks. 2. Immersion foot: Cause: Prolonged exposure in cold water. Usually in excess of 12 hours at temperatures below 50 degrees Fahrenheit. 3. Trench foot: Cause: Exposure to wetness and cold between freezing and 50 degrees Fahrenheit, lasting hours to several days. 4. Frost bite: Cause: Exposure to cold at temperatures at or below freezing or below, for minutes to several hours.	How: Range safety brief PCC/PCI Cold Weather injury prevention training Who: OIC/RSO All Soldiers Leaders at all levels	L
	Conduct of Live Fire Exercise	Eye/Hearing Loss	M	Range OIC will: 1. Brief all Soldiers on the dangers of not wearing approved eye wear and hearing protection. 2. Ensure extra ear protection is available. 3. All personnel will wear triple flange hearing protection when firing weapon systems addressed specifically in the waiver. 4. All injuries will be assessed by medical personnel and eye injuries evacuated to TMC.	How: AR 385-63, policies and procedures for Firing Ammunition for Training, Target Practice, and Combat Range safety brief PCC/PCIs Who: All Soldiers OIC/RSO Medics	L
		Bug bites/Snake bites/bug stings	M	Range OIC/RSO will: 1. Advise Soldiers of wildlife precautions to prevent bites and stings. 2. Ensure personnel with medical allergies have appropriate medical supplies on person and at the training site 3. Ensure supplies are kept up to date to treat any case of anaphylactic shock. 4. Do not harass wildlife. 5. Report presence of dangerous wildlife to leadership.	How: Range safety brief Who: All Soldiers RSO	L
<input type="checkbox"/> + <input type="checkbox"/> -						
<input type="checkbox"/> + <input type="checkbox"/> -						

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
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	4. SDBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">-</div>	Conduct of Live Fire Exercise	Fire hazards	M	<ol style="list-style-type: none"> 1. Ammunition NCO will ensure there is no smoking within 50 feet of ammunition and flammable materials. 2. Soldiers will not smoke outside of approved smoking areas. 3. Ammo NCO will ensure 2x 10lb BC fire extinguishers are present and within maintenance specs at all ASPs. 4. Ammo NCO and ammo detail will be aware of emergency procedures. 5. Enforce a zero tolerance for tampering, linking/de-linking of rounds to modify effects. 6. Ensure fires on the range are reported to the Tower and Range Control. 7. Ensure a fire fighting detail is prepared to combat fires on the range after a cease fire is issued. 8. A self-imposed check fire will be issued for fires affecting the conduct of the exercise or fires that require immediate attention for the safety of all Soldiers and training units. 9. Explosives will be stored in separate containers away from all other munitions and initiators. 10. Qualified personnel will handle explosives transport to and from the range. 11. The tampering of explosives will not be tolerated at any time. Senior NCOs and Team Leaders will supervise at all times to ensure safety. 12. Explosives ASP will be at least 300m away from all personnel, facilities, and other ASPs. 	<p>How: Range safety brief Enforce ASP security at all times and proper ammunition storage, issue/turn in procedures MCoE Range and Terrain Regulation 350-19</p> <p>Who: All Soldiers Leaders at all levels RSO Ammo NCO Tower cadre</p>	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; display: flex; align-items: center; justify-content: center;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; display: flex; align-items: center; justify-content: center;">-</div>		Lost Soldier	M	<p>1. Safety briefing will include measures to take if lost or separated.</p> <p>2. A SITREP will be provided by the Chain of Command to Range Control.</p> <p>3. Task Force units will issue a cease fire and conduct a search for the lost Soldier using all available manpower.</p> <p>4. All Soldiers will be issued safety azimuths.</p> <p>5. Dedicated contingency vehicles will be coordinated to search for a lost Soldier.</p> <p>6. During limited visibility, vehicles will utilize white light to increase signature and assist in rally point identification.</p> <p>7. OC/T Academy will train leaders on appropriate prevention measures.</p> <p>8. Units will rehearse lost Soldier scenario to ensure all Soldiers know the proper procedures to implement.</p>	<p>How: MCoE Range and Terrain Regulation 350-19 Range safety brief</p> <hr/> <p>Who: OIC/RSO Leaders at all levels All Soldiers</p>	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; padding: 2px; width: 20px; margin: 5px auto;">+</div> <div style="border: 1px solid black; padding: 2px; width: 20px; margin: 5px auto;">-</div>		Movement to and from ranges	M	<ol style="list-style-type: none"> 1. RSO gives detailed safety briefing to all Soldiers advising of posted speed limits, proper following distance, washouts, ditches, recovery plan, limited visibility movement, proper night time markings. 2. Soldiers in vehicles must maintain proper PPE at all times to avoid injury. 3. Vehicle rollover drills will be conducted 4. Utilized approved routes. 5. Driver's training. 6. Current dispatches and licenses checked for all operators. 7. Utilize troop safety strap while in LMTV/ HMWWVs. 8. Convoy Commander briefs safe following distances and procedures in case of a vehicle collision. 9. Recovery plan will be established and CASEVAC plan en route to and from range. 10. Route reconnaissance will be conducted on all primary and alternate routes to include administrative and tactical routes. 11. Experienced vehicle crews will adhere to all range safety provisions while conducting the exercise to prevent accidents and Soldier injury. 	<p>How: Range safety brief Convoy brief Vehicle commander supervision Driver rest plan</p> <p>Who: All Soldiers Driver/TC Convoy commander OIC/RSO</p>	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Gunner/Vehicle Commander ejected from vehicle during rollover	M	1. PMCS will be conducted daily IAW applicable pub. 2. All drivers will be properly licensed. 3. A route recon will be conducted to identify any possible hazards to vehicles and Soldiers. 4. Speed limits enforced. 5. Soldiers wear proper PPE and all gunners will utilize the gunners restraint system. 6. Rehearse vehicle roll over drills and first aid. 7. Gunners will not exceed nametape defilade while in the turret.	How: MCoE Regulation 350-19 Range safety brief Driver's training Rehearsals	L
	Who: All Soldiers OIC/RSO Team Leaders Vehicle commanders					
<input type="checkbox"/> + <input type="checkbox"/> -		Environmental considerations	M	1. Soldiers will be briefed on the location of latrines. 2. Range will be policed of all garbage and procedures for proper disposal daily. 3. All vehicles utilize drip pans. 4. All spills will be reported to Range Control. 5. POL spill kit will be available. 6. Soldiers will stay away from protected species clusters. 7. No digging will be authorized unless approved by Environmental. 8. All approved digging sites will be appropriately restored once training is complete. 9. Soldiers will not tamper or dig IVO blackwater creek sites or protected grounds. 10. All Task Force units will adhere to approved 144R.	How: MCoE Regulation 350-19 Range safety brief PMCS	L
	Who: OIC/RSO NCO supervision All Soldiers					

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -		Round out of Impact	II	1. No live fire training will be permitted without meeting all prerequisite training. 2. Range will be proofed by the Master Gunner ensuring all targets can be engaged safely within the range fan. 3. Crews will only engage targets presented within their individual lane. 4. Crews will identify range fans prior to engagement. 5. OIC/RSO provide range orientation brief during safety brief.	How: OIC/RSO safety brief PMI Muzzle awareness Target identification Soldier discipline Who: All Soldiers Leaders at all levels	M
	Conduct of Live Fire Exercise	Ammunition	M	1. Live ammunition will be kept separate from blank ammunition with a properly guarded issue and turn in point. 2. Ammunition NCO will ensure accurate accountability of all ammunition. 3. The mixing of ammunition is unauthorized and will be closely monitored by all senior NCOs and the Ammunition NCO. 4. Ensure all blank adapters are installed prior to blank fire iterations. 5. Remove all BFAs from weapons prior to execution of Live Fire iteration. 6. Companies will certify Soldiers at the Ammunition Handler's Course prior to execution.	How: Leader supervision Range safety brief Team leader checks PCC/PCIs Who: All Soldiers Leaders at all levels Ammo NCO/Detail OIC/RSO	L
<input type="checkbox"/> + <input type="checkbox"/> -						

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Misfire	II	1. Mounted sections conduct crew drills to rehearse proper misfire procedures. 2. Dismounted troops ensure proper misfire procedures are rehearsed prior to execution of training 3. PMI training will be conducted prior to execution. 4. Weapons maintenance conducted IAW -10 manual 5. All rounds will be inspected prior to firing. 6. Proper tube maintenance is conducted and misfires handled IAW FM 3-22.90.	How: MCoE Regulation 350-19 Range safety brief Continuous supervision Training on misfire procedures Who: All Soldiers Leaders at all levels OIC/RSO Vehicle commanders	M

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
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	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK/LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK/LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; display: flex; align-items: center; justify-content: center;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; display: flex; align-items: center; justify-content: center;">-</div>	Conduct of Live Fire Exercise	Fratricide	H	<ol style="list-style-type: none"> 1. RSO briefs range limits and safety. 2. Mounted elements maneuver within approved lanes while conducting interation. 3. All firing crews completed certified through Table VI. 4. Conduct rehearsals of battle drills, trigger and safety switch manipulation. 5. Sections rehearse crew drills prior to live fire. 6. Proper weapons maintenance IAW the -10 manual. 7. Ensure live ammunition is not mixed into blank fire iterations. 8. Ensure high risk Soldiers are identified prior to conducting training with live ammunition. 9. Any Soldier identified as high risk should be observed for behaviors or gestures that may danger Soldiers. 10. FLA will be available for the immediate EVAC of injured personnel to the nearest medical care facility. 11. Air MEDEVAC requests are the responsibility of the Task Force. Range control can assist as necessary. 12. Ensure Soldiers have adequate rest prior to live fire exercises. 13. Dry and blank fire iterations will be conducted prior to the live fire exercise. 14. All platoons have conducted a team and squad level live fire exercise. 15. Platoon STX will be conducted prior to execution of exercise. 16. Leader TEWT has occurred. 17. Each maneuver element will have a safety. 18. Proper PPE will be worn at all times. 	<p>How: Range safety brief MCoE Regulation 350-19 AR 385-63, policies and procedures for Firing Ammunition for Training, Target Practice, and Combat High Risk Soldier backbrief PMI and rehearsals</p> <p>Who: OIC/RSO Leaders at all levels Individual Soldier</p>	M

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -		Laser Safety	M	1. Laser signs will be posted within the training area. 2. PMI training will be conducted prior to the exercise to train Soldiers on the dangers of Laser to eye exposure. 3. All lasers will be treated as a weapon and only used when needed. 4. No laser aiming at aircraft will be tolerated. 5. A variety of lasers and designators will be used in the training. Rehearsals will address safety concerns and proper usage. 6. A Laser Safety Officer (LSO) will be designated for the training exercise to monitor proper use in accordance with FB regulations.	How: Range Safety Brief PMI Soldier discipline Rehearsals Who: All Soldiers RSO/OIC LSO Team Leaders	L
<input type="checkbox"/> + <input type="checkbox"/> -	Firing of Mortar/Artillery Rounds	Primer or charges ignite due to mishandling of mortar ammunition	M	1. Proper handling of mortar ammunition with respect to the tail fin assembly primer's ability to ignite causing the outer charges to ignite if the round is dropped. 2. The firing pin on the bottom of the tail fin assembly does not have to be indented to cause the primer to ignite. 3. Everyone can call a "cease fire" in the event of an unsafe act. 4. Gun Tubes will enforce safety standards at all times. 5. MORTEP/AT certifications will be completed through Table XII.	How: MCoE Regulation 350-19 Range safety brief Who: Mortar PL/PSG OIC/RSO Range Safeties FSO/FDC	L
<input type="checkbox"/> + <input type="checkbox"/> -		Round fire from tube during misfire procedures	H	1. Range NCOIC or RSO will brief all Soldiers to call an immediate "cease fire" or "misfire" in any unsafe act. 2. Ensure Soldiers move a minimum safe distance during a "misfire". 3. Range cadre handle misfires through appropriate personnel/agencies. 4. MORTEP/AT will be conducted prior to exercise to qualify teams. 5. Notify Range Control during any IDF misfires.	How: MCoE Regulation 350-19 Range safety brief MORTEP Certification Rehearsals Who: NCOs Mortar Firing teams OIC/RSO	M

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -		Body part not clear of muzzle	M	1. Range safety officer will ensure that CLS personnel are available to treat any injuries. Aid bags will be stocked with appropriate supplies. 2. Ensure rehearsals on the proper procedure for hanging rounds is conducted.	How: MCoE Regulation 350-19 Range safety brief MCoE PM 385-6-13 Who: All Soldiers OIC/RSO Mortar PL/PSG	L
<input type="checkbox"/> + <input type="checkbox"/> -	Firing of Mortar/Artillery Rounds	Round out of impact area	M	1. Range NCOIC or RSO will declinate the M2 aiming circle. Inspect boresight on all firing mortars for deflection and elevation. 2. Ensure safety "T" is placed on each firing mortar. Baseplates are settled. 3. All rounds will be observed. 4. Call "cease fire" if observing any unsafe act. 5. Notify Range Control of any round out of impact area. 6. Gun safeties will verify that the correct data is placed on the sight (deflection and elevation) and bubbles are level. 7. Ensure that the correct charge is on the round. 8. Verify that the correct time setting is on the multi-time fuze. 9. Mortar systems will register prior to conducting call for fire missions. 10. Aircraft rounds requiring jettison will be do so in the approved impact area. All training will cease until aircraft has cleared the "hung rounds." Aircraft will proceed back to the FARP to be inspected by qualified air crews. 11. Unit will utilize Q36 Radar to track IDF flight path and impact. FST will be located at Cactus OP with GTAC and JFO.	How: DA Pam 385-63 MCoE Regulation 350-6-3 Who: Mortar PL/PSG RSO/OIC All Mortar Firing Teams FDC/FSO	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Firing of Mortar/Artillery Rounds	Burning of propellants	M	1. Range OIC and NCOIC will observe an experience cadre member burn propellant in accordance with Company SOP and Range Control guidance. 2. Inform Mortar teams of potential hazards of burning propellant charges and demonstrate the proper way to dispose of them.	How: MCoE Regulation 350-19 Range safety brief MCoE Pam 385-6-13 MCoE Pam 385-64 MCoE Pam 385-63, policies and procedures for Firing Ammunition for Training, Target Practice, and Combat Who: All Mortar teams Mortar PL/PSG RSO Lane safety	L
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Attack aviation collision with other aircraft and individuals on the range	M	1. Air crew will notify range control and airfield operations center prior to aircraft flying. GTAC personnel will maintain communications with aircraft at all times. 2. Aircraft will adhere to established ROZ and will avoid all Fort Benning flight corridors if at all possible. 3. In the event of an emergency requiring aerial MEDEVAC, all aviation operations supporting the training will be suspended until MEDEVAC is complete. 4. Aircraft flight paths will be deconflicted with maneuver units. Aircraft will not fly directly over Soldier's positions during the event. 5. No direct or indirect fires will be conducted with aircraft in flight.	How: MCoE Regulation 350-19 Range safety brief Communications with ground and air personnel Air plan briefing CALFEX Rehearsal Who: Air Crews RSO JTAC personnel JFO/FIST All Soldiers	L
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Deconfliction of Airspace between Aviation and Indirect Fire Assets	M	1. Range NCOIC and RSO along with air crew will notify range control and airfield operations center prior to aircraft flying. 2. All indirect fire assets will rehearse echelonment of fires. 3. All aircraft will maintain the approved AGL and heading during the CAS request and time on station. 4. Aircraft will adhere to the established ROZ and will avoid all Fort Benning flight corridors if at all possible.	How: MCoE Regulation 350-19 Range safety brief CALFEX Rehearsal Concept of air support Who: Air Crews RSO/NCOIC/OIC Tower PL/PSG Company Commander JFO/FST/GTAC	L

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	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -		UXO	M	<ol style="list-style-type: none"> 1. Any Soldier observing munitions from aircraft producing an unexploded ordinance must immediately call a "cease fire" 2. Range Control will be notified of the UXO. 3. OIC/NCOIC will place the Task Force into a self-imposed check fire until follow on instructions are provided by Range Control/EOD. 4. No maneuver or movement is authorized into the impact area. 5. UXO will be reported via the standard UXO report and provided to Range Control. 6. Mark all UXOs IAW applicable unit policies and clear the area until the all clear is given. 	<p>How: Daily safety brief MCoE Range and Terrain Regulation 350-19 AR 385-63, policies and procedures for Firing Ammunition for Training, Target Practice, and Combat Range certified OIC/RSO Maintain communications with Range Control and Tower</p> <p>Who: OIC/RSO NCO supervision Range safeties All Soldiers</p>	L
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Range access	M	<ol style="list-style-type: none"> 1. Road guards will be posted at high traffic areas IAW mandatory road block enclosure. 2. Communications with the OIC/Tower/Road Guards will be maintained at all times. 3. Road Guards will have shifts that are not excessive in length and be provided supplies to support their mission (water, batteries, frequencies, etc.). 	<p>How: Range safety brief Task to troops NCOIC supervision</p> <p>Who: S6 OIC/Tower/NCOIC ISG Gate Guard personnel</p>	L
<input type="checkbox"/> + <input type="checkbox"/> -		Soldier limb crushed by vehicle/turret weapon system/Pinch Points	M	<ol style="list-style-type: none"> 1. Ensure Soldiers maintain situational awareness at all times while operating on vehicles. 2. Ensure medics are available to treat all injuries to Soldiers. 3. Medics rehearse CASEVAC/MEDEVAC plan prior to the CALFEX. 4. Leader supervise Soldiers during training. 	<p>How: Range safety brief</p> <p>Who: OIC/RSO Vehicle Commander Team Leader Gunners</p>	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL	
<input type="checkbox"/> + <input type="checkbox"/> -		Engineer Breaching Operations	H	1. Task Force units will conduct breach training and certify all Soldiers conducting the breach prior to executing the training exercise. 2. Rehearsals will be conducted during dry and blank fire iterations. 3. All Soldiers will be clear of the blast radius during explosive breaching operations to ensure safety IAW packet approved MSDs. 4. All dunnage will be retrieved prior to closure of the range.	How: Range Safety Brief Rehearsals Leader Certification Training Engineer Breach LPD Who: All Soldiers RSO/OIC Breaching Element Team Leaders	M	
	<input type="checkbox"/> + <input type="checkbox"/> -	Perform Demolition Operations	Injury due to premature detonation of blasting caps during handling/preparation of charges	H	1. All personnel will observe proper grounding procedures while handling blasting caps. 2. All Soldiers will wear the required PPE at all times. 3. Leader certifications will be complete prior to LFX being conducted. 4. Rehearsals will be conducted during dry/blank iterations. 5. Triple Flange Hearing protection use will be enforced to protect from sound decibels produced by explosions.	How: Range Safety Brief Leader Certification Training Engineer Breach LPD Who: All Soldiers Breaching elements RSO/OIC Team Leaders	M
		<input type="checkbox"/> + <input type="checkbox"/> -		Explosive Breaching Hearing Loss	M	1. Triple Flange Hearing protection will be available for all Soldiers and worn at all times. 2. Any Soldier observing an unsafe act prior to the demolition will immediately call a "cease fire" and alert the nearest lane safety to remedy the issue. 3. All Soldiers will conduct PCC/PCI on their equipment to ensure serviceability.	How: Range Safety Brief OIC/NCOIC Supervision PCC/PCIs Team Leaders Who: All Soldiers OIC/RSO

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<input type="checkbox"/> + <input type="checkbox"/> -		Demolition Misfire	H	1. Any misfire will be reported to Range Control. Immediate check fire will be put into effect. EOD will be called to handle the misfire. 2. All Soldiers will be made aware of the misfire and take appropriate safety measures beyond the MSD. 3. Only certified personnel will handle all misfires. 4. No alterations to explosive material is authorized.	How: Range Safety Brief Rehearsals Leader Certification Training Follow FB Range Misfire Procedures Who: All Soldiers RSO/OIC Breaching element Team Leaders	M
		Loss of Demolitions Material	M	1. Demo will be contained and under guard at the ASP at all times. 2. Only certified personnel will handle demolitions material. 3. Any loss of demolitions material will be reported immediately to the OIC/RSO. 4. Training unit will place themselves under a self imposed "check fire" until the demolitions material is found. 5. Soldiers will maintain accountability of issued demolitions material at all times. 6. Leaders ensure that all dunnage is turned in at the conclusion of the lane to the ASP.	How: Range Safety Brief Rehearsals Leader Certification Training Follow FB Range procedures Who: OIC/RSO ASP NCOIC Demolitions Team	L
	Range Security	Civilian and Soldiers wandering into Live Fire Area	M	1. An immediate "cease fire" will be issued by anyone observing an unsafe act. 2. Guards will maintain communications with the Tower/OIC/RSO at all times. 3. Entry into the training area will be restricted during Live Fire Exercises. 4. Any VIPs will be approved through the Chain of Command and all appropriate documentation. 5. All gates will be manned or closed to limit unauthorized entry or misdirection into the training area.	How: Range Safety Brief Radio communications Guard detail Gate/Road Block closures Who: OIC/RSO Gate Guards Tower	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
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	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Conduct of Live Fire Exercise	Demolitions	H	1. All demolitions will be IAW with approved range scenario. Charges will not be enhanced as to attempt to make an excessive amount of force which damages the range for future training units. 2. All charges will be dual primed. 3. During demolition training, all Soldiers will wear protective equipment. 4. Road guards/Gate guards must be on duty during any demolitions.	How: Range safety brief Demo certification training course Lane safety supervision Who: OIC/RSO All Soldiers Engineers (Sapper) NCOs	M

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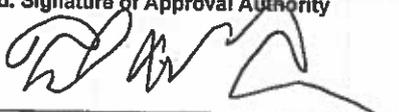
	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin-bottom: 5px; display: flex; align-items: center; justify-content: center;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">-</div>	Conduct of Live Fire Exercise	Deconfliction of Airspace between Aviation and Indirect Fire Assets	M	<p>1. In the event of an emergency requiring aerial MEDEVAC, all aviation operations supporting the training will be suspended until MEDEVAC mission is complete.</p> <p>2. Constant communication between Land and Air assets is required at all times. All missions will be cancelled if communications are lost between the air crew and maneuver unit.</p> <p>3. Ensure communications and frequencies (primary/alternate) are established.</p> <p>4. Aircraft will not fly directly over Soldier's positions during the event.</p> <p>5. Aircraft flight paths will be deconflicted with maneuver units via rehearsal prior to the CALFEX.</p> <p>6. All participating units will be present at the CALFEX rehearsal.</p> <p>7. CAS/CCA requests will be coordinated through the JTACs and airfield operations cell to ensure no ROZ conflicts occur.</p> <p>8. Rotary wing assets must maintain AGL along approved phase lines during the operation.</p> <p>9. CCA platforms will maintain their approved AGL and front line trace at all times unless emergency situations arise in which the helicopter will return to the FARP or approved helicopter landing zone.</p>	<p>How: MCoE Regulation 350-19 Range safety brief CALFEX Rehearsal Concept of air support</p> <p>Who: Air Crews RSO/NCOIC/OIC Tower PL/PSG Company Commander JFO/FST/GTAC</p>	L
10. OVERALL RESIDUAL RISK LEVEL (All controls implemented):						
<input type="checkbox"/> EXTREMELY HIGH <input type="checkbox"/> HIGH <input checked="" type="checkbox"/> MEDIUM <input type="checkbox"/> LOW						

11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION

The range will have both a certified range OIC and RSO. OC coverage will be provided for Task Force units. Demolitions certified personnel will handle explosive charges. Mounted assets will be trained through Gunnery Table XII. Lane safeties will focus on the safety of all Soldiers and adherence to the approved mission. The RSO will clear all elements off the range. Ammunition NCO and detail will provide accurate ammunition counts and reports to the OIC and alert of any discrepancies. Communications with Range Control, Gates, Mortar Firing Points, Artillery assets, and Aircraft will be maintained at all times. Air space requests will be approved by Air Traffic Controllers. JTAC personnel will be present to coordinate with the Task Force personnel on the ground. All hands on training and certification courses will be completed prior to the conduct of the Live Fire Exercise.

12. APPROVAL OR DISAPPROVAL OF MISSION OR TASK

Approve Disapprove

a. Name (Last, First, Middle Initial) TANNER, FRED W.	b. Rank/Grade LTC/O5	c. Duty Title/Position TF 1-28 IN COMMANDER	d. Signature of Approval Authority 
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e. Additional Guidance:

Risk Assessment Matrix		Probability (expected frequency)				
		Frequent: Continuous, regular, or inevitable occurrences	Likely: Several or numerous occurrences	Occasional: Sporadic or intermittent occurrences	Seldom: Infrequent occurrences	Unlikely: Possible occurrences but improbable
Severity (expected consequence)		A	B	C	D	E
Catastrophic: Mission failure, unit readiness eliminated; death, unacceptable loss or damage	I	EH	EH	H	H	M
Critical: Significantly degraded unit readiness or mission capability; severe injury, illness, loss or damage	II	EH	H	H	M	L
Moderate: Somewhat degraded unit readiness or mission capability; minor injury, illness, loss, or damage	III	H	M	M	L	L
Negligible: Little or no impact to unit readiness or mission capability; minimal injury, loss, or damage	IV	M	L	L	L	L

Legend: EH - Extremely High Risk H - High Risk M - Medium Risk L - Low Risk

13. RISK ASSESSMENT REVIEW (Required when assessment applies to ongoing operations or activities)

a. Date	b. Last Name	c. Rank/Grade	d. Duty Title/Position	e. Signature of Reviewer

14. FEEDBACK AND LESSONS LEARNED

15. ADDITIONAL COMMENTS OR REMARKS

Instructions for Completing DD Form 2977, "Deliberate Risk Assessment Worksheet"

1. Mission/Task Description: Briefly describe the overall Mission or Task for which the deliberate risk assessment is being conducted.

2. Date (DD/MM/YYYY): Self Explanatory.

3. Prepared By: Information provided by the individual conducting the deliberate risk assessment for the operation or training.
Legend: UIC = Unit Identification Code; CIN = Course ID Number; OPORD = operation order; DSN = defense switched network; COMM = commercial

4. Sub-task/Sub-Step of Mission/Task: Briefly describe all subtasks or substeps that warrant risk management.

5. Hazard: Specify hazards related to the subtask in block 4.

6. Initial Risk Level: Determine probability and severity. Using the risk assessment matrix (page 3), determine level of risk for each hazard specified. probability, severity and associated Risk Level; enter level into column.

7. Control: Enter risk mitigation resources/ controls identified to abate or reduce risk relevant to the hazard identified in block 5.

8. How to Implement / Who Will Implement: Briefly describe the means of employment for each control (i.e., OPORD, briefing, rehearsal) and the name of the individual unit or office that has primary responsibility for control implementation.

9. Residual Risk Level: After controls are implemented, determine resulting probability, severity, and residual risk level.

10. Overall Risk After Controls are Implemented: Assign an overall residual risk level. This is equal to or greater than the highest residual risk level (from block 9).

11. Supervision Plan and Recommended Course of Action: Completed by preparer. Identify specific tasks and levels of responsibility for supervisory personnel and provide the decision authority with a recommend course of action for approval or disapproval based upon the overall risk assessment.

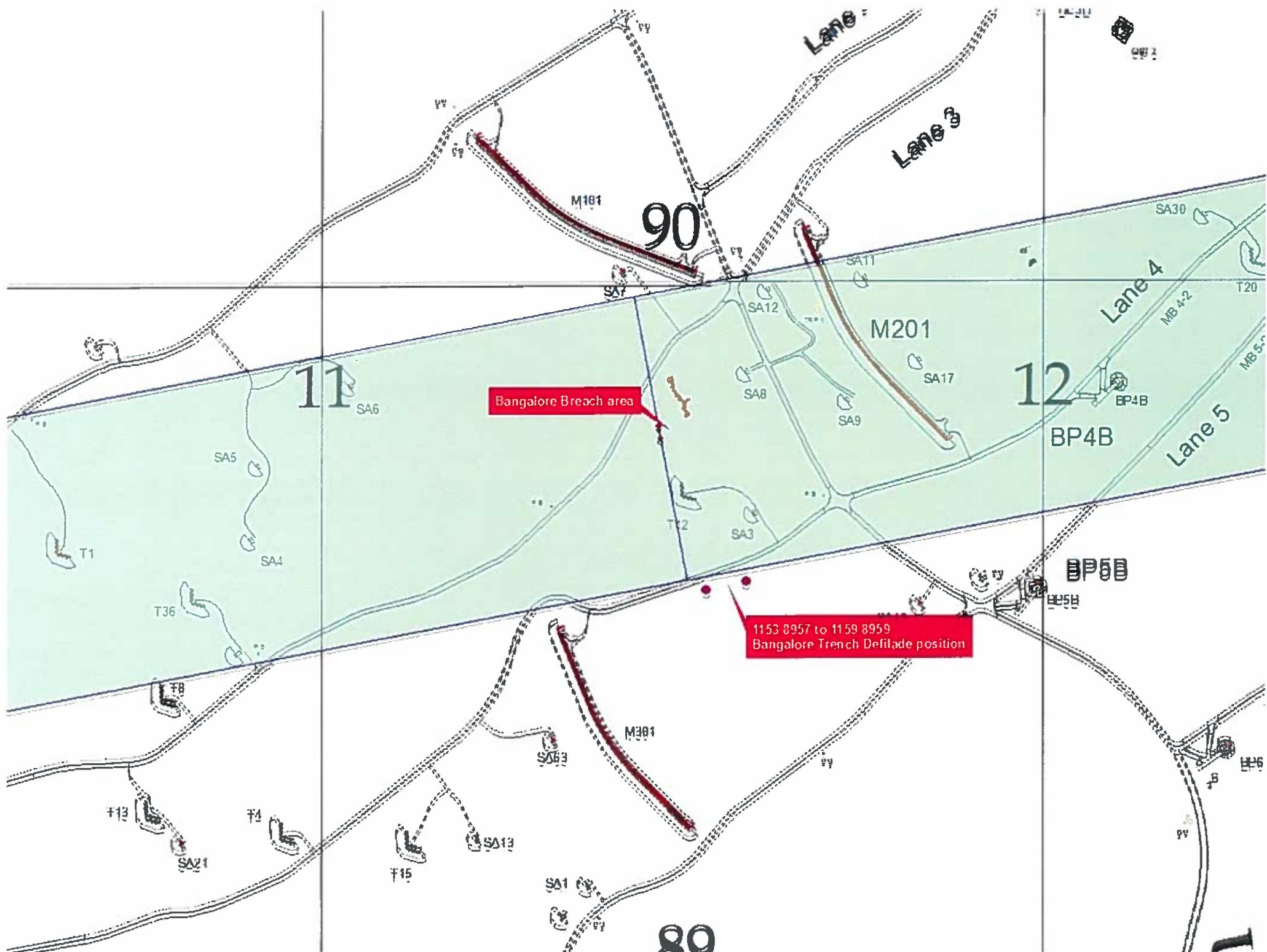
12. Approval/Disapproval of Mission/Task: Risk approval authority approves or disapproves the mission or task based on the overall risk assessment, including controls, residual risk level, and supervision plan.

13. Risk Assessment Review: Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission or activity and controls to provide valid input on changes or adjustments needed. If the residual risk rises above the level already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.

14. Feedback and Lessons Learned: Provide specific input on the effectiveness of risk controls and their contribution to mission success or failure. Include recommendations for new or revised controls, practicable solutions, or alternate actions. Submit and brief valid lessons learned as necessary to persons affected.

15. Additional Comments or Remarks: Preparer or approval authority provides any additional comments, remarks, or information to support the integration of risk management.

Additional Guidance: Blocks 4-9 may be reproduced as necessary for processing of all subtasks/ substeps of the mission/task. The addition and subtraction buttons are designed to enable users to accomplish this task.



Bangalore Breach area

1153 8957 to 1159 8959
Bangalore Trench Defilade position

90

11

12

20

Lane 3

Lane 3

Lane 4

Lane 5

M181

M201

M381

BP4B

BP5B

SA5

SA4

SA6

SA12

SA8

SA9

SA17

SA3

SA30

T1

T36

T2

T20

F13

F4

F15

F55

SA13

SA1

PV

QW 2

BP 6

MB 4-2

MB 5-c

BP 5B

BP 8

Buena Vista Rd.

Pine Knot Creek

713570 0 3590950 0
Bangalore 1 @ 40 degrees

713680 0 3590850 0
Bangalore 2 @ 55 degrees

91

Hartell OP
& Bunkers

K4

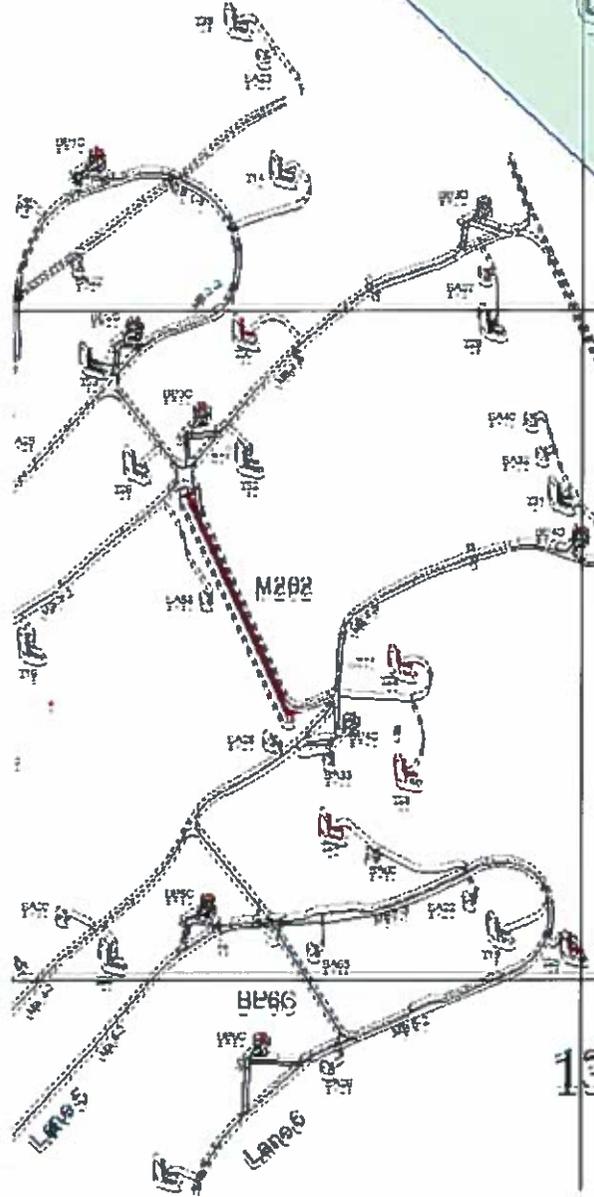
90°

C
& FE

13

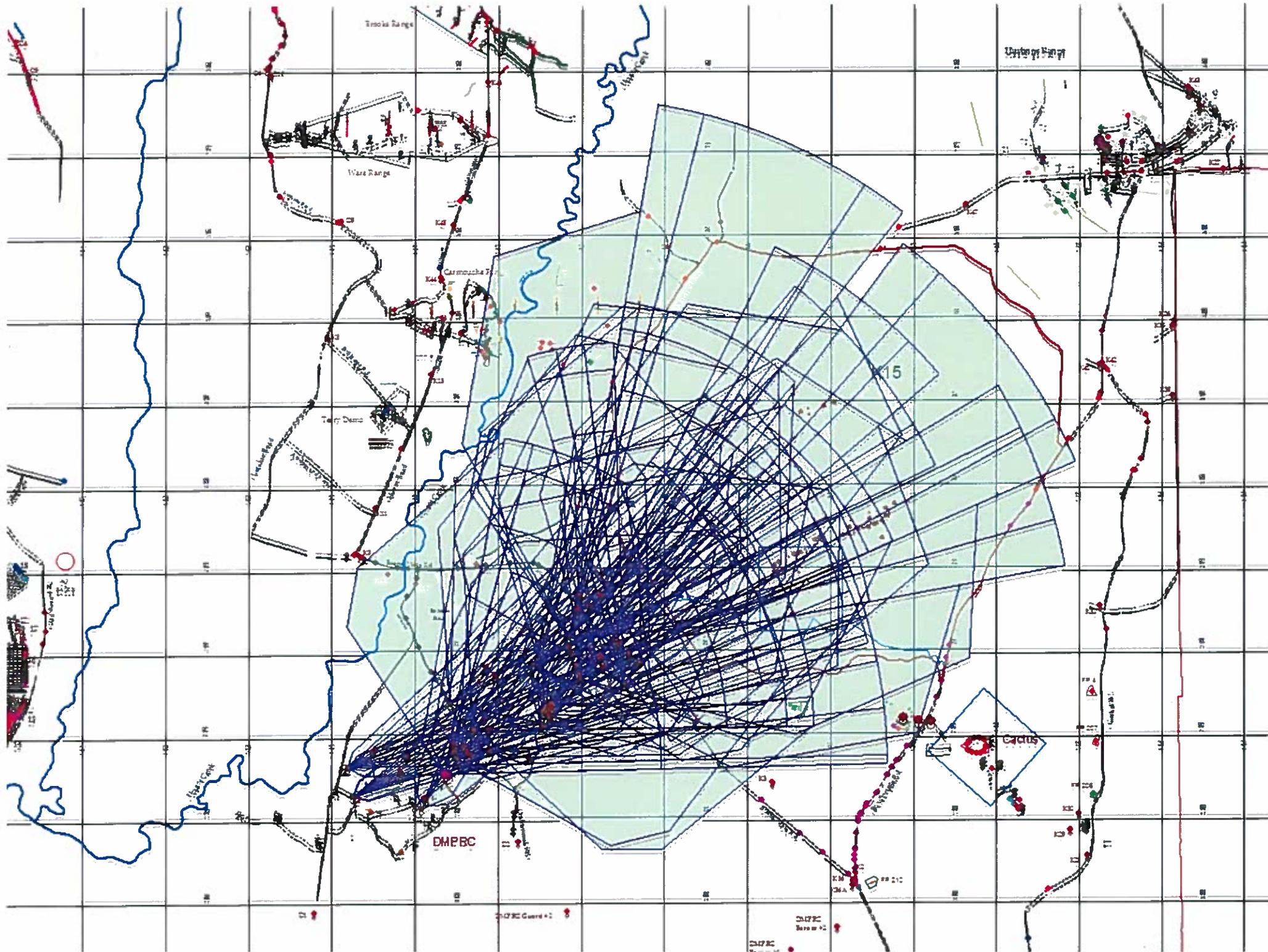
14

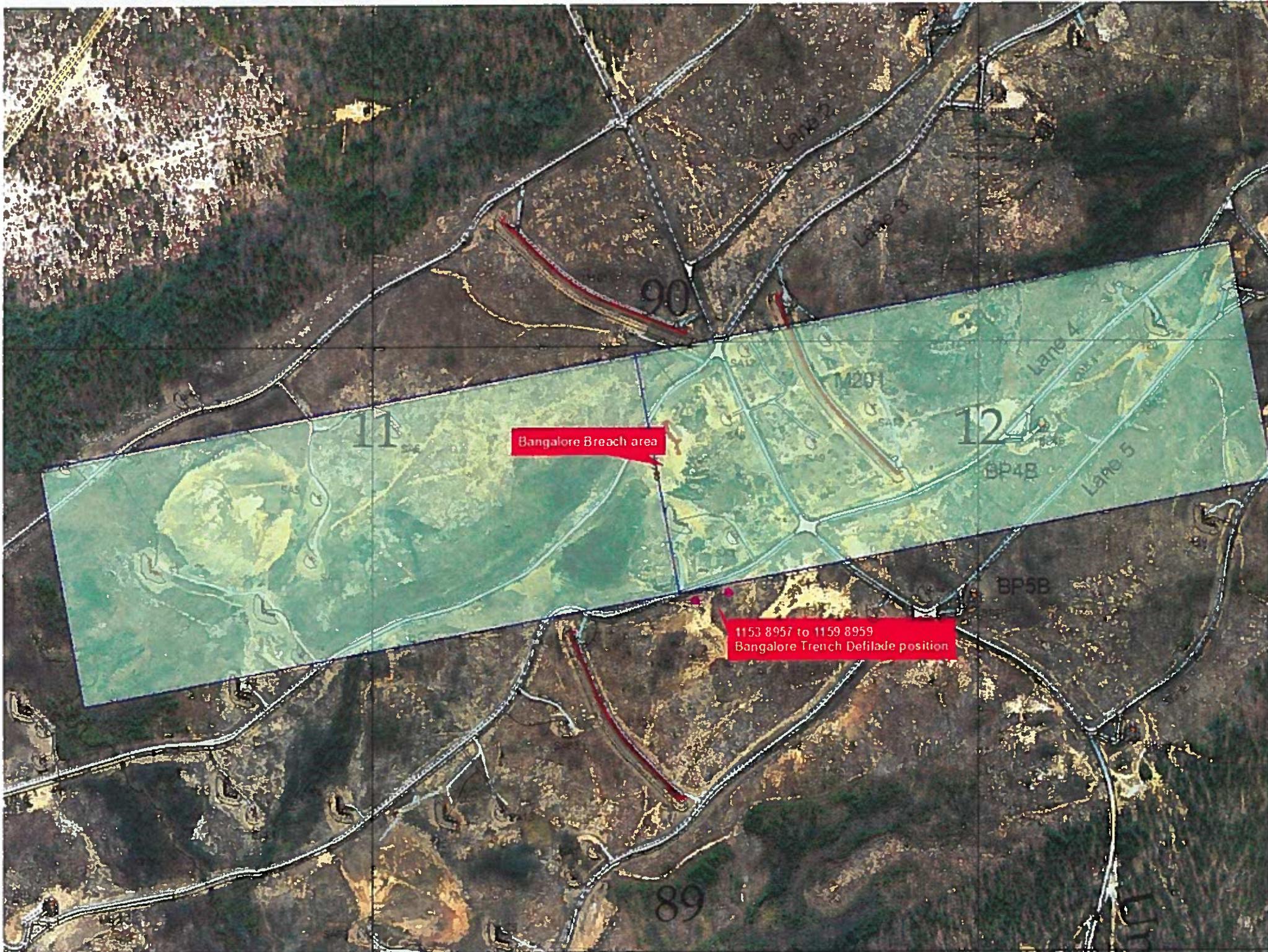
15



DMPRC, TF 1-28 IN PLT CALFEX (Log #01-02-16) Roadblock, Roadguard and Barrier List.

#	GRID	LOCATION	TYPE	DMPRC BARRIERS			
K-2	GA 163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate	Barrier 1: On un-named trail at GA 1553 8738 blocking traffic going West. Barrier 2: On un-named trail at GA 1608 8766 blocking traffic going West.			
K-9	GA 103 921	Across Buena Vista Rd 40m E of the intersection with Moore Rd (Road Guard Location)	Gate				
K-9A	GA 106 919	Across tank trail 200m W of the Upatoi Creek	Gate				
K-16A	GA 172 989	Across Rinehart Rd 20m S. of its intersection with the northern boundary range road.	Gate	ROADGUARD POSITIONS (Guards will maintain communications with OIC)			
K-16B	GA 171 990	Across un-named trail 20m S. of its intersection with the northern boundary range road.	Gate	Guard #1: Located on Buena Vista Road at the K9 roadblock location (GA 103 921) blocking traffic going East on Buena Vista Road and East on adjacent tank trail leading to Upatoi Creek. Guard #2: Located on Underwood Road at the Plymouth Road intersection (GA 128 878) blocking traffic going North-West on Underwood Road. Guard #3: Located on Buena Vista Road at the K36 roadblock location (GA 163 883) blocking traffic going North-East on Buena Vista Road. Guard #4: Located on Hourglass Road at the D1 roadblock location (GA 098 878) controlling access to the DMPRC Control Center (OIC will coordinate with Mr Cribb, DMPRC Site Supervisor, 706 626-2678, for assistance)			
K-28	GA 191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Gate				
K-29	GA 189 888	Across un-named trail on left side of Cactus Range 300m W of Cactus Road	Gate	K-40	GA 174 908	Across Box Springs Rd 30m S. of Pine Knot Creek.	Gate
K-30	GA 190 890	Across un-named trail on right side of Cactus Range 250m W of Cactus Road.	Gate				
K-32	GA 192 915	Across Shamanski Road 35m W of its intersection with Cactus Rd.	Gate				
K-36	GA 163 883	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd. (Road guard location).	Gate				
K-36A	GA 163 882	Across Tank Trail 50m W. of its intersection with Box Springs Rd.	Gate				
K-38	GA 201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Gate				
K-39	GA 202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Gate				
K-41	GA 192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Gate				
K-42	GA 193 944	Across Box Springs Rd 10m N. of its intersection with Cactus Rd.	Gate				
K-47	GA 176 963	Across Turrentine Rd 1000m W. of mover 4 on Hastings Range	Gate				
D-1	GA 098 878	On Hourglass road, 700 meters north of 1st Division Road	Gate				
D-2	GA122 887	On Underwood road approximately 900 meters north of Underwood and Plymouth road intersection	Gate				
L-10	110 918	North on Hourglass road from Buena Vista road. 175 meters past tank trail.	Gate				





Bangalore Breach area

1153 8957 to 1159 8959
Bangalore Trench Defilade position