# MILITARY OPERATIONS IN URBAN TERRAIN (MOUT) FACILITY SOP

## FACILITY DESCRIPTION

### INFORMATION

Description: 16 single and multi-level structures with a tunnel network

and a lighted after action review/classroom. **Status:** Active **Location:** 18STH7930072700

## FACILITY USES

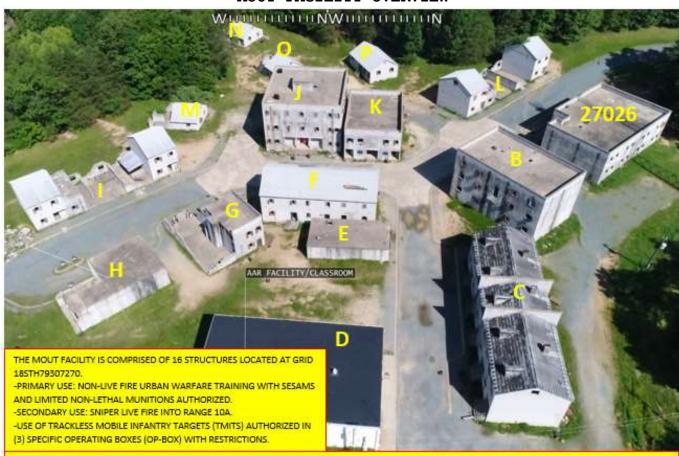
Primary Use: Non-Live Fire Urban Warfare and MOUT training with SESAMS and limited use Non-Lethal (NL) munitions.

Alternate Use: Urban Sniper Live Fire (with restrictions).

NOTE: Certain events require coordination with the Installation Range

Safety Officer (IRSO).

### MOUT FACILITY OVERVIEW



#### MOUT FACILITY BUILDINGS

- -27026: SCHOOL
- -27026-B: APARTMENT
- -27026-C: TOWNHOUSES
- -27026-D: AFTER ACTION FACILITY/CLASSROOM (SCHEDULED SEPARATELY)
- -27026-E: BANK
- -27026-F: MARKET/SHOPS
- -27026-G: OFFICE (RUBBLE)
- -27026-H: GAS STATION/GARAGE

- -27026-I: TOWNHOUSES (RUBBLE)
- -27026-J: EMBASSY
- -27026-K: OFFICE
- -27026-L: TOWNHOUSES (RUBBLE)
- -27026-M: RESIDENCE (RUBBLE)
- -27026-N: RESIDENCE (RUBBLE)
- -27026-O: RESIDENCE (RUBBLE)
- -27026-P: RESIDENTIAL

# MOUT FROM SOUTHWEST CORNER LOOKING NORTHWEST



MOUT FROM NORTHWEST CORNER LOOKING SOUTHEAST



FIGURE-2

# MOUT FROM SOUTHEAST CORNER LOOKING NORTHWEST



MOUT FROM NORTHWEST CORNER LOOKING SOUTHWEST

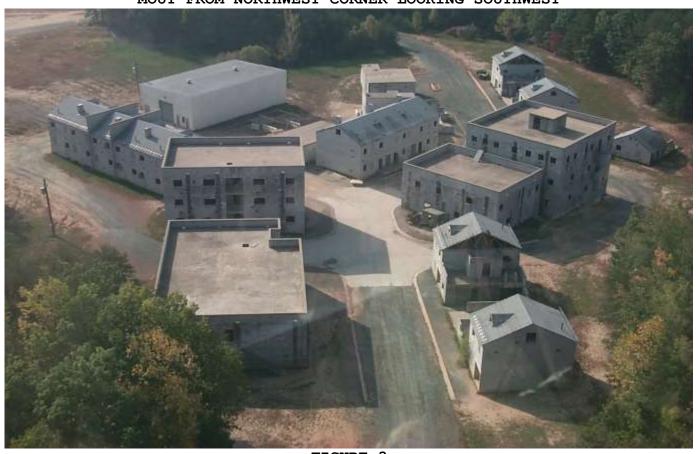


FIGURE-3

## TMIT NON-LIVE FIRE OP-BOX



## TMIT OP-BOX-MOUT

- -THIS IS A NON-LIVE FIRE OP-BOX ONLY.
- -SESAMS USE IS AUTHORIZED AGAINST TMITS.
- -BLANKS AND OTHER NON-LIVE MUNITIONS ARE AUTHORIZED.
- -OTHER NON-LETHAL WEAPONS (NLW) MAY BE USED ONLY WHEN AUTHORIZED. PRIOR COORDINATION WITH IRSO IS REQUIRED.
- -TMITS ARE AUTHORIZED TO MOVE IN ANY SCENARIO THE TERRAIN AND PERSONNEL MOVEMNT ALLOWS INSIDE THIS OP-BOX ONLY.
- -MINIMUM ENGAGEMENT DISTANCES MUST BE ADHERED TO.

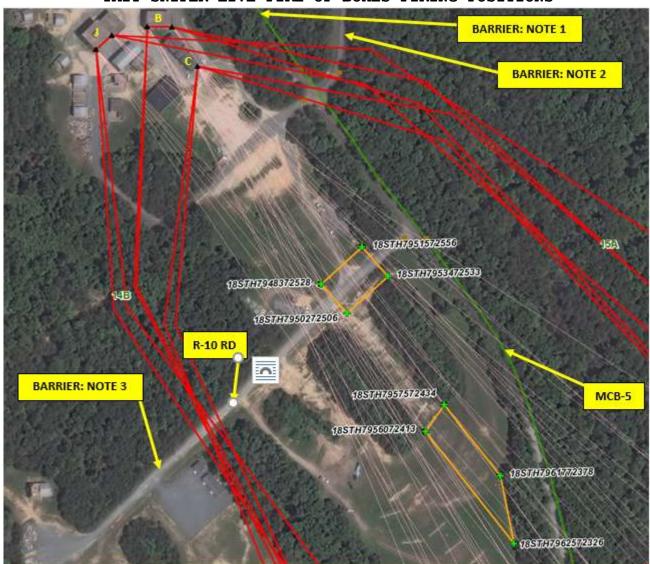
#### TMIT SNIPER LIVE FIRE OP-BOXES 1 & 2



#### TMIT OP-BOX-SNIPER 1 AND SNIPER 2

- -THESE LIVE FIRE OP-BOXES ARE FOR SNIPER USE ONLY AND ARE SPECIFIC TO THE SCOUT SNIPER INSTRUCTOR SCHOOL AT WTBN.
- -USE OF THESE OP-BOXES BY ANY OTHER UNIT MUST BE APPROVED BY THE INSTALLATION RANGE SAFETY OFFICER (IRSO).
- -USE OF THESE OP-BOXES BY ANY AUTHORIZED UNIT MUST BE COORDINATED WITH THE IRSO PRIOR TO APPROVAL.
- -THIS EVENT CREATES SPECIFIC CO-USE CONFLICTS WITH LZ-KIWI, TUNNELS, MCB-5, AND RANGE 10A THAT MUST BE ADDRESSED IN RFMSS.
- -THIS EVENT CREATES ACCESS CONFLCITS WITH RANGE 10, RANGE 10 PARKING LOT/CLASSROOM, MOUT DEFENSE BLDG, AND RANGE 11 THAT MUST BE ADDRESSED IN RFMSS.
- -ALL CONFLCITS MUST BE MITIGATED BY PLACEMENT OF BARRIERS AND ROAD GUARDS. SEE FIGURE-6.
- -ACCESS TO OR CO-USE OF THESE CONFLICT AREAS MUST BE CLOSELY COMMUNICATED BETWEEN OIC/RSO'S OF THESE AREAS.
- -TMITS ARE AUTHORIZED TO MOVE IN ANY SCENARIO THE TERRAIN ALLOWS INSIDE THESE OP-BOXES ONLY.
- -CROSS-FIRE IS AUTHORIZED IN THESE TWO OP-BOXES ONLY.
- -THE AUTHORIZED FIRING POINTS ILLUSTRATED IN FIGURE-6 MUST BE USED, LIVE FIRE FROM ANY OTHER POINT IS PROHIBITED.
- -MINIMUM ENGAGEMENT DISTANCES MUST BE ADHERED TO.
- -LIVE FIRE ON TMITS ANYWHERE ELSE IN OR FROM THE MOUT FACILITY IS PROHIBITED.
- -ANY STATIONARY TARGETS MUST BE PLACED WITHIN THESE ESTABLISHED OP-BOXES.

#### TMIT SNIPER LIVE FIRE OP-BOXES FIRING POSITIONS



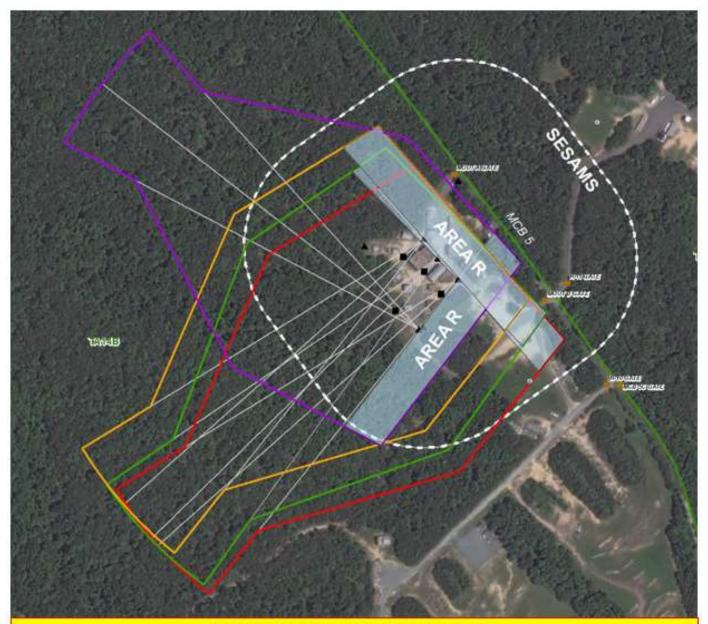
# TMIT OP-BOX-SNIPER 1 AND SNIPER 2 FIRING POSITIONS

- -LIVE FIRE IS ONLY AUTHORIZED FROM THE LOCATIONS INDICATED HERE INTO THE SNIPER OP-BOXES ONLY.
- -THESE LIVE FIRE OP-BOXES ARE FOR SNIPER USE ONLY AND ARE SPECIFIC TO THE SCOUT SNIPER INSTRUCTOR SCHOOL AT WTBN.
- -USE OF THESE OP-BOXES BY ANY OTHER UNIT MUST BE APPROVED BY THE INSTALLATION RANGE SAFETY OFFICER (IRSO).
- -USE OF THESE OP-BOXES BY ANY AUTHORIZED UNIT MUST BE COORDINATED WITH THE IRSO PRIOR TO APPROVAL.
- -FIRING POSITIONS ARE:
- ;;(B): BLDG 27026-B (APARTMENTS) SOUTHEASTERERN CORNERS OF ROOFTOP ONLY.
- --(C): BLDG 27026-C (TOWNHOUSES) SOUTHEAST FACING WINDOW ONLY.
- \_\_(J); BLDG 27026-J (EMBASSY) SOUTHEASTERN CORNERS OF ROOFTOP ONLY.
- -TMITS ARE AUTHORIZED TO MOVE IN ANY SCENARIO THE TERRAIN ALLOWS INSIDE THESE OP-BOXES ONLY.
- -CROSS-FIRE IS AUTHORIZED IN THESE TWO OP-BOXES ONLY.
- -LIVE FIRE ANYWHERE ELSE IN OR FROM THE MOUT FACILITY IS PROHIBITED.
- -BARRIERS AND ROAD GUARDS ARE REQUIRED WHEN THIS EVENT IS APPROVED:
- --NOTE 1: BARRIER MUST BE PLACED BLOCKING MCB-5 NEAR THE MOUT-A GATE WITH A ROAD GUARD POSTED DURING THE LIVE FIRE
- -NOTE 2: BARRIER MUST BE PLACED INSIDE THE RANGE 11 GATE AND A ROAD GUARD PROVIDED BY THE UNIT AT RANGE 11 WHEN RANGE 11 IS OCCUPIED. ACCESS IN AND OUT OF RANGE 11 MUST BE STRICTLY CONTROLLED.
- --NOTE 3: BARRIER MUST BE PLACED BLOCKING RANGE 10 RD NEAR ENTRANCE TO THE RANGE 10 PARKING LOT WITH A ROAD GUARD POSTED DURING LIVE FIRE. ACCESS IN AND OUT OF RANGE 10, PARKING LOT, AND MOUT DEFENSE BLDG MUST BE STRICTLY CONTROLLED.
  --ROAD GUARDS MUST HAVE CONSTANT COMMS WITH THEIR RESPECTIVE OIC/RSO.



#### **EMPLOYMENT OF NON-LETHAL 12GA ROUNDS**

- -FORCE-ON-FORCE TRAINING WITH NON-LETHAL WEAPONS (NLW) OTHER THAN SESAMS IS PROHIBITED.
- -PPE LEVEL-0 REQUIRED FOR ALL PERSONNEL.
- -USE OF THE 12GA NLW AMMO IS ONLY AUTHORIZED FROM THE NUMBERED FIRING POINTS (FP) INTO THEIR CORRESPONDING TARGET POINTS (TP) AND ON THE AZIMUTH PROVIDED BELOW ONLY.
- -TARGETS MUST BE PLACED MINIMUM 10M FROM ANY STRUCTURE TO MINIMIZE RICCOCHET AND DAMAGE TO BUILDINGS.
- -SINGLE FIRING POINT TO SINGLE TARGET ONLY.
- -AREA BEHIND TARGETS MUST BE CLEAR OF ALL PERSONNEL.
- -MINIMUM ENGAGEMENT DISTANCES ARE 10-20M. THIS ROUND LOSES EFFECTIVENESS BEYOND 20M TO TARGET.
- -ROUND IS PRONE TO RICOCHET BACK TOWARD FIRING POSITION AS INDICATED BY AREA-R IN THE SDZ OF FIGURE 8.
- -TARGETS CAN BE PAPER, PLASTIC, WOOD, STEEL, OR STATIONARY TMITS.
- -LIVE FIRE ANYWHERE ELSE IN OR FROM THE MOUT FACILITY IS PROHIBITED.
- -FIRING POSITIONS, TARGET POSITIONS, AND AZIMUTHS ARE:
- --(1): FP GRID: 18STH7936572700, TP GRID: 18STH7934372682, AZIMUTH MAGNETIC: 230.12°
- --(2): FP GRID: 18STH7934072726, TP GRID: 18STH7932372710, AZIMUTH MAGNETIC: 227.29°
- --(3): FP GRID: 18STH7931572639, TP GRID: 18STH7928672662, AZIMUTH MAGNETIC: 309.29°
- --(4): FP GRID: 18STH7932472751, TP GRID: 18STH7929772729, AZIMUTH MAGNETIC: 230.16°



## SESAMS AND NON-LETHAL (NL) 12GA ROUNDS SDZ

- -FORCE-ON-FORCE TRAINING WITH NON-LETHAL WEAPONS (NLW) OTHER THAN SESAMS IS PROHIBITED.
- -PPE LEVEL-0 REQUIRED FOR ALL PERSONNEL.
- -SESAMS SPECIFIC PPE REQUIRED WHEN USED FOR ALL PERSONNEL INSIDE THE ARC SHOWN HERE.
- -FOR 12GA NL USE:
- -- TARGETS MUST BE PLACED MINIMUM 10M FROM STRUCTURES TO MINIMIZE RICOCHET AND DAMAGE TO BUILDINGS.
- -- AREA BEHIND TARGETS MUST BE CLEAR OF ALL PERSONNEL.
- --MINIMUM ENGAGEMENT DISTANCES ARE 10-20M. THIS ROUND LOSES EFFECTIVENESS BEYOND 20M TO TARGET.
- -12GA NL ROUND IS PRONE TO RICOCHET BACK TOWARD FIRING POSITION AS INDICATED BY AREA R IN THIS SDZ.
- -- AREA R IS 300M WIDE AND 50M DEEP FROM THE CENTER OF THE FIRING POINT.
- -- SDZ'S ARE WORST CASE AGAINST HARD AND SOFT TARGETS AND ARE FOR PLANNING PURPOSES ONLY.
- -- DEVIATIONS FROM THIS EVENT AS SHOWN ARE NOT AUTHORIZED AND MAY CREATE UNADDRESSED SAFETY CONFLICTS WITH ADJACENT RANGES AND TRAINING AREAS.
- -- COORDINATION WITH THE IRSO IS REQUIRED FOR 12GA NL EVENTS.

**WEAPONS ACCOMMODATED:** Detailed list is maintained in the Range Facility Management Support System (RFMSS).

- -All weapons capable of firing blanks
- -SESAMS/CCMCK conversion kits and similar weapons (airsoft/paintball)
- -5.56/7.62mm rifles (for Sniper live-fire only)

**AMMUNITION AUTHORIZED:** Detailed list is maintained in the Range Facility Management Support System (RFMSS).

- -Blank ammunition
- -Smoke, CS, and non-lethal grenades
- -12ga Fin Stabilize NL rounds
- -Limited pyro and explosives
- -SESAMS/CCMCK, water-soluble paintballs, and airsoft.
- -Sniper ammunition up to 7.62 x 51mm/.308 Special Ball (Snipers only)

# TARGETS/SIMULATORS/DEVICES:

- -Trackless Mobile Infantry Targets (TMITs) are approved in this facility and must be coordinated through the Training Systems Support Desk (TSSD).
- -There are (3) distinct "Operating Boxes" (Op-boxes) for the TMITs. One large Op-Box that covers all of MOUT for non-live fire, SESAMS, and limited NLW use and two live fire Op-Boxes for use by Snipers. See Figures 4, 5, & 6 above.
- -TMITs will operate in the designated areas depicted in Figures 4, 5, & 6 only.
- -Additional targets are limited to paper, wood, plastic and approved ballistic steel reactive targets (SRT).
- -OIC/RSO must ensure all targets are placed and engaged to ensure SESAMS and NL rounds do not exceed the facility or established SDZ's indicated in Figure 8.
- -Steel reactive targets (SRTs) must be a minimum of 3/8" and constructed of AR-500 or greater steel.
- -EPR ammunition (M855A1/M80A1) is NOT authorized to be fired on SRTs, TMITs, or steel protective plates for Portable Infantry Targets (PITS) if used for authorized Sniper training.
- -Contact Training Support Center (TSC) at (703)432-7026/7969 for target support or questions.

## PRIMARY DIRECTION OF FIRE.

- -360° for blanks and SESAMS/CCMCK not to exceed the arc shown in figure 8.
- -Southeast (Range 10A) for Sniper live fire as indicated in figures 5 & 6.
- -West/Northwest for 12ga NL rounds on the specific azimuths indicated in figures 7 & 8.

# Minimum engagement distances for SRTs specific to MOUT:

-12ga NL rounds: 10 meters

-5.56mm: 150 meters for TSC targets

100 meters for unit-owned targets

-7.62mm Ball: 150 meters for TSC targets

100 meters for unit-owned targets

-7.62mm Special Ball: 150 meters

## Minimum engagement distance for TMITS specific to MOUT:

-7.62mm (Ball/Special Ball): 150 meters

-5.56mm (Steel Penetrator): 69 meters

-5.56mm (Soft Core): 23 meters

-12ga NL rounds: 10 meters

## RANGE USE RESTRICTIONS/COMMENTS

- 1. All Orders, Regulations and this SOP must be strictly adhered to.
- 2. A thorough pre-inspection of this facility by the OIC/RSO is required prior to the start of training. A thorough post-inspection will be conducted. Any brass, trash, or other debris found during the post-inspection will be the responsibility of the using unit unless otherwise noted to the Fire Desk during their pre-inspection.
- 3. A specific RFMSS event for the tunnel network is required and must be approved prior to use due to safety issues for confined space use.
- 4. Smoke and CS Grenades will not be thrown or placed within any of the structures or tunnel network.
- 5. Entrances to the tunnel network will not be blocked for any reason.
- 6. Fires are not allowed within any structures or tunnel network.
- 7. Any concertina/barbed wire, engineer stakes, or any other obstacles will be removed and properly secured prior to the unit being allowed to depart the facility.
- 8. SESAMS force-on-force training will not take place when temperatures:
- -Below 38 $^{\circ}$  (F) for 9mm DODICs AA12 and AA21
- -Below 18 $^{\circ}$  (F) or above 104 $^{\circ}$  (F) for 5.56mm DODICs AB05 and AB06
- -Below 23 $^{\circ}$  (F) or above 104 $^{\circ}$  (F) for 5.56mm DODICs AB09, AB10, and AB11
- 9. SESAMS, Paintball, and all other marks must be removed from walls prior to the post-inspection.
- 10. Helicopters cannot land atop or "lip-land" on any of the buildings in MOUT. Fast rope and rappelling from hovering aircraft is authorized after coordination with the IRSO.
- 11. Rappelling on or in any structure in MOUT is not authorized.

- 12. Live ammunition is only authorized from specific locations inside MOUT into Range 10A as shown in figures 5 & 6.
- 13. SESAMS/CCMCK and 12ga NL rounds must be fired as shown in figure 8.
- 14. When 12ga NL rounds are used against TMITS, the TMIT and shooter must be stationary and on the firing points and target points indicated in figure 7.
- 15. All other firing other than blanks in/out of MOUT is not authorized.
- 16. Range 10A will not be scheduled or occupied when MOUT is scheduled for live fire Sniper training.
- 17. Range 10 and/or Range 11 may be occupied when MOUT is scheduled for live fire Sniper training, but access in/out must be strictly controlled. -Direct communication between OIC/RSO of both units must be established. -Barriers <a href="mailto:and">and</a> Road Guards must be placed/manned by the unit in MOUT in accordance with figure 6 to ensure no one enters an active SDZ. -Road Guards on Range 11 are the responsibility of the unit on Range 11.
- 18. Blanks and live ammunition will not be stored together anywhere within the MOUT facility to include separate buildings. A separate facility such as LZ Kiwi must be scheduled. Any exception to this policy must be approved by the IRSO during the request process.
- 19. All targets for live fire Sniper training must be placed in the Op-Boxes shown in figures 5 & 6.
- 20. In the Sniper-1 and Sniper-2 Op-Boxes shown in figures 5 & 6, TMITS may move in any scenario inside these boxes that terrain allows. These are the only areas authorized for cross-fire.
- 21. Units that do not occupy their range within two hours of their scheduled occupy time will lose the use of that range for that day.
- 22. Units that have requested contractor support (TMITS, PITS targets, battlefield effects simulators, etc.) are required to contact a Government representative (TECOM Systems Support Officer (SSO) or Fire Desk) if the unit will not be present on the specified range within 1 hour of the approved time in RFMSS.
- 23. Units that have occupied a range with approved contractor support (TMITS, PITS targets, battlefield effects simulators, etc.) and that have not begun to use that support within 2 hours of the approved time in RFMSS will forfeit all contracted support for the day.
- 24. Units that are training with contractor support (TMITS, PITS targets, battlefield effects simulators, etc.) that place themselves into a voluntary check fire for 2 hours or more during the approved support hours will forfeit remaining support for the day.

NOTE: Units that encounter situations where contractor support (TMITS, PITS targets, battlefield effects simulators, etc.) is delayed or interrupted by circumstances beyond the control of the requesting unit (RMB directed check fire, ASP support, MEDEVAC, etc.) must contact a Government representative (SSO or Fire Desk) in order to arrange continued support within the scope of the contract and available assets.

25. If battle effect simulators are to be used in this facility, qualified personnel trained on the systems must be present.

<u>APPLICABLE MAP SHEET</u>. All grid coordinates listed in this order apply to the Quantico Military Installation Map V834S Edition 5-NGA 1:25000.

# FACILITIES (Number of Each)

Towers: 1 Communication Tower with generator (Off-Limits)

Sheds: 0

Ammo Breakdown: C Parking: Yes

Description of Other Structures: Port-a-Johns

# UTILITIES AVAILABLE

Electricity: Yes: MOUT Classroom only Lights: Yes: MOUT Classroom only

Water System: No

INSTALLED COMMUNICATIONS. None

MEASURED DISTANCES	MILES	MGRS
Range Control `	9.0	87406360
TBS	8.5	87106390
WTBN	9.0	87806740
Camp Upshur	4.5	80007850
ASP	11.0	91256605
Mainside Gate	12.5	94406440
EMT/Fire (Fire House 3)	9.8	89606710
Nearest MEDEVAC LZ	0.1	79507260 (LZ Kiwi)

**Directions to MEDEVAC LZ:** LZ-Kiwi. Top of the hill adjacent to MOUT facility. Aircraft hazard includes 200' communication tower.

**LASERS AUTHORIZED**. Class 3B and below. PEQ-16 is Class 3B. They can be used in MOUT if the safety screw is installed in the lock out position preventing high power selection.

AVAILABLE DAYS/HOURS. 362/All

#### AREA SUITABILITY

Unit typeUnit SizeNumber of UnitsCombat ArmsSquad to Company1

#### GEOGRAPHICAL DATA

Access Routes: MCB 5 Soil Type: Dirt Terrain Type: Level

Vegetation: Grass/Woodland

# COMMUNICATION REQUIREMENTS:

- 1. A radio check is required immediately upon occupying any portion of the RTA, every 30 minutes in a live fire status and every 3 hours in a non-live fire status.
- 2. The Range Control Facility (RCF) Fire Desk call sign is "Range Control". Your call sign is "MOUT".
- 3. The primary RCF Fire Desk frequencies are: ELMR talk group "RC Safety" (ground) and 323.7 AM UHF (air).
- 4. The secondary RCF Fire Desk Contact is telephone at: 703-784-5321/5322.
- 5. OIC/RSO will monitor the RCF primary and secondary Safety Nets at all times. Instant communication is required.
- 6. Any unit with organic ELMR radios will have their ELMR radios programed with the "RC Safety" talk group and use those radios as their primary means of communication within the RTA and must keep that radio on the RC SAFETY Net.
- 7. Units without organic ELMR assets will be issued ELMR radios from RMB upon check-out.
- 8. Approved Non-ELMR radios are only authorized for internal communication (ground).
- 9. If the RCF cannot reach a unit within the RTA via primary communication, the unit will be contacted via the secondary means of communication.
- 10. Upon loss of primary communication the OIC/RSO will initiate a "check fire"/cease training status and will contact the RCF via secondary communication. This communication will be maintained while primary communication is being restored. Units may only resume firing/training once primary communication has been re-established and clearance is granted by the RCF.

#### INJURY CLASSIFICATIONS:

Injuries are classified into the following categories in order to aid in casualty evacuation from the RTA.

- 1. ROUTINE. Routine injuries are those injuries that are not threatening to life, limb or eyesight; and conditions or illnesses treatable by medication or procedures available at the base medical facilities.
- 2. PRIORITY. Priority injuries are those injuries that require immediate medical attention but are not threatening to life, limb, or eyesight if treated promptly.
- 3. URGENT. Urgent injuries are severe injuries that are threatening to life, limb, or eyesight and require immediate medical attention.
- 4. MASS CASUALTY. A mass casualty is a series of injuries with multiple priority and urgent medical patients.

# MEDICAL EVACUATION (MEDEVAC) PROCEDURES:

- 1. Injury occurs.
- 2. Range immediately cease-fires.
- 3. Medical support evaluates/treats injured personnel.
- 4. Range OIC/RSO notifies the RCF of the injury, is the victim conscious/unconscious and what type of MEDEVAC transportation is requested (ground/air).
- 5. The OIC/RSO must maintain constant radio contact with Range Control and awaits further instructions.

INSTALLATION RANGE SAFETY OFFICER

Date: 16 Nov 2022