

FIRING/NONFIRING DATA

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

TO: Chief, Range Division, Directorate of Plans, Training, Mobilization and Security Fort Benning, GA 31905	Date: 01 May 2012 Range: Terry Demo Title: Standard Demolitions/Shotgun Ballistic Breach/EET Problem No:
THRU: Chief, Range Operations, DPTMS Fort Benning, GA. 31905	FROM: Survey, Range Division Fort Benning, GA. 31905

Log #11-02-11

SECTION I, TYPE OF TRAINING

a. Live Fire
 b. Non-live Fire
 CP/Controller Coordinates: GA 1075 9392

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
Station 5: Light Pits 1065 9384 to 1060 9390	See Demo Enclosure	See Demo Enclosure	See Demo Enclosure
Station 6: Claymore, Explosive Entry 1063 9383 to 1058 9389	Claymore, See Demo Enclosure	M18A1, K143/145 See Demo Enclosure	See Demo Enclosure
Station 7: Heavy Pit 1050 9385	Bangalore, See Demo Enclosure	M1A2, M028, See Demo Enclosure	See Demo Enclosure

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
Station 6: Claymore 1063 9383 to 1058 9389	Claymore, M18A1	Anti-Personnel Mine HE	230 Deg's Grid Az	230 Deg's Grid Az
Station 7: Heavy Pit 1050 9385	Bangalore	HE	165 Deg's Grid Az	175 Deg's Grid Az
Station 8: Shotgun Breach 1064 9382 to 1059 9382	Shotgun, 12ga	00Buck/Slug/Hatton	088 Deg's Grid Az	178 Deg's Grid Az

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: <i>Benjamin Bolding</i> Benjamin Bolding, GS-08, Chief Survey Technician	Name/rank of Major Unit S3/Commander: <i>Brad Tesch</i> Brad Tesch, GS-12, Chief Range Operations, DPTMS
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SECTION VI, FOR RANGE DIVISION USE

DATE: *3 MAY 2012*

TO: Chief of Range Operations, DPTMS	FROM: Range Division, Directorate of Plans, Training, Mobilization and Security Fort Benning, GA 31905
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a. Roadblocks to be closed: *see Roadblock and Roadguard List.*

b. Road(s) to be closed/road barrier locations:

c. Remarks:

d. This approval expires: *Indef*

Chief, Range Division
Directorate of Plans, Training, Mobilization and Security
Brad S. Tesch

ENCLOSURE #1
TERRY DEMO RANGE

Coordinates	Type	Model/DODAC	Size of Charges
Station #5 10646 93841 - 10596 93902 (Light Pits)	Det Cord	M456	1000 feet
	Time Fuse	M670	10 feet
	Charge Demo Block 1/1/4lb C4 M112	M023	325 each
	Charge Demo Block 1/4lb TNT	M030	325 each
	M11 Branch Line (MDI)	ML47	30 feet
	M12 Shock Tube (MDI)	MN02	500 feet
	M13 Shock Tube (MDI)	MN03	1000 feet
	Igniter Time Fuse Shock Tube	MN08	35 each
	Station #6 Claymore 10633 93830 -10582 93891	M18 Claymore, AP Mine	K143
Station #6 EET 10633 93830 -10582 93891	Det Cord	M456	1000 feet
	Cap Blasting Non-Electric	M131	50 each
	Igniter Time Fuse Shock Tube	MN08	35 each
	Cap Blasting Non-Electric	MN11	20 each
	Cap Blasting Non-Electric	M12	8 each
	Cap Blasting Non-Electric	M13	2 each
	Cap Blasting Non-Electric	MN06	50 each
	Time Fuse M700	M670	500 feet

ENCLOSURE #1
TERRY DEMO RANGE

Coordinates	Type	Model/DODAC	Size of Charges
Station #7 10502 - 93851 (Heavy Pit)	Charge Demo Block 1/1/4lb C4 M112	M023	325 each
	Charge Demo Block 2/1/2lb C4 M5A1	M038	200 each
	Charge Demo Block 1lb TNT	M032	33 each
	Charge Demo Shape 15 lbs M2	M420	5 each
	Charge Demo Block 40lbs Cratering	M039	5 each
	Cap Blasting Non-Electric M1 30 ft Shock Tube	ML47	50 each
	Cap Blasting Non-Electric M13 1000 ft Shock Tube	MN03	2 each
	Det Cord PETN NEW/FT	M456	7100 feet
	Cap Blasting Non-Electric M12 500 ft Shock Tube	MN02	8 each
	Cap Blasting Non-Electric M14 7.5 ft Shock Tube	MN06	50 each
	Igniter Time Fuse Shock M81	MN08	56 each
	Fuse Blast Time M700	M670	2550 each
	Igniter Time Blast Fuse Shock M2/M60	M766	275 each
	Charge Demo Block 1/4lb	M030	43 each
	Demo Kit Bangalore TRPD m1a2	M028	2 each
	Cap Blasting Non-Electric SPEC/M7	M131	327 each
	Dynamite Military M1 TNT	M591	40 each
	Cap Blasting Non-Electric M18 30 ft Shock Tube	MN41	40 each
	Booster Demo Charge M151	MN68	31 each

ENCLOSURE #1
TERRY DEMO RANGE

Coordinates	Type	Model/DODAC	Size of Charges
Station #7 10502 - 93851 (Heavy Pit)	Booster Demo Charge M151	MN68	31 each
	Cap Blasting Non-Electric 10 ft Shock Tube M16	MN39	50 each
	Det Cord	M456	1000 feet
	Time Fuse	M670	10 feet
	M11 Branch Line (MDI)	ML47	30 feet
	M12 Shock Tube (MDI)	MN02	500 feet
	M13 Shock Tube (MDI)	MN03	1000 feet

MEMORANDUM FOR TRAINERS

SUBJECT: Standard Training Scenario for Terry DEMO Range

1. Unit personnel will occupy the range and breakdown ammunition. Scheduled unit OIC will request opening code, post guards, and conduct a range safety briefing on the range bleachers. All students arriving late on the range will be taken to the bleacher area and will receive a demolition safety briefing by the OIC.
2. First road guard will be posted on Moore Road at K11 gate, fifty (20) meters north of its intersection with Audernarde Trail (Grid 105 927). Second road guard will be posted on Bulls Eye Road at K8 gate, east of its intersection with Lorraine road (Grid 099 947).
3. When initiating charges in the designated blasting areas. Road guards will be stationed at gate (K11) and (K8) (see site layout) 15 minutes prior to any detonation. Each road guard will have FM communications with either the OIC or RSO of the range. Hourly radio checks will be done and DA Form 1594 will be kept by the RSO. Roadblock K13 will be closed prior to training.
4. **Red Tables (Station 3)**: The Primary Instructor (PI) will demonstrate systematically on how to construct each charge and initiating system. Hands on training pertaining to the safe employment of military explosives will be given. The soldiers will learn to prime a ¼ lb block of TNT using detonation cord and tied into a line main using a girth hitch with an extra turn. Soldiers will also prime a ¼ lb block of C4 using and M11 and M12 blasting caps. Soldiers will also be taught how to employ an M18A1 claymore, along with a Bangalore Torpedo kits and Explosive Entry Techniques. Soldiers will be under close cadre supervision at all times. Charges will be constructed at the red tables only where they will be a maximum of five soldiers per instructor, and once charges have been constructed, the instructors and five (5) soldiers will proceed to the appropriate demolition pits with all constructed charges. (See enclosure for location)
5. **Light Pit (Station 5)**: Charges will be placed in the center of the pit. Pits will be checked for proper sand, depth, and timber condition. The instructors will check all the systems, identify, and correct all deficiencies with the soldiers. Upon completion of constructing charges three (3) out of the five students will return to the bunker for cover. Two soldiers with two instructors will remain on site in order to initiate charges; once charges have been initiated, the two remaining soldiers will then proceed back to the bunker. The two instructors will then proceed toward the bunker after the soldiers. Audible warnings will be given prior to initiation of charges. This warning should consist of the verbal warning of "fire in the hole" three times. All charges are primed once inside the pits. Each soldier primes a ¼ lb. block of TNT with detonating cord, and tied off into a line main of detonating cord. The soldiers will then carry the charges to the light pits where they will tie off into the line main. The line mains are laid out vertically in the light pit with 12 soldiers. Once all charges have been primed, everyone returns to the bunkers. Charge #1 is detonated in sequence on command of the OIC with a one to five (1-5) second delay between detonations per pit to ensure a valid boom count for positive identification of misfires. Next soldiers will prime a ¼ lb. block of C4 with an M11 in the light demolition pit. Once all

charges have been primed, everyone moves back to the bunker. Charge #2 is detonated in sequence (using the same 1-5 second delay) on command of the OIC.

6. **Claymore (Station 6):** No more than five claymores will be placed and primed under supervision oriented on a grid azimuth of 230 degrees. All participating personnel will be behind cover at the firing positions located on the bunker side (Station 4) of Station 5, Light Pits, (see enclosure for location) and all other personnel will be in the bunker. Claymores are detonated in sequence, one at a time, on command of the OIC with a one to five (1-5) second delay between detonations per claymore to ensure a valid boom count for positive identification of misfires. Misfires will be handled IAW FM 3-34.214/MCRP3-17.7L by qualified personnel.

7. **Explosive Entry (Station 6):** Explosive Entry Training will be conducted behind (south) of the claymore mine area (See Sketch). The maximum single blast for Explosive Entry will not exceed one 1/4lb C4 charge per door. If there is more than a single blast, there will be a 5-10 second delay between detonations to ensure a valid boom count for positive identification of misfires. Demolition will be limited to doors, windows, and walls attached to the appropriate steel frames (oriented on a 320/140 degrees grid azimuth). Materials will be soft metal or wood only. The order of movement for an explosive breach is number one (point man responsible for emplacing the Kevlar blanket/blast shield), number two (team leader), number three (assistant breacher), and number four (tools man). The number one man emplaces the Kevlar blanket/blast shield; the number two man (team leader) carries the demolition charge and places it on the door. The number three man provides security for the number two man, and the number four man provides rear security. After the charge has been placed by the number two man the breaching team will move back to the designated safe distance determined by the minimum safe distances required by the amount of explosives to be used and reinforced by instructor (IAW FM 3-34.214 and approved MSD waiver). Students will assume their position behind the Kevlar blanket/blast shield and wait for PI/AI to verify the charges emplacement. At that time, the instructor will call over the radio to the OIC to make sure that everyone is inside bunkers. Once all requirements are met, the PI will approach number two man and tell him: "Breacher you have Control" then the instructor will issue the M-81 and will instruct student to connect the MDI. Prior to student initiating his five (5) seconds countdown and pulling his igniter when zero is reached, the instructor will proceed behind number four man and behind the kevlar blanket/blast shield. Once the breach is open, the entire team enters the room as quickly and smoothly as possible and clears the doorway and glass-house immediately. If breach is not open, man number 2 will call "breach not cleared" and man number 4 will move towards the door and use his hooligan tools to break the door open. This scenario ends when students have cleared the glass-house. All frames will be removed prior to any other training (except shotgun breach). The use of the Kevlar blanket/blast shield allows personnel to be positioned near the blast site outside of bunker (Station 4) **will require a waiver approved by the Commanding General on site.**

NOTE: The building façade will have three (3) walls or long enough front wall to protect the five (5) personnel executing the event. (see sketch)

Type of Charges (Examples):

I. Flex Linear Charge:

Charge Requirements: 22ft Det. Cord, 1 British Junction, 2 blasting cap

Non-explosive materials: One hundred-miles-per-hour tape, double-sided tape, and electrical tape and one door.

Note: The calculating formula for Net Explosive Weight (NEW) is **0.26** pounds of explosive. Minimum Safe Distance IAW FM 3-34.214 with Kevlar blanket or a shield is **8 feet**

II. Oval or Silhouette Charge:

Charge Requirements: 61 ft Det. Cord per silhouette (5 wraps), 1 British Junction and 2 blasting caps.

Non-explosive materials: 1- hundred-miles-per-hour tape, 2 E-type silhouettes, 1 prop stick (if required), Zip ties and one door.

Note: The calculating formula for Net Explosive Weight (NEW) is **0.72** pounds of explosive. Minimum Safe Distance IAW FM 3-34.214 with Kevlar blanket or a shield is **11 feet**.

III. DOUGHNUT CHARGE:

Charge Requirements: 3.5 ft Det cord, 1 blasting cap (direct prime)

Non-explosives materials: One hundred-miles-per-hour tape, 1 door

Note: The calculating formula for Net Explosive Weight (NEW) is **0.04** pounds of explosive. Minimum Safe Distance IAW FM 3-34.214 with Kevlar blanket or a shield is **5 feet**

IV. WATER IMPULSE CHARGE:

Charge Requirements: 12 FT Det. Cord, one British Junction, 2 blasting cap

Non-explosive materials: 550 cord, suitable backing material (cardboard), One hundred-miles-per-hour tape and electrical tape, prop stick, 1 Door, two 1,000-milliliter IV bags.

Note: The calculating formula for Net Explosive Weight (NEW) is **0.14** pounds of explosive. Minimum Safe Distance IAW FM 3-34.214 with Kevlar blanket or a shield is **7 feet**

8. Heavy Pit (Station 7):

1. **Heavy Pit (Station 7) Bangalore Torpedo:** Bangalore Torpedo charges are constructed and placed in the heavy pit with the long axis along an azimuth of 165-175 degrees grid azimuth. After all charges have been placed, all personnel will move back to the bunker and charge #3 is detonated. No more than three (3) Bangalore's can be detonated at one time.

2. **Heavy Pit (Station 7) Road Cratering/Shape Charges:** The following charges will be constructed: ring main, and line main with road crater and shape charge. Students will be issued one block of demolition for priming purposes. Upon completion of charge construction the Range NCOIC (separate from their respective firing system) will secure all charges. The range NCOIC will safeguard the charges until each respective team is called forward to detonate their charges. After all charges have been placed, all personnel will move back to the bunker then charges are detonated in sequence on command of the OIC. Road cratering will be a two-step process. First shape charges will be detonated and then road crater charges will be emplaced then detonated. Up to five (5) shape charges or cratering charges can be employed at once and will have a one to five (1-5) second delay between detonations to ensure a valid boom count for positive identification of misfires. All shape charges will be fired from the upright position towards the ground. All charges placed underground will only use det-cord and **NO FUSES**.

3. **Heavy Pit (Station 7) Timber Cutting:** Unit will not cut any live trees but will bring their own materials (i.e. wood pole or any wood required for training). Soldiers will be issued one block of demolition for priming purposes. Upon completion of charge construction, the Range NCOIC (separate from their respective firing system) will secure all charges. The Range NCOIC will safeguard the charges until each respective team is called forward to detonate their charges. After all charges have been placed, all personnel will move back to the bunker then charges are detonated in sequence on command of the OIC. Up to five (5) timber, cutting charges can be emplaced at once and will have a one to five (1-5) second delay between each separate charge detonation to ensure a valid boom count for positive identification of misfires.

NOTE: Steel cutting, concrete breaching and conventional AT Mines training will be reviewed by the Chief, Range Operations with approval on a case-by-case basis.

9. **Shotgun breach (Station 8):** The doorframes made of wood will be moved onto the shotgun range after everyone has familiarized with and fired a dry-fire scenario. There will be no hardware actually on the doors, this will be simulated by marking the position of the hinges and doorknob with a black marker. The doors will be positioned from grid 1064 9382 to 1059 9382 with the hinges on the left side. The hinges and doorknobs will only be fired in a direction to keep the rounds inside the SDZ which cannot exceed a left limit of 88 degrees azimuth and a right limit of 178 degrees azimuth. Each iteration will have 10 Soldiers. Each Soldier will draw a shotgun from the weapons NCOIC and no ammunition will be given out at this time until all dry fire rehearsals per iteration have been completed. The Soldiers will be led down from the bleacher area by an NCO to station 8. Each Soldier will dry fire and practice placing the shotgun at the proper positions prior to breaching or live firing with the shotguns. Each Soldier will go through a scenario of loading/unloading, right/left shoulder and hip positions. After all rehearsals are complete per iteration the ammunition NCO will give each Soldier six (6) rounds. The Soldier will not load the weapon until told by the NCOIC. Each Soldier will move to the door under supervision from a safety. The NCOIC will give the command to load three (3) rounds into the shotgun. The NCOIC will then give the command to load a round into the chamber and ensure the weapon is on safe and pointed downrange. The command will be given to fire three (3) rounds into the hinges on the door and then place the weapon on safe. The Soldier will then be instructed to load three (3) more rounds and under command from the NCOIC will fire three (3) rounds into the same door hinges and doorknob. If more than one door is to be engaged by one Soldier, he/she will move under supervision with cleared weapon and repeat the same sequence of safe, issue ammunition, load,

command to fire, etc... as initial engagement. That iteration of Soldiers will be taken off the firing line after the scenario is complete. Safeties will ensure shotguns are cleared and on safe and then will be handed over to the next iteration of Soldiers. Once all training is complete at station 8, the Soldiers will make sure all weapons are cleared and on safe. This will be checked by the NCOIC. Soldiers will be led back to turn in weapons and any unused ammunition to the AHA and then return to the bleachers. Each additional iteration is conducted in the same manner.

10. Any leftover or demolition residue (piece of det-cord, time fuse, etc) will be turned into the instructor, NCOIC or OIC of the Range. All residues will be burned using a burn pit upon completion of the training and all soldiers have departed the training site.

11. Storage of explosives in the ammunition holding area on the range will be IAW DA PAM 385-63, TM 9-1300-206, and FM 5-250. Blasting caps and explosives will be separated and stored in separate bunkers in the ammunition holding area. A guard will be posted and will maintain control of the entrance into the AHA and will be in the bunker when Claymore/Explosive Entry (Station 6) and Heavy Pit (Station 7) are being initialized. A minimum of two (2) 10 BC fire extinguishers will be placed at the entrance to the ammunition holding area. No meals will be eaten in the area of the AHA and all trash will be removed from the AHA as it is generated.

12. Demolitions will be issue at the AHA only.

13. When detonating charges in the designated blasting areas, all personnel will be in the bunker complex (Station 4). See Station 6, explosive entry training, for exception. All personnel will remain in the bunker until the Primary Instructor determines that the demolition area is clear of misfires and gives the command "All Clear". All charges will be dual primed as this significantly reduces the possibility of misfires.

14. **MISFIRES:** Misfires are the results of an explosive charge failing to fully detonate after initiation. All misfires must be handled IAW FM 5-250. There will be no electric firing systems. All systems require a minimum waiting period of 30 minutes if investigating the cause of the misfire requires moving from the firing point. **All personnel on the range must remain in the bunker complex (Station 4) and entrances remain closed during this waiting period.**

15. The maximum single blast for road crater will not exceed three 42.5lbs charges (five separate holes) if it is more than a single blast it will be 5-10 seconds delay.

16. All training for this scenario will comply with demolition SOP for Terry Demo.

17. There will be a minimum of two medics and a vehicle on site at all times. All life threatening injuries will be evacuated by MEDEVAC. All non-life threatening injuries will be transported by vehicles.

18. **Police and Clearance of Range:** Upon completion of all training, the range will be policed for all trash and debris removed. All light pits will be raked and any holes that were created will be filled in. Any wire or craters blown in the heavy pits will be cleared away and all the craters filled in. The OIC/RSO will inspect the range prior to departure for cleanliness.

19. 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.

20. 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. Range and location.
- b. Type of weapon involved. Type of ammunition involved.
- c. Brief summary of what happened. Personnel injuries and extent.
- d. Full Name, SS#, Rank and unit of injured personnel.
- e. Extent of property damage.
- f. Intentions regarding an AR 15-6 investigation.

21. 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.

22. 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.

23. POC is Mr. Bolding @ 544-6267.



Brad Tesch
GS12, DAC
Chief, Range Operations

Urban Breaching Diagram Shots



Breachers
Blanket

DOUGHNUT CHARGE

References

FM 3-34.214

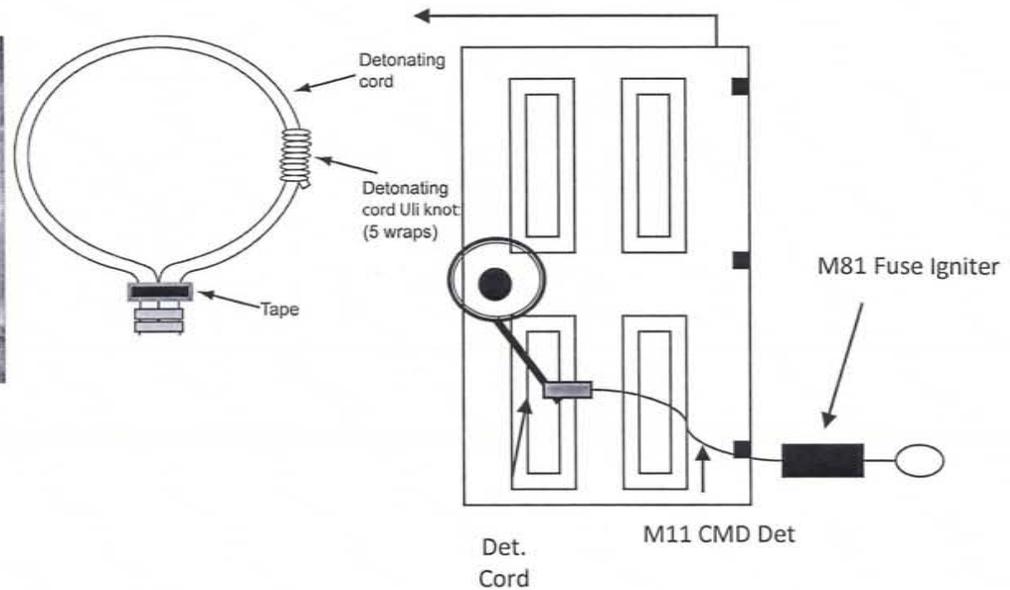
Charge Requirements

Explosives materials:

3.5 ft Det.
1 blasting cap
(direct prime)

Nonexplosives materials:

One hundred-miles-per-hour tape.
1 Door



Note:

Using 3.5ft of Det Cord and one blasting caps the calculating formula for Net Explosive Weight (NEW) is **0.04** pounds of explosive.

The minimum safe distance according to the table in FM 3-34.214 for this NEW utilizing a Kevlar blanket or a shield is **5 feet** with out a is shield is **7 feet**.

Minimum safe distance (MSD)
w/o shield 7ft
w/shield 5ft

NEW= 0.04

WATER IMPULSE CHARGE

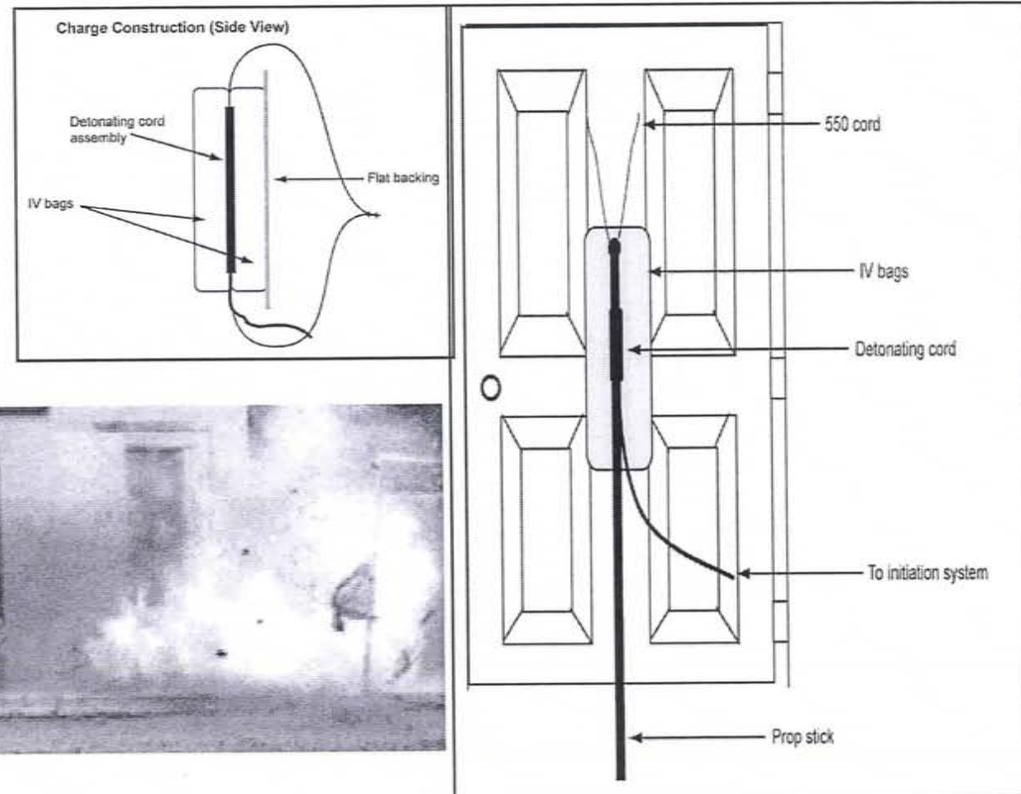
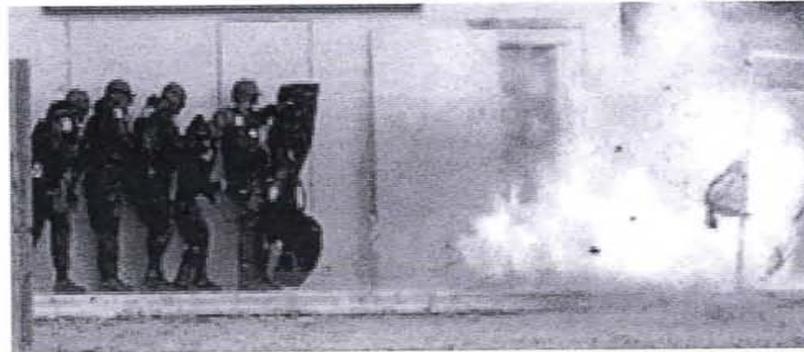
Charge Requirements

Explosives materials:

- 12 FT Det. Cord
- 1 British Junction
- 2 blasting cap

Nonexplosive materials:

- Five hundred fifty cord.
- Suitable backing material (cardboard).
- One hundred-miles-per-hour tape and electrical tape.
- Prop stick.
- 1 Door
- Two 1,000-milliliter IV bags.



Note:

Using 12ft of Det Cord and one blasting caps the calculating formula for Net Explosive Weight (NEW) is **0.14** pounds of explosive.

The minimum safe distance according to the table in FM 3-34.214 for this NEW utilizing a Kevlar blanket or a shield is **7 feet** with out a is shield is **10 feet**.

Minimum safe distance (MSD)
w/o shield 10ft
w/shield 7ft

NEW= 0.14

Charge Requirements

Flex Linear Charge

References

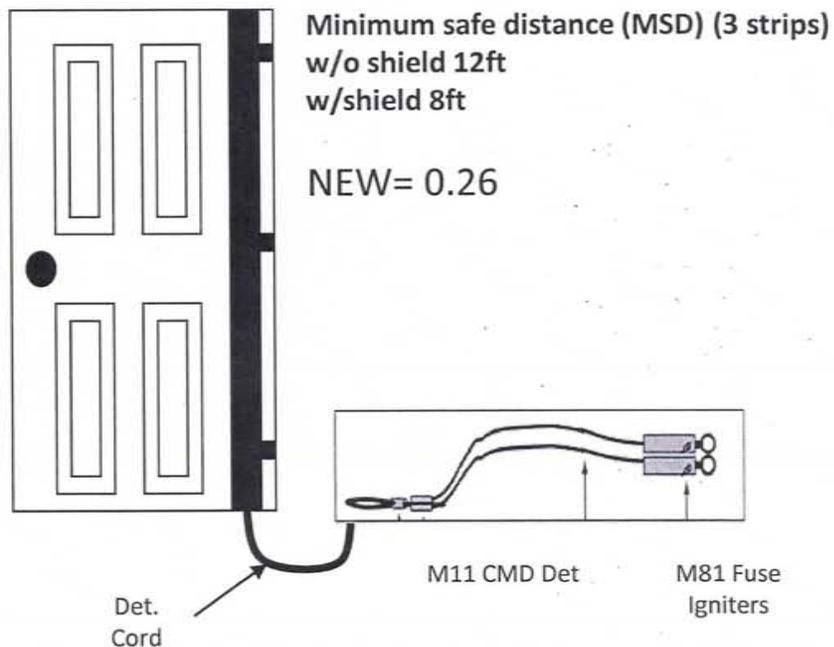
FM 3-34.214

Explosives materials:

- 22ft Det. Cord
- 1 British Junction
- 2 blasting cap

Nonexplosives materials:

- One hundred-miles-per-hour tape, double-sided tape and electrical tape.
- 1 Door



Note:

Using 22ft of Det Cord and two blasting caps the calculating formula for Net Explosive Weight (NEW) is **0.26** pounds of explosive.

The minimum safe distance according to the table in FM 3-34.214 for this NEW utilizing a Kevlar blanket or a shield is **8 feet** with out a is shield is **12 feet**.

Oval or Silhouette Charge

References
FM 3-34.214

Charge Requirements (5 wraps)

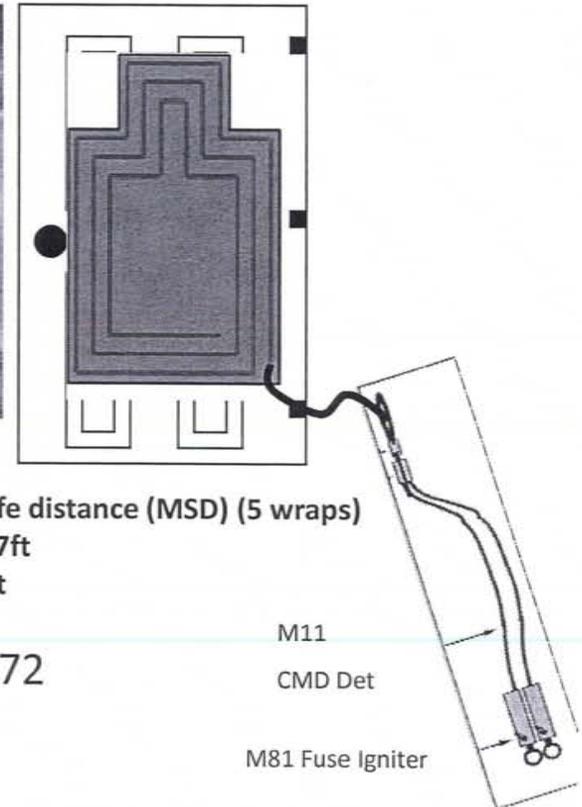
Explosive materials:

61 ft Det. Cord per silhouette (5 wraps)
1 British Junction
2 blasting cap

Five wraps for an exterior wall, lap siding, studs, and sheetrock.
Six wraps for roof (shingle/plywood).
Eight wraps for an unfilled cinder block wall.
Appropriate priming system

Nonexplosive materials:

One hundred-miles-per-hour tape.
Two E-type silhouettes
One prop stick, if required.
Zip ties.
1 Door



Note:

Using 61ft of Det Cord and two blasting caps the calculating formula for Net Explosive Weight (NEW) is **0.72** pounds of explosive.

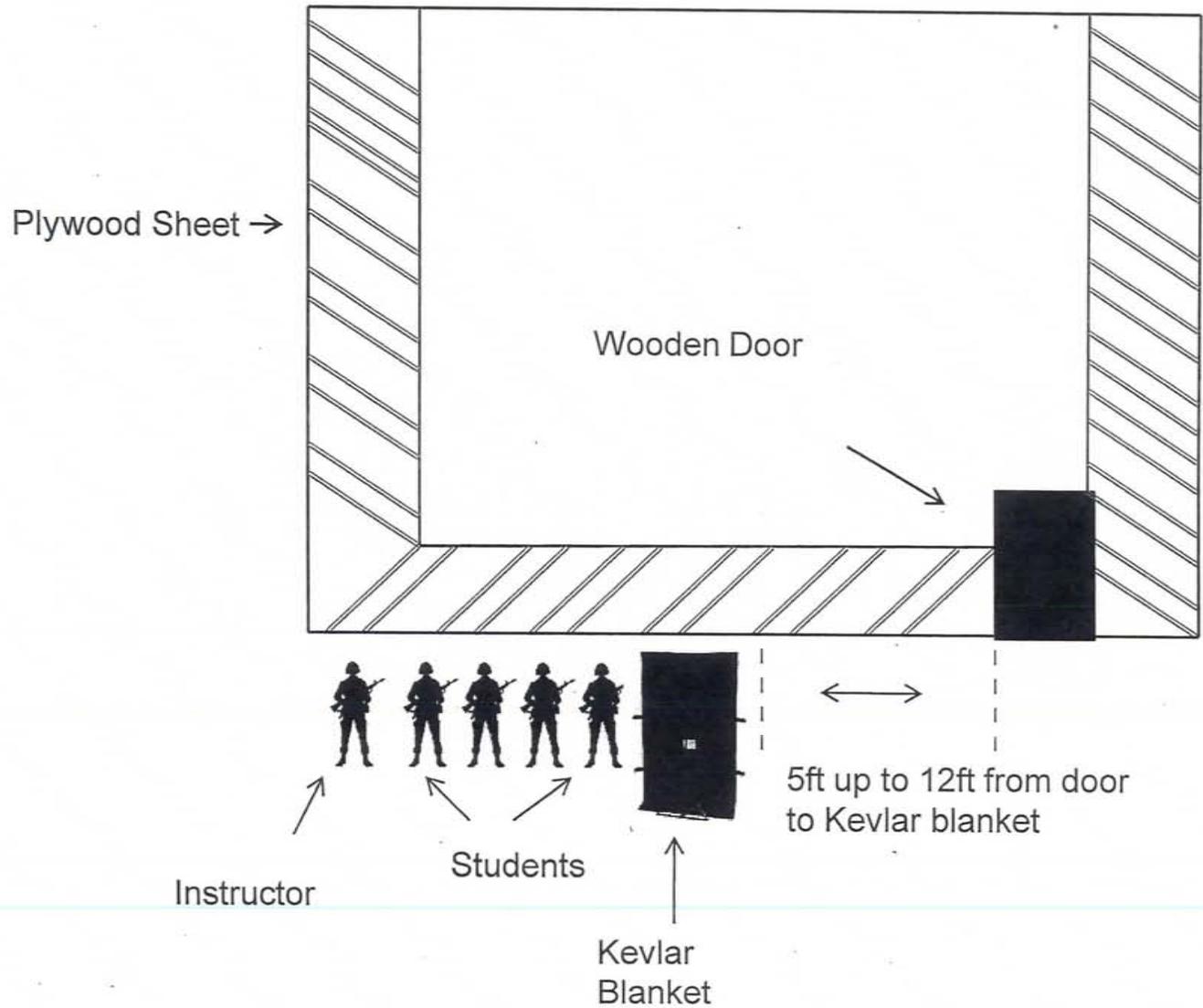
The minimum safe distance according to the table in FM 3-34.214 for this NEW utilizing a Kevlar blanket or a shield is **11 feet** with out a is shield is **17 feet**.

Minimum safe distance (MSD) (5 wraps)
w/o shield 17ft
w/shield 11ft

NEW= 0.72

M11
CMD Det
M81 Fuse Igniter

Mock-Up Wooden Framed

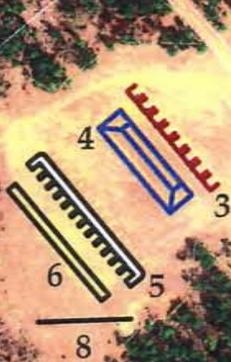


Note:
Distance starts from the smallest charge which is 5 feet up to 12 feet of the biggest charge this is the distance that the student will be from the blast.

Terry Demo Range

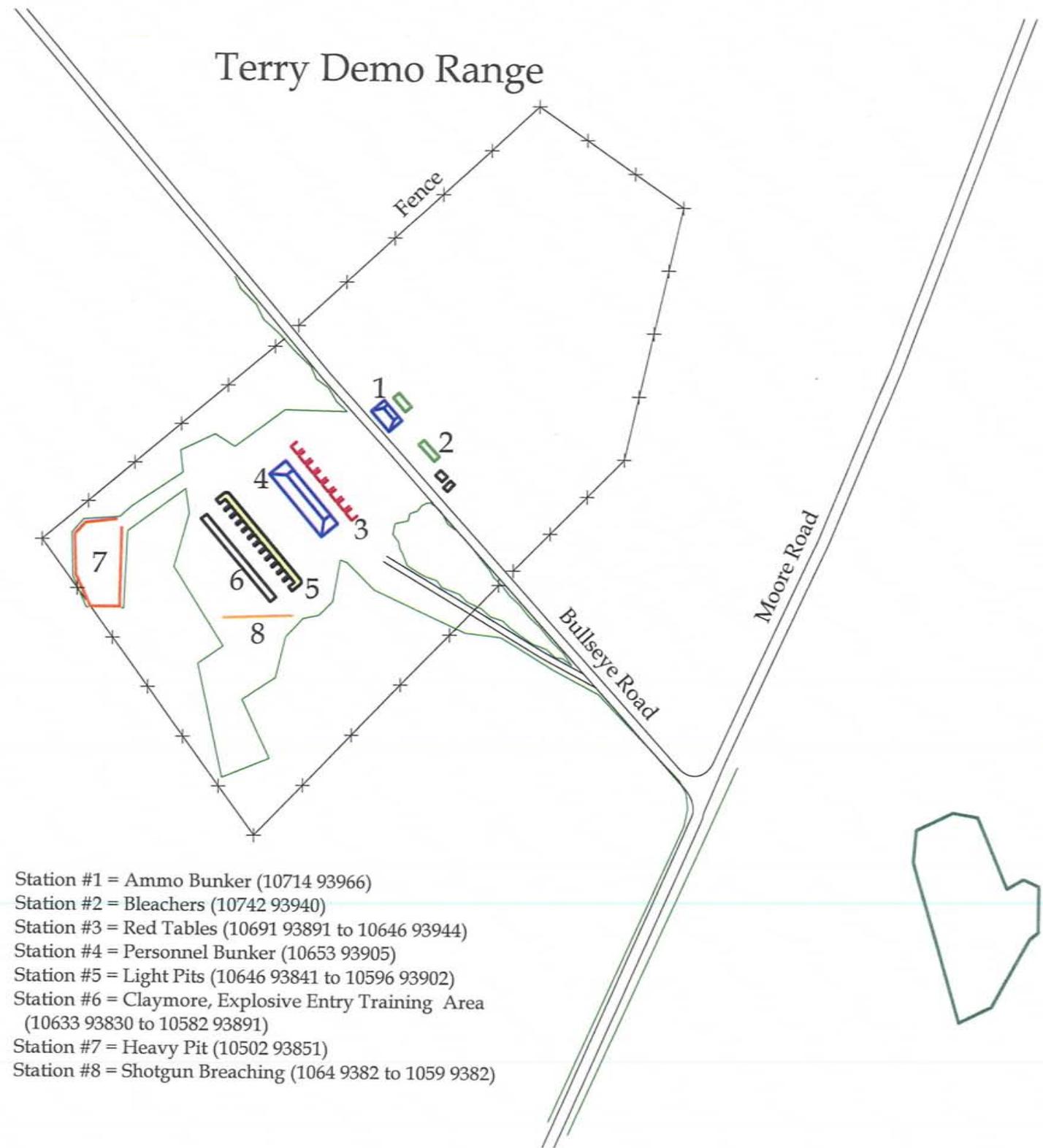
Bullseye Rd

Moore Rd

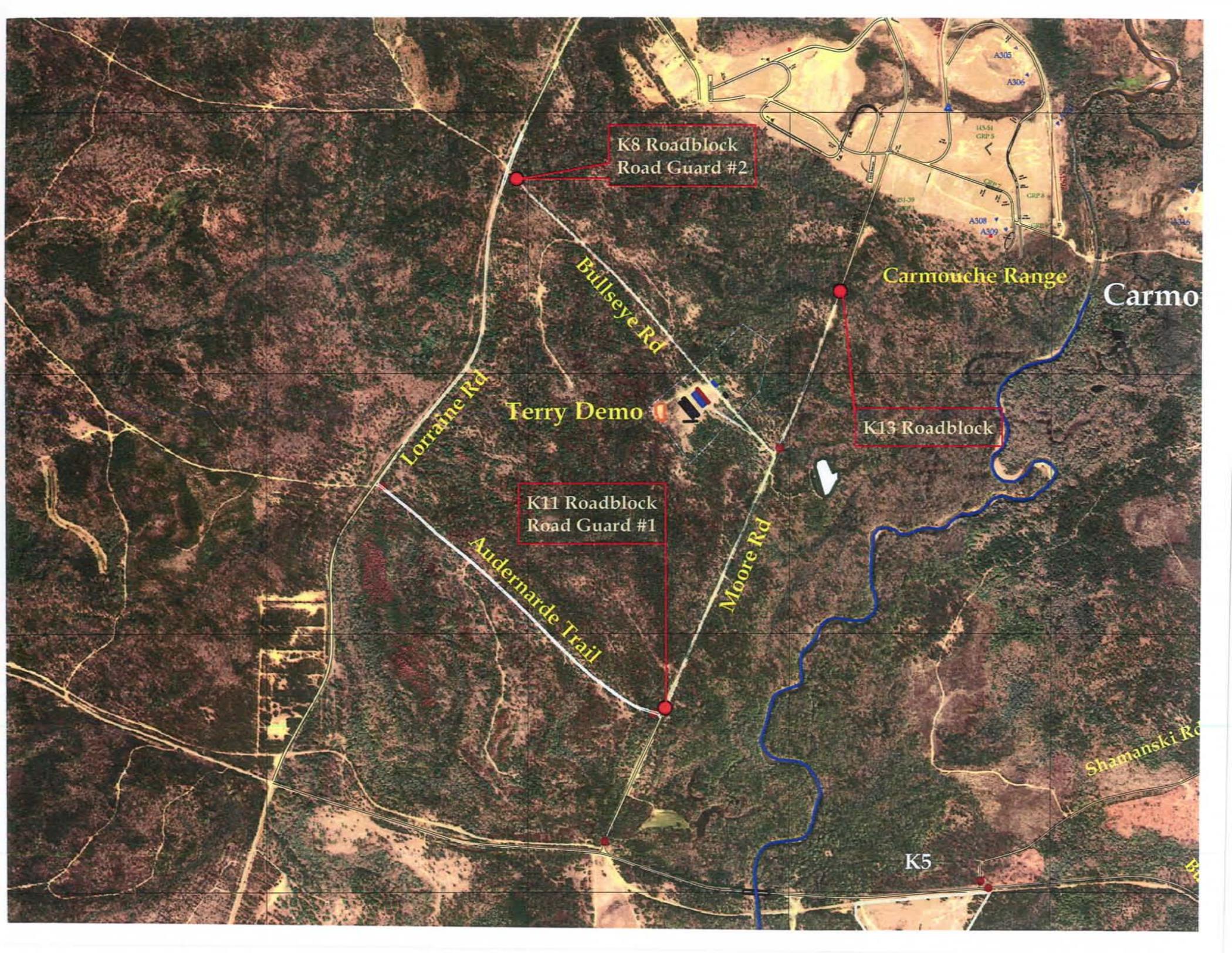


- Station #1 = Ammo Bunker (10714 93466)
- Station #2 = Bleachers (10742 93940)
- Station #3 = Red Tables (10691 93891 to 10646 93944)
- Station #4 = Personnel Bunker (10653 93905)
- Station #5 = Light Pits (10646 93841 to 10596 93902)
- Station #6 = Claymore, Explosive Entry Training Area (10633 93830 to 10582 93891)
- Station #7 = Heavy Pit (10502 93851)
- Station #8 = Shotgun Breaching (1064 9382 to 1059 9382)

Terry Demo Range



- Station #1 = Ammo Bunker (10714 93966)
- Station #2 = Bleachers (10742 93940)
- Station #3 = Red Tables (10691 93891 to 10646 93944)
- Station #4 = Personnel Bunker (10653 93905)
- Station #5 = Light Pits (10646 93841 to 10596 93902)
- Station #6 = Claymore, Explosive Entry Training Area (10633 93830 to 10582 93891)
- Station #7 = Heavy Pit (10502 93851)
- Station #8 = Shotgun Breaching (1064 9382 to 1059 9382)



K8 Roadblock
Road Guard #2

Carmouche Range

Carmo

Terry Demo

K13 Roadblock

K11 Roadblock
Road Guard #1

Lorraine Rd

Bullseye Rd

Audemarde Trail

Moore Rd

Shamanski Rd

K5

Terry Demo Range, Range Division Standard Demolitions, Shotgun Breaching & EET (Log #11-02-11) Roadblock List 01 May 2012

#	GRID	LOCATION	TYPE	#	GRID	LOCATION	TYPE
K-2	163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate	K-28	191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Cable
K-3	153 894	Across entrance road leading to Concord OP 250m N. of its intersection with Buena Vista Rd.	Gate	K-30	193 916	Across Cactus Rd 150m N. of Pine Knot Creek. Permanently closed.	Gate
K-4	144 901	Across entrance road leading to Hartell Bunkers 50m N. its of intersection with Buena Vista Rd.	Gate	K-32	192 915	Across Shamanski Rd 35m W. of its intersection with Cactus Rd.	Gate
K-5	117 920	Across Shamanski Rd 25m N. of its intersection with Buena Vista Rd.	Gate	K-34	134 932	Across Buzancy Trail at its intersection with Rinehart Rd. Permanently closed.	Berm
K-7	095 935	Across Audernarde Trail 10m E of its intersection with Lorraine Road.	Gate	K-36	162 882	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd. (Road guard location).	Gate
K-8	099 947	Across Bulls Eye Rd 50m E of its intersection with Lorraine Road.	Gate	K-38	201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Cable
K9	105 927	Across Audernarde Trail 30m W of Moore Rd, 575m N of Buena Vista Rd & Moore Rd intersection.	Gate	K-39	202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Cable
K-10	118 920	Across Buena Vista Rd at K-5 road block. (Road guard location).	Gate	K-40	174 908	Across Box Springs Rd 30m S. of Pine Knot Creek.	Gate
K-11	105 927	Across Moore Rd 20m N. of its intersection with Audernarde Trail. Entrance to Terry Demo Rng. (Road guard location)	Gate	K-41	192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Cable
K-12	104 988	South of tower on Stationary gunnery Range # 1	Gate	K-42	194 956	Across Box Springs Rd 1200m N. of its intersection with Cactus Rd.	Gate
K-13	112 943	Across Moore Rd 680m N. of its intersection with Bullseye Rd.	Gate	K-43	197 984	Across Box Springs Rd. approx 450m N. of its intersection with the Hastings Range baseline road.	Cable
K-14	113 998	Across Moore Rd 10m S. of its intersection with Lorraine Rd.	Gate	K-44	113 955	Across Moore Rd on the N. side of Carmouche Range maneuver box.	Gate
K-15	114 999	Across course road leading out of Ruth Range 50m E. of its intersection with Moore Rd.	Gate	K-45	116 964	Across Moore Rd 30m S. of its intersection with the old Ware Range course road.	Gate
K-16	190 003	Across Rinehart Rd 100m W. of its intersection with Box Springs Rd.	Gate	K-46	119 979	Across Moore Rd 725m S. of its intersection with Americo Trail.	Gate
K-17	116 013	Across unnamed trail 15m E. of Moore Rd and 130m N. of Ruth Range tower.	Cable				
K-18	122 033	Across Moore Rd. at the northern reservation boundary. Permanently closed.	Berm	O-9	101 962	600m N of Carmouche Rng on right side of Lorraine Rd	Gate
K-19	121 023	Across unnamed trail 1400m N. of Ruth Range and 150m E of Moore Rd.	Cable	O-18	093 979	800m N of Ware Rng Entrance on right side of Lorraine Rd	Gate
K-20	141 026	Across unnamed trail off northern boundary trail along railroad tracks 400m E. of Cox Creek ford.	Cable				
K-24	219 968	Across Turrentine Rd at reservation boundary. Permanently closed.	Barrier/ Berm				
K-25	180 923	Across unnamed trail leading to Shiloh Trail 10m W. of Box Springs Rd. Permanently closed.	Cable				
K-26	201 968	Across Turrentine Rd 20m W. of its intersection with Boundary Rd.	Gate				



RECORD OF ENVIRONMENTAL CONSIDERATION (REC)



EMD Number: 1122814

Project#: M6826

Project Title: Qualification Tables

Description of proposed action:

Demolitions training to include vehicle maneuvering on Terry Demo in order to conduct EQT. No digging will occur, only an M9 ACE to back fill holes which have been created by shape and cratering charges. Squads will use C4, bangalore torpedoes, and modern demo initiations to conduct certification training. Inert miclic will fire upon completion of all other training. All holes will be filled in and dunnage trash will be removed prior to leaving area. Light demolitions training will also be accomplished. (RENEWAL ~KP)

Project Location:

Oscar 12 (Terry Demo)

Amount, Description, Location of Disturbance/Digging:

M9 ACE used to back fill holes created.

Number/Types of Vehicles:

None

Number of Personnel:

None

Type of Ammunition:

Demolitions Live

Number/Types of Trees:

None

Size of Project Area:

Duration of Action: Start: 10/1/2011

Stop: 9/30/2012

Proponent: Ronnie Williams 706-545-5677

Organization/Unit: Range Division

DECISION: Concur with conditions

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

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

REC APPROVED THROUGH 30 SEPTEMBER, 2012

Hazardous Materials/Waste

Conditions:

Dudley Carson (706 545 7570), 8/18/2011

Considerations for Field Training Exercises and Range Operations

- Appropriate precautions must be taken to prevent hazardous material spills. Have adequate quantities of spill response supplies on hand. If a spill occurs use notification procedures as outlined in the Fort Benning Hazardous Waste Management Plan. Contain and clean up spill according to guidance provided by the Environmental Protection Management Branch. Any waste generated must undergo a waste stream analysis to determine appropriate management requirements. If any hazardous waste is generated it must be managed in accordance with Federal, State, Army and Fort Benning regulations.
- 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.
 All excess, unused munitions (including smoke canisters) must be returned to the Ammunition Supply Point (ASP) after the range operation is complete. Defective, misfired, or otherwise unserviceable munitions may be destroyed on the range, as part of the training exercise, in coordination with EOD. A dud shall not be removed from the range; it will be marked, called into range control and will be properly disposed of by EOD personnel IAW/MCOE Reg 350-19, dated 23 July 2010.
- Rubbish, empty containers and other waste shall be removed from the training area after the exercise. Contact EPMB for detailed information on the proper disposal of waste products resulting from the exercise.
- Contact POC for questions or additional guidance.

EMD Number: 1122814

IJO# M6826

Project Title: Qualification Tables

CWA - Training

Conditions:

Jesse Taylor (706 545 0276), 8/30/2011

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

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

General ISCP Requirements: In the event of a spill/discharge -- notify Range Control by radio or call 544-6291, and they will notify E-911 for Fire Department/HAZMAT Team assistance and/or notification of the EMD office (Spill Beeper 706-317-6584). As appropriate, and if personnel are trained -- REACT to minimize spill damages. Submit a spill report to the EPMB Spill Program Manager (use Spill Response Report attached). All spills reaching navigable water must be reported immediately. The unit is responsible for the final cleanup of any spill during this exercise. Coordination with this office is required for clearance of the site.

SPECIAL NOTE: See 2010 ASP SOP Training and Deployment.doc for further training requirements.

Natural Resources - RCW

Conditions:

Michael Barron (706-544-7080), 8/16/2011

See attached conditions. Please note that Terry Demo is now located in O08, not O12. Note locations of red-cockaded woodpeckers (RCW) and gopher tortoises on attached maps. Training restrictions apply. Unit commanders must make sure that all troops know the locations of restricted areas and understand these training restrictions. This is imperative since night training may occur. Boundaries are often hard to see at night, but this is no excuse for violations to occur. Two hour time restriction is for 2 hours once every 24 hour period. Note where digging may not occur. All trenches, fighting positions, etc must be filled in prior to leaving an area. There must be no cutting down or intentional destruction of any pine trees throughout the requested area(s).

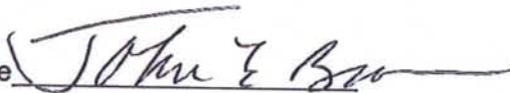
Noise

Conditions:

Ellis Leeder (706 545 7576), 8/16/2011

This is normal training operations that must be conducted. If there are any noise complaints received, the Environmental Management Division IONMP and or POA programs will investigate by determining if the noise was detected by noise detection monitors, 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 good smoke management practices not allowing smoke to travel off Installation boundary. If any assistance or a copy of MCoE Regulation 350-19 is needed please feel free to contact Ellis Leeder at 706.545.2400 or email ellis.leeder@us.army.mil

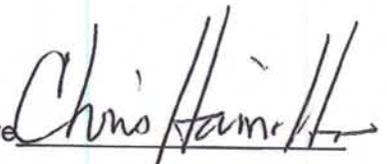
Signature



John E Brown
NEPA Program Manager

Date 01 SEP 2011

Signature

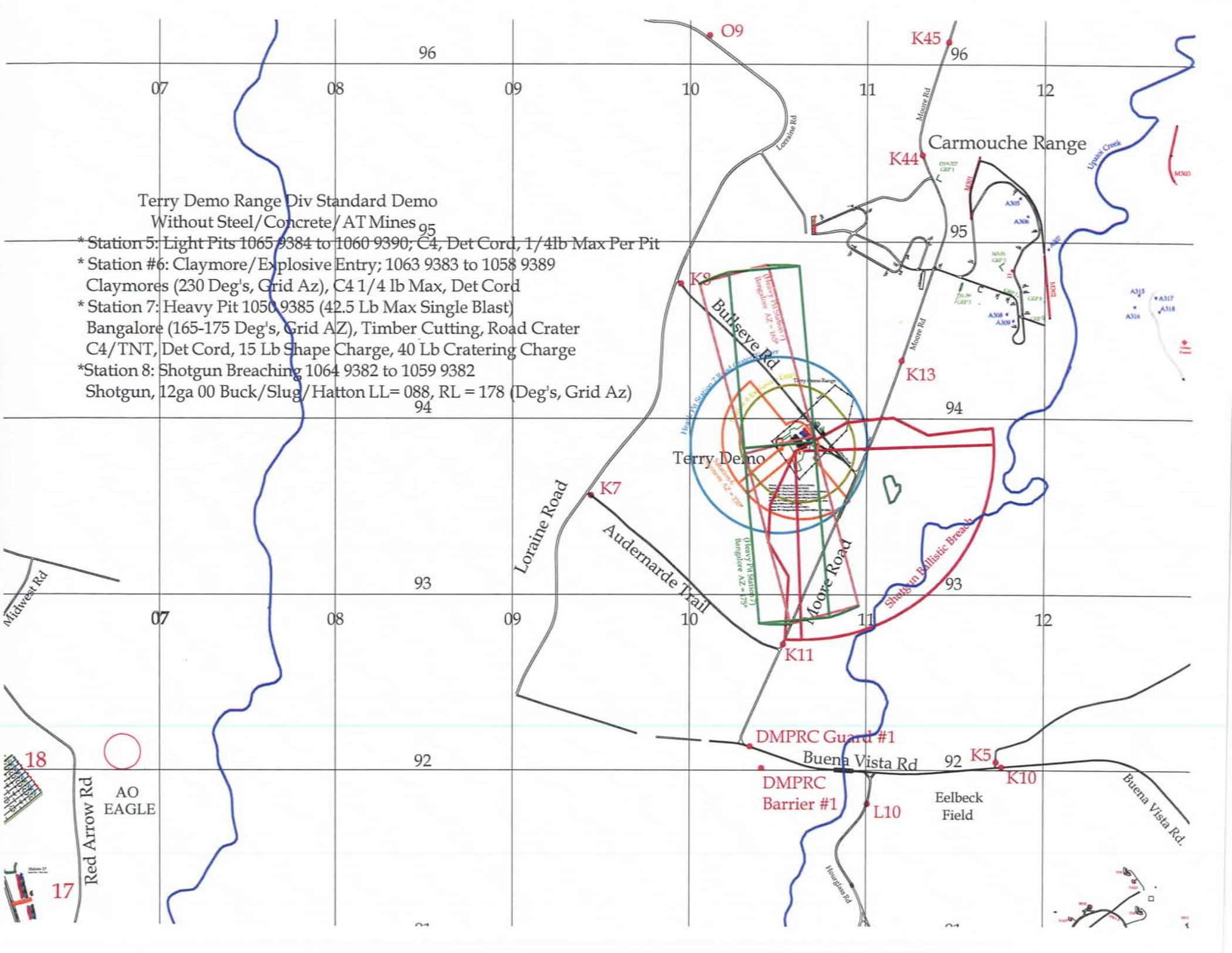


Christopher E. Hamilton, PhD
EPMB Chief

Date 1 Sep 11

Terry Demo Range Div Standard Demo
Without Steel/Concrete/AT Mines

- * Station 5: Light Pits 1065 9384 to 1060 9390; C4, Det Cord, 1/4lb Max Per Pit
- * Station #6: Claymore/Explosive Entry; 1063 9383 to 1058 9389
Claymores (230 Deg's, Grid Az), C4 1/4 lb Max, Det Cord
- * Station 7: Heavy Pit 1050 9385 (42.5 Lb Max Single Blast)
Bangalore (165-175 Deg's, Grid AZ), Timber Cutting, Road Crater
C4/TNT, Det Cord, 15 Lb Shape Charge, 40 Lb Cratering Charge
- * Station 8: Shotgun Breaching 1064 9382 to 1059 9382
Shotgun, 12ga 00 Buck/Slug/Hatton LL= 088, RL = 178 (Deg's, Grid Az)



IMBE-PLT-O

~~30 May 2012~~

5 JUN 2012

RH

MEMORANDUM FOR WHOM IT MAY CONCERN

SUBJECT: Standard Operating Procedures (SOP) for Terry Demo Range

1. PURPOSE: To establish Standard Operating Procedure to be used during various aspects of demolition training on Terry Demo Range.
2. APPLICABILITY: The SOP applies to all units/activities using Terry Demo Range. All Officers in Charge (OIC), Non-Commissioned Officers in Charge (NCOIC) and Range Safety Officers (RSO) will be familiar with the contents of the SOP and all other applicable references.

3. REFERENCES:

- a. AR 385-63 and DA Pam 385-63, Range Safety
- b. MCoE Regulation 350-19, Range and Terrain Regulation
- c. TM 9-1300-206, Ammunition and Explosives Standards
- d. ST 5-250-1, Modernization Demolition Initiation Systems, Ft Leonard Wood
- e. FM 3-34.214/MCRP 3-17.7L, Explosives and Demolitions

4. SCHEDULING: Units/Activities deviating from the standard Terry Demo Range with waiver will prepare and submit the following documents to Chief, Range Operations:

- a. DA Form 7566, Risk Management Worksheet, FB Form 350-19-1-E-R, scenario, sketches, FB Form 144, Environmental Consideration Worksheet, DA Form 2203-R, Demolition Reconnaissance Report and any specific enclosures as required.

- b. Training guidelines for all training will be conducted IAW this SOP together with references listed in paragraph 3 of this SOP and FB 350-19-1-E-R approved by Chief, Range Division.

NOTE: Units/activities schedule to use Terry Demo Range are required to contact the Sustainable Range Program (SRP) Coordination Office, 545-5677, one day prior to the execution of the training event. The SRP Coordination personnel assigned to the range will have the following current documents listed above except for the daily risk management work sheet, request summary and Demolition Permit for the OIC and RSO. Scheduling (paragraph a) applies to units/activities requesting to divert from the standard packet will have to get approval from Chief, Range Division.

5. GENERAL: Terry Demo Range is a demolition range consisting of eight training stations:

- a. Station Number 1 (Ammunition Point)
- b. Station Number 2 (Bleachers)
- c. Station Number 3 (Red Tables)

- d. Station Number 4 (Personnel Bunker)
- e. Station Number 5 (Light Pits)
- f. Station Number 6 (Claymore Mine, EET)
- g. Station Number 7 (Heavy Pits)
- h. Station Number 8 (Shotgun Breaching)

6. All supporting regulations, FMs, TMs, etc., with an approved standard 350-19-1-E-R/scenario package, waiver, and request summary will be on site. OIC/NCOIC/RSO will maintain positive control of all personnel when engaging simultaneous training. All visiting personnel will also be directly controlled by the OIC/RSO/NCOIC. Prior to any training, all personnel will be given a range orientation/safety briefing, to include location of dud areas, medical procedures, misfire procedures and emergency cease-fire signals, etc. Only demolitions listed on approved FB Form 350-19-1-E-R/scenario package will be allowed on the range. Prior to vacating the range, using unit will ensure the range is cleaned to include the latrines. All personnel arriving late on the range will be taken to the bleacher area and will receive a safety briefing by the OIC. NOTE: Civilians are not allowed on the range without a memorandum signed by the Garrison Commander.

7. All refuse generated, pallets, ammunition boxes, food packaging, etc., will be removed from the range and disposed of IAW, paragraph 5-15, MCoE Regulation 350-19. All using units are responsible for damages to any structure, fixture or equipment that is part of the range. Units will repair or replace all items at their expense. Any damage or malfunction must be reported in writing to Chief, Range Division. All meals will be eaten only in the bleacher area and all trash will be policed by the unit and are moved from the range (See sketch). No meals will be eaten in the ammunition holding area (AHA). A detailed briefing will be given by the OIC/NCOIC/RSO to all personnel prior to training in any individual training station. This briefing will include the 350-19-1-E-R/scenario package and detailed safety briefing for each station.

NOTE: No other type of training will be conducted on the range except shotgun breaching and demolition training that requires calculation, placement and use or handling of explosives.

a. **Station Number 5 (Light Pit):** Pit will not be used for Demolition unless the pits conditions are IAW DA PAM 385-63.

(1) The explosive charge for the light pits will not exceed ¼ lb net explosive weight per pit and will be placed in the center of the pit.

(2) All charges employed in the light pit will have a one to five (1-5) second delay between detonations per pit to ensure a valid boom count for positive identification of misfires.

(3) Charges will be allowed to be tied into the line main.

(4) Instructors will supervise not more than five students while they are priming individual charges. Two Soldiers with two instructors will remain on-site in order to initiate charges.

(5) The minimum length of time fuse for the light pit is no less than one minute.

(6) Unit will clear any debris from the stations after training.

(7) All Soldiers will wear the minimum protective equipment consisting of Kevlar helmet, hearing and eye protection and body armor.

(8) All other personnel not participating downrange will be in bunkers and remain until the "all clear" announcement is made.

(9) Charges will be constructed at the red tables only and they will be a maximum of five Soldiers and an instructor per pit.

b. Station Number 6 (Claymore Mine/Explosive Entry Techniques/Shotgun Breach)

(1) Only five claymore mines will be fired with a 1-5 second delay to ensure a valid boom count for positive identification of misfires.

(2) Instructors will supervise not more than five students while they are emplacing claymore mines. Not more than five students will emplace claymore mines at a time.

(3) Unit will clear any debris after training.

(4) Claymore mine training will be in front of the light pits.

(5) The instructor and Soldier firing the claymore mine will be at a minimum of sixteen meters behind the light pit and in the prone position.

(6) For Explosive Entry Techniques to include blast and blanket shield (Waiver is required for blast and blanket shield training), shotgun breach training, (See scenario for guidance).

(7) All other personnel not participating downrange will be in bunkers and remain until the "all clear" announcement is delivered.

(8) All Soldiers will wear the minimum protective equipment consisting of Kevlar helmet, hearing and eye protection and body armor.

c. Station Number 7 (Heavy Pit)

(1) Road crater, timber cutting and Bangalore torpedoes will be the only demolition training allowed in the heavy pit.

(2) Timber cutting training will require a wood pole or wood already cut and brought in by the using unit.

(3) Placement of Bangalore torpedoes will require the long axis of the charge to be placed on a grid azimuth of 165 to 175 degrees. No more than three Bangalore's can be detonated at one time.

(4) When detonating cratering charges personnel will remain in the bunker for a minimum of one minute after detonation before proceeding downrange to ensure a complete detonation. All charges placed below ground level will be primed with detonation cord only.

IMSE-BEN-PLT-R

SUBJECT: Standard Operating Procedures (SOP) for Terry Demo Range

(5) The explosive charge for the heavy pit will not exceed 42.5 lbs net explosive weight per detonation.

(6) Steel cutting and conventional AT mines training will be reviewed by the Chief, Range Division with approval on a case by case basis.

(7) Instructors will supervise not more than five Soldiers while they are priming individual charges. Not more than five students will prime charges at a time.

(8) All charges employed in the heavy pit will have a 1-5 second delay between detonations per pit to ensure a valid boom count for positive identification of misfires.

(9) Charges will be allowed to be tied into the line main.

(10) All other personnel not participating downrange will be in bunkers and remain until the "all clear" announcement is delivered.

(11) All Soldiers will wear the minimum protective equipment consisting of Kevlar helmet, hearing and eye protection and body armor.

(12) Charges will be constructed at the red tables only and they will be a maximum of five Soldiers and one instructor per pit.

(13) The minimum length of time fuse for the heavy pit is no less than five minutes.

d. Station Number 8 (Shotgun Breaching)

(1) The door frames made of wood will be moved onto the shotgun range after everyone has familiarized with and fired a dry fire scenario.

(2) There will be no hardware actually on the doors simulated by marking the position of the hinges.

(3) The doors will be positioned from grid 1064 9382 to 1059 9382 with the hinge on the left side.

(4) The hinges and doorknobs will only be fired in a direction to keep the rounds inside the SDZ which cannot exceed a left limit of 88 degrees azimuth and a right limit of 178 degrees azimuth.

8. MEDICAL: Medical personnel and equipment on site will be IAW unit POI and Risk Management Worksheet risk level for the training conducted. MEDEVAC will be IAW MCoE Regulation 350-19 and MCoE REG 40-2 (MEDEVAC PROCEDURES).

9. VEHICLE CONTROL:

a. No tracked vehicles are authorized on Bulls Eye and Moore road.

IMSE-BEN-PLT-R

SUBJECT: Standard Operating Procedures (SOP) for Terry Demo Range

b. POV parking is located outside the barbed wire two-strand fence along Bulls Eye Road (See sketch). POVs on the range are to be kept to a minimum and any liability for a POV is assumed by the owner.

c. Wheeled military vehicle parking is located along Bulls Eye Road fifty meters to the west of the ammunition holding area (See sketch).

10. AMMUNITION POINT: No weapons or open flame will be allowed within 50 feet of the ammunition point. Two fire extinguishers will be available at all times at the ammunition point. Ammunition Non-Commissioned Officer (NCO) will control issue of all demolitions and will be monitored at all times. Demolitions will be issued and turned into the ammunition NCO.

11. SAFETY: If hazardous conditions present immediate danger to life or property training will cease until the hazard has been removed. Safety will not be compromised for any reason. Anyone observing an unsafe act will immediately stop training and notify RSO/OIC/NCOIC and Range Control IAW, MCoE Regulation 350-19 of the safety violation or incident.

a. All instructors/supervisors of demolition training will possess a valid Demolition Permit Card (POI Training only). FORSCOM/SOCOM deployable organization certification is the responsibility of the unit Commander.

b. Explosives will be handled IAW references in paragraph 3 of this SOP and not exposed to heat, shock or friction.

c. All charges will be dual primed.

d. Smoking is not permitted during training. A smoking area designated by the OIC will be a minimum of 100 feet from all flammables and explosives.

e. During demolition training, all Soldiers will wear the minimum protective equipment consisting of Kevlar helmet, hearing protection (double hearing protection required for where the noise level exceeds 140 decibels), eye protection and body armor. Additional equipment required by unit SOP is authorized.

f. Road guards must be stationed at gates number 1 (K11) and 2 (K8) (see site layout) 15 minutes prior to any detonations. Each road guard will have FM communication with the OIC, RSO or the SOG for the range. Roadblock K13 will be closed prior to training.

g. All personnel on the range will be in the bunkers when detonating charges and will remain there until RSO determines that the stations are clear of misfires.

h. All commands to initiate the firing systems will come from the OIC/NCOIC/RSO throughout the duration of the training. The OIC/NCOIC/RSO will verify all detonation/ initiation systems prior to placing them in the armed stage.

i. Audible warnings will be given prior to ignition of charges. This warning will consist of the verbal warning of "fire in the hole" three times.

j. After each detonation, OIC/NCOIC/RSO while clearing debris before leaving the facility is required to ensure safety of personnel and property.

k. Direct supervision by OIC/NCOIC/RSO while clearing debris before leaving the facility is required to ensure safety of personnel and property.

l. Accountability of Class V will be the responsibility of the OIC. A copy of DA Form 5692-R, Ammunition Consumption Report and DA Form 81, Ammunition Issue and Turn-In must be submitted to Range Control no later than two days after the completion of training.

m. Units will provide all necessary materials for training on Terry Demo. They are not provided by Range Division. The ITRM, P2 or CONOPS are the source for funds. Units will remove/dispose of any material and debris off the range before closing and fill any crater holes in the heavy pit. Report all damages to Chief, Range Operations.

12. WEATHER: OIC/RSO/NCOIC will consider the advisability of demolition training during adverse weather conditions.

a. No demolition training will occur when lightning is observed from/reported to the training site. At first warning of lightning, everyone will move into the bunker or transported off the site until storm passes. No primed charges will be left in place if the site is vacated. Any remaining demolition material will be secured before leaving.

b. Range Control will advise Range OIC/RSO of any approaching weather conditions that might have an adverse effect on demolition training.

13. TRANSPORTATION AND STORAGE: Transporting of explosives will be IAW TM-9-1300-206 and FM 3-34.214/MCRP 3-17.7L. Vehicles carrying explosives will display proper placards accurately indicating its contents. Stored demo material will be secured at all times.

a. Explosives will be hand carried (vehicle transport prohibited) from the demolition ammunition point of the range to the red tables and to the appropriate stations.

b. Storage of explosives in the demolition ammunition point will be IAW AR 385-63, DA Pam 385-63 and TM 9-1300-206 and FM 3-34.214/MCRP 3-17.7L. Blasting caps and explosives will be stored separately. A minimum of two 10 pound BC fire extinguishers will be placed at the demo holding area.

14. FIREFIGHTING:

a. Small fires will be extinguished immediately using BC fire extinguishers to prevent conflagration or explosion. Hand tools will not be used to extinguish these fires.

b. If a small fire gets out of control or develops after a detonation on site, do not attempt to extinguish it. Evacuate all personnel to a safe distance and immediately notify Range Control. Range Control will determine to what extent the fire will be fought.

15. MISFIRES: Misfires are the results of an explosive charge failing to fully detonate after initiation. All misfires will be handled IAW FM 3-34.214/MCRP 3-17.7L. The electric firing system is the only initiation system that may be investigated immediately when a misfire occurs. All other systems require a minimum waiting period of thirty minutes if investigating the cause of the misfire requires moving out of the bunkers. All personnel must remain in the bunkers and entrance remains closed during this waiting period.

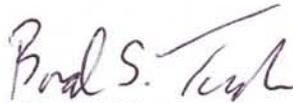
IMSE-BEN-PLT-R

SUBJECT: Standard Operating Procedures (SOP) for Terry Demo Range

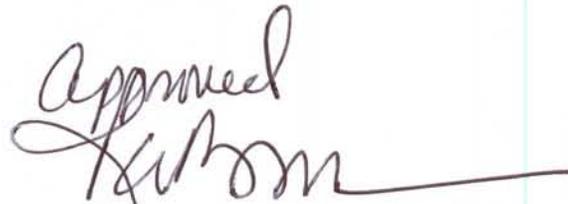
a. At no time will a misfired charge or its initiation system be disturbed. A smaller charge of one pound will be placed near the misfire without disturbing the misfire. Only qualified personnel with proper equipment will handle misfires IAW FM 3-34.214/MCRP 3-17.7L.

b. Misfires involving shaped charges must be referred to EOD through Range Control. All operations will cease until the misfire is cleared. All personnel will remain in the bunkers until the misfire has been cleared.

16. The point of contact for this action is Mr. Bolding, Operations Branch, Range Division, Directorate, Plans, Training, Mobilization and Security, COMM (706) 544-6267 or DSN 784-6342.



Brad S. Tesch
GS12, DAC
Chief, Range Operations
Directorate of Plans, Training, Mobilization
And Security



ROBERT W. BROWN
GS15
Dir DPTMS