

**RANGE AND TRAINING REGULATIONS**  
**Maximum Vehicle Speed for Tactical Vehicles inside IIT-B is 5 MPH**  
**POVs are not authorized inside the IIT-B**

**All Contractor Role Players Shall Use Approved Toby Road Route to and from IIT**

<b>Range/Facility:</b> IIT - Bravo	<b>Allowable Wpns:</b> Service Shotguns – (DODIC AA54 Breaching Rounds Only) Demo – Breaching Only (Max NEW .25 lbs)	<b>Assigned To:</b> CG, MCB
<b>Location:</b> 46842 96465	Blanks – All Practice Grenades <b>SESAMS</b> Battlefield Effects (BFX) (As listed below) Flash Bangs	<b>Date revised:</b> 12 May, 2015
<b>Boundaries:</b> As Briefed Below	<b>Range Facilities:</b> As listed below	
<b>Type:</b> Scenario Development		

**IIT-B (Outside)**



**Scheduling**

- 1) Units Must Submit Requests through I MEF.
  - a) Site Lead - Matt Fennell
  - b) 760-305-2949
  - c) jfennell@katmaicorp.com.com
- 2) **Once approved by Site Manager, unit will utilize RFMSS to schedule range.**
- 3) **Final approval & scheduling of this facility must be submitted to Range Scheduling.**
- 4) When utilizing classroom/offices **only**, instructor will call LONGRIFLE (725-3974) to notify occupation and departure.
- 5) Proactive personnel will not need to be scheduled for daily maintenance or when they are in support of using units.
  - a) **The ESP RSO will ensure that they maintain positive communication with LONGRIFLE at all times.**

<b>Scheduling Conflict</b>	<b>Conflict Notes</b>
IIT-Alpha	Must be schedule Separately from IIT-Bravo
TA-Sierra	Unit must schedule TA-Sierra for any training outside of IIT footprint

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## RANGE AND TRAINING REGULATIONS

### OIC/RSO Requirements

1. **A safety Brief will be conducted prior to each live fire event to all participants.**
2. **All personnel shall wear required PPE during all training events.**
3. **OIC & RSO Requirements -**
  - a. **Demolition Breaching, SESAMS, Flash Bangs & BFX**
    - i. **OIC Requirement – GySgt or Above**
    - ii. **RSO Requirement - SSgt or Above**
  - b. **Shotgun Breaching, Blanks**
    - i. **OIC Requirement – SSgt or Above**
    - ii. **RSO Requirement - Sgt or Above**
  - c. **No Munitions**
    - i. **OIC Requirement – None**
    - ii. **RSO Requirement - Cpl or Above**

### Range Description

1. 300ft x 400ft village enclosed by a 6-8ft concrete perimeter wall.
2. There are 8 vehicle gates and 5 pedestrian gates located within the perimeter wall.
3. The village consists of 63 pre-cast concrete buildings and 14 containerized buildings.
4. There are several residential areas, two mosques, a large two-story school, two governmental buildings, two market places and two dry river beds.
5. The dry rivers beds have both pedestrian bridges and vehicle bridges.
6. The village is outfitted with atmospherics, smell generators and trails (roads) throughout.
7. There are several two story buildings and 8 roof breaches.
8. All doors (not gates) are mechanically breachable.
9. Other special features are listed below
  - a. mouse holes
  - b. soccer field
  - c. crop and poppy fields
  - d. gardens
  - e. animal pens
  - f. cemeteries
  - g. police station
  - h. gas stations
  - i. courtyards
  - j. wells
  - k. narrow alleyways
  - l. pharmacy
10. The village is also equipped with a Tactical Video Capture System that includes 235 camera and 12 avatar rooms.

### Special Instructions

- 1) **Bivouac -**
  - a) **Bivouacking in the buildings is authorized to support training.**
- 2) **A Police Call will be conducted of the town footprint and all areas used by the unit and inspected prior to any unit departing this facility. Inspection of facility will take approximately 2 hours. Plan accordingly.**
- 3) **All vehicles not involved in training shall be parked in the designated parking lot.**
  - a) **Privately owned vehicles (POVs) are prohibited from entering the Town.**
- 4) **Portable toilets will be used vice field expedient heads.**
- 5) **Trenches or fighting holes will not be dug.**
- 6) **Fires –**
  - a) **Fires are authorized in designated burn barrels within the footprint of the town.**
  - b) **The RSO shall ensure that only wood is burned.**
- 7) **Pyrotechnics –**
  - a) **No Aerial Pyrotechnics are allowed at any time.**
  - b) **No pyrotechnics are allowed inside any building.**
- 8) **Aviation Operations**
  - a) **UAS's**
    - i) **UAS operations are not authorized unless prior approval has been granted by the RCO.**
    - ii) **Submission for UAS operations are no latter than 14 days prior to the exercise.**
    - iii) **Unit will submit an ACA overlay to the RSO for approval.**
    - iv) **Annual waivers for this requirement shall not be approved.**

Special Instructions Continued on Next page

## RANGE AND TRAINING REGULATIONS

Each RSO/PSO will certify to the OIC that all weapons (including all Role Player Weapons) are in Condition 4 prior to exiting the range/facility and all ammunition is accounted for

<ul style="list-style-type: none"><li>b) <b>Helicopters</b><ul style="list-style-type: none"><li>i) <b>Are prohibited from landing on rooftops.</b></li><li>ii) <b>Fast Roping is authorized onto buildings with railings and parapets.</b></li></ul></li><li>9) <b>Rappelling &amp; Grappling Hooks are not authorized.</b></li><li>10) <b>Use Of Ladders For Movement Over Walls or Roof Top Access:</b><ul style="list-style-type: none"><li>a) PSO's shall supervise all ladder employments and any utilization of rooftops without railings or walls</li><li>b) Ladder and rooftop use shall be appropriately annotated on the training ORM.</li></ul></li></ul>
<b>SESAMS</b>
<ul style="list-style-type: none"><li>1) <b>A "SESAMS training In Progress" Sign shall be posted at each the entrance outside the building by the unit.</b> <b>The mixing of live ammunition and SESAMS rounds is prohibited.</b></li><li>3) Before SESAMS firing:<ul style="list-style-type: none"><li>a) Ensure that ONLY Marine Corps procured adapter kits and marking cartridges are used.</li><li>b) Force-on-force training with SESAMS 9mm DODICs (AA12) and (AA21) is prohibited when temperatures are below 38 degrees Fahrenheit. Training with SESAMS 5.56mm DODICs (AB05) and (AB06) is prohibited when temperatures are below 18 degrees or above 104 degrees Fahrenheit.</li><li>c) Account for and <b>remove all live ammunition</b> from the designated training area prior to commencement of SESAMS training exercises.</li><li>d) Instruct all participants that <b>head shots are not authorized.</b></li><li>e) Ensure that all personnel within the <b>150m safety distance</b> (zone) wear PPE Level 0 protective equipment and clothing. The use of groin protection and gloves is highly encouraged.</li><li>f) The FX 9000 and 9003 Protective Face Masks are authorized for use. The FX 9003 Protective Face Mask is specifically authorized for use with DODICs (AB05) and (AB06).</li><li>g) The MCU-2A/P Chemical Biological Mask may be used for face and eye protection ONLY if the hard outer eye shields and the C2 canister are attached prior to use with the SESAMS training system.</li><li>h) A balaclava, towel, or neck scarf will be worn so as not to expose any portion of the neck and throat. A commercially produced neck protector is also available from Simunition, the FX 8000 Protective Throat Collar.</li><li>i) Ensure that the 150m safety distance (zone) remains clear of unprotected personnel.</li></ul></li><li>4) During SESAMS firing:<ul style="list-style-type: none"><li>a) Ensure that qualified medical personnel and appropriate medical equipment are available during all SESAMS training exercises (same as live-fire).</li><li>b) Ensure all personnel wear approved hearing protection during all SESAMS training exercises.</li><li>c) Ensure that a <b>minimum</b> safe engagement distance of <b>2m (6.5ft) for the 9mm</b> SESAMS training system and <b>4m (13ft) for the 5.56mm</b> system is established and maintained from the muzzle.</li></ul></li><li>1) After SESAMS firing:<ul style="list-style-type: none"><li>a) Ensure all weapons are returned to their operational state and a function check is performed.</li><li>b) Account for and return all unused ammunition to the appropriate location in accordance with current applicable directives.</li></ul></li></ul>

### 5.56mm Blank Ammunition

1. The following precautions will be observed during the use of blank ammunition:
  - a. AK-47 Blank firing weapons & AK-47 blanks DoDIC A103.
  - b. Blank Firing Attachment (BFA) shall be used on all weapons.
  - c. **5 meter safe separation distance** (SSD) will not be reduced.
  - d. This distance includes a dispersion angle of 10 degrees left and right of the GTL.
  - e. Hearing protection (ear plugs) should be worn while firing blank ammunition.
  - f. **Encapsulating Eye Protection shall** be worn by all personnel.
2. A violation of the SSD could result in serious injury. If the SSD is decreased to within .9m, fatal injuries may occur.

### AK-47 Blank firing weapons & AK-47 Blanks DoDIC A103

1. The following precautions will be observed during the use of blank ammunition:
  - a. All firing events will be conducted by trained, qualified personnel who shall comply with all safety regulations under the direction of the supervising Range Safety Officers.
  - b. Operators shall wear personal protective equipment, to include, as a minimum, eye and hearing protection and the service working/combat utility uniform during firing evolutions.
  - c. A minimum five yard (15') standoff distance (distance to the person you are firing toward) shall be maintained during all blank firing evolutions.
  - d. Ammunition is restricted to blank 7.62x39mm Full Flash cartridges for outdoor training and blank 7.62x39mm Quarter Flash cartridges for indoor training.
  - e. Administrative and supervisory controls shall be in place to control the issue of the 7.62x39mm blank cartridges to ensure no live ammunition is present.
  - f. Ensure all weapons, BFAs and blank ammunition used in the STEs are inspected and maintained prior to use in accordance with the processes and procedures provided in MARCORSSYSCOM Itr 5100 PMM-118/127 of 21 Jul 14.

## RANGE AND TRAINING REGULATIONS

### Battlefield Effects (BFX)

1. The site supervisor shall hold a current state 1<sup>st</sup> Class or Theatrical card holder. All other operators shall hold a current state pyrotechnics card as outlined in the license scope for pyrotechnic operators. Personnel that are not card holders may assist only. At no time shall a non-card holder operated/fire BFX devices other than AK-47 with blanks.
2. Suspension or revocation of any individual listed on this letter shall occur on the basis of incorrect, inaccurate, or incomplete information or violation of any ordinance or regulation or of any other directive given by the RCO or his designated representative.
3. The maximum Net Explosive Weights (NEW) listed in most current BFX letter shall be final. At no time shall any BFX Operator exceed the maximum NEWs and/or utilize any other medium other than what is listed under this certification. The BFX operator, upon request by OIC, RSO, RCO or his designated representative, shall verify the NEWs utilizing a scale, provided by the BFX operator. Violation will result in immediate revocation of their certification to operate any BFX device in or on any Camp Pendleton Range, Training Facility or Training Area.
4. The following Pyrotechnics & Special Effects devices are the only devices/munitions authorized for use on Camp Pendleton ranges & training areas:
  - a. Black Powder, Pentaerythrite Tetranitrate (PETN) and Propane IED Simulators not to exceed maximum NEWs listed in most current BFX letter.
  - b. Rocket Propelled Grenade (RPG) simulators:
    - 1) RPGs shall travel captured on a wire. At no time are "free fight" RPGs allowed.
    - 2) The engines of all RPGs shall be extinguished prior to termination of flight.
  - c. Propane with Black Powder initiator not to exceed maximum NEWs listed in most current BFX letter.
5. All the listed Pyrotechnics & Special Effects devices shall be initiated by command detonation only.
6. Unit OICs & RSOs:
  - a. The OIC shall be a GySgt and the RSO shall be an SSgt.
  - b. All BFX devices shall be listed on the unit ORM
  - c. The OIC shall conduct a joint inventory of all BFX devices with the site supervisor utilizing the NAVMC 11381 prior to break out or prior to any OIC change over.
  - d. OIC & RSO shall be present prior to any break out or placement of any BFX device.
  - e. All Unit OICs & RSOs shall participant in a walk through of all intended uses and locations of all BFX devices.
  - f. OIC shall ensure that Only BFX listed and approved by the RCO are used.
  - g. OIC shall ensure that all activities/devices are included on the units ORM matrix.
  - h. OIC shall give final authorized the firing of each BFX IED or RPG.
  - i. OIC shall visually approve the location of all BFX and approved the designation of the minimum safety distances.
  - j. OIC shall ensure that reflective over pressures are calculated and minimum safety distances are adhered to.
  - k. RSO shall visually verify the location of all BFX and approved the designation of the minimum safety distances approved by the OIC.
  - l. OIC shall conduct a "spot" check of IEDs to ensure that charges are in accordance with enclosure (1).
10. **At no time shall any BFX be used in any enclosed space.**
11. **At no time shall any IED be used within 3 feet of any electronics.**
12. At no time shall any BFX be used with out "eyes on".
13. All the listed Pyrotechnics & Special Effects devices shall be initiated by command detonation only.
14. "Suicide Vest" BFX devices are not authorized for use within the Camp Pendleton Range & Training Areas (RTA) at any time.
15. **Flash Powder is NOT authorized in any quantity.**
16. All CO<sup>2</sup> IMESS & TIED-2 devices shall be used is accordance with most current BFX letter.
17. Use of all authorized devices shall be consistent with current Fire Danger Rating (FDR).

### LASER

1. **A "LASER training In Progress" Sign shall be posted at each the entrance outside the building by the unit.**
2. **Laser must have LRSB Letter filed with RCO.**
3. **Calibration**
  - a. **A LRSO is required when calibrating the Laser.**
  - b. Precautions associated with direct-fire weapons shall be applied to all lasers operated on military ranges. **No personnel shall be allowed "down range" during calibration.**
  - c. **Appropriate Laser Eye Protection (LEP) will be worn by all personnel during calibration.**
  - d. LSSOs shall establish boundaries for laser range operations and strictly control laser use in training to conform to the provisions of this brief and applicable TMs.
  - e. A laser safety orientation will be given to all personnel who use or work with laser devices to include an explanation of hazards and safety requirements before they commence laser operations.
  - f. **Personnel suspected of experiencing potentially damaging eye exposure from laser radiation will be evacuated immediately to the nearest medical facility and undergo an eye examination.**

**Special Instructions Continued on Next page**

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- g. Intrabeam viewing of either direct or reflected beams from a flat mirror-like (specular) surface from lasers can expose the unprotected eye to a potential hazard and must be prevented. Flat specular surfaces shall be removed from prior to calibration.
  - h. If is not feasible to remove all specular surfaces from the target, these surfaces must be covered with a diffuse material prior to use as a target.
  - i. Personnel will not deliberately view direct laser radiation with optical instruments within NOHD-O and NOHD-M unless optical devices are considered "laser safe" for the type of laser being used. The resulting amplification of laser energy significantly increases the probability of eye injury.
  - j. Night vision devices will not be used for laser eye protection. These devices are not "cover-all" goggles. Laser energy may enter the eye from reflections or from around the tubes.
4. **Force-on-Force**
- d. Minimum engagement distance shall be as follows –
    - i. Unaided viewing – 10 meters
    - ii. Aided viewing – 50 meters

### Flash Bangs

1. **Incomplete Detonations/Misfires - Range Procedures/Reporting apply. EOD will handle removal/destruction.**
2. While conducting rehearsals and live fire with flash bangs, the RSO shall ensure:
  - a. Flash Bangs shall be carried in pouches.
  - b. No flash bang shall be thrown if there is any standing water or mud.
  - c. **Only one flash bang shall be thrown at a time.**
  - d. The maximum number of grenades to be thrown by an individual thrower are:
    - i. 2 with single hearing protection and 41 with double hearing protection.
    - ii. **No one shall be closer than 5 meters (16.5 feet) of detonation.**
3. Human target participation is not authorized. Once a pin is pulled on a flash bang, it shall not be reinserted into the flash bang.

### Breaching Operations

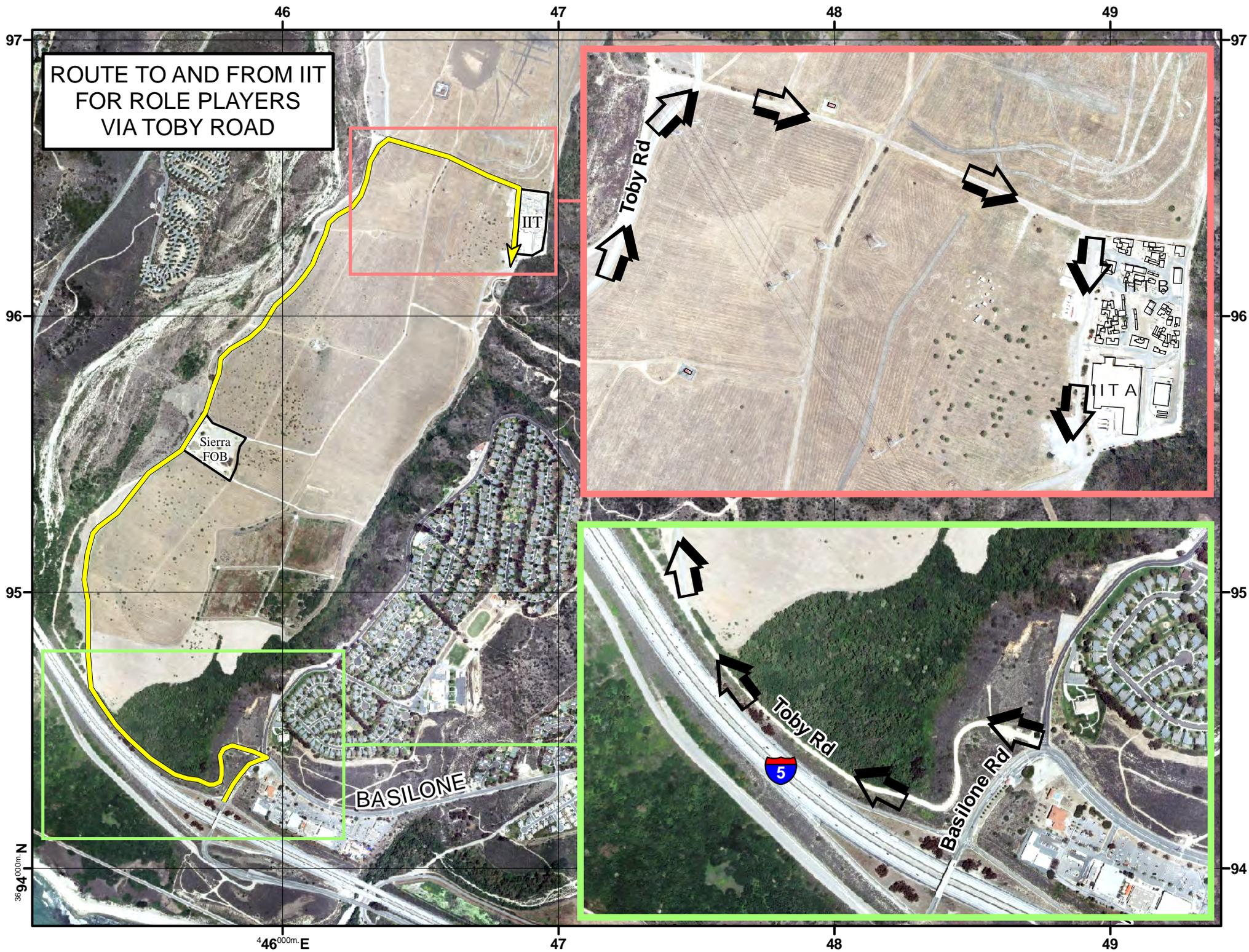
1. **Mechanical Breaching**
  - a. All mechanical breaching will be conducted utilizing tools from issued breaching kits.
2. **Thermal/Saws**
  - a. FDR Dependent.
3. **Ballistics Breaching**
  - a. **Only 12 gauge lockbuster ammunition (DODIC AA54) shall be used.**
  - b. Ammunition will only be issued per event.
  - c. Only commercial breaching rounds shall be used.
  - d. All ballistic breaching shall be conducted on unit supplied free standing external facades placed offset from structure doorways. Facades shall be placed a minimum of 10 feet away from the building entrance.
  - e. All shots shall be directed at a 45° angle down.
  - f. **Wooden uprights and targets are to be supplied by the using unit.**
  - g. **When utilizing AA54:**
    - i. **Double hearing protection shall be used.**
    - ii. **Only solid wood core wooden doors with a minimum of 1 ¾ inches thick shall be used.**
    - iii. **Units shall provide a minimum of 2 inches of protection to the lock area.**
4. **Explosive Breaching**
  - a. **All explosive breaching shall be conducted on unit supplied free standing external facades placed offset from structure doorways or compound gates.**
    - i. **Facades shall be placed a minimum of 10 feet away from the building entrance or gated compound gate entrance.**
    - ii. **Buildings and surrounding structures shall be protected by plywood sheeting.**
    - iii. **Breacher Reports shall be submitted for approval no later than seven days prior to explosive breaching event.**
  - b. **During breaching operations:**
    - i. The breach shall consist of a field expedient urban breaches (duel primed) at no more than .25 lbs. NEW.
    - ii. Max Ord is 206.6 feet for vertical or fragmentation hazard.
    - iii. A maximum K – Factor of 18 (3.5 PSI) will be utilized.
    - iv. Double hearing protection required for all PSI's at or above 1.68.
    - v. All personnel shall be set in position prior to initiating the breach.

## RANGE AND TRAINING REGULATIONS

- vi. A safety Brief shall be conducted prior to each live fire event to all participants.
  - vii. Each breach shall be inspected and approved by the RSO.
  - viii. The RSO & OIC shall personally observe each live fire event.
  - ix. Time fuse shall be cut and tested by the RSO. (30 Sec. Min. Time)
  - x. Any Electrical System shall be tested by RSO.
  - xi. All unused blasting materials shall be retrieved upon completion of training, and shall be returned to the Las Pulgas ASP.
  - xii. **Shielding required for all breaches** (i.e. Blast Shield, Bomb Blanket, placing breaching team around corner, etc.)
  - xiii. **CPU required when using any lead lined charges.**
5. **There shall be additional safety personnel assigned as follows:**
    - a. **A PSO shall travel with each breaching team.**
    - b. **Each PSO shall have positive communication with the RSO.**
  6. **Range Guards shall be posted at all times to prevent entry into the explosive arc of demolition breaching.**
  7. **The OIC is responsible for all charges, and ensuring all misfire procedures is in compliance with current directives.**

<b>Flaks and Helments Required in Addition to the Below PPE</b>				
	<b>Double Hearing Protection and Eye Protection</b>	<b>Single Hearing Protection and Eye Protection</b>	<b>Eye Protection</b>	<b>Shielding Against Hazard</b>
<b>NEW OF CHARGE (TNT EQUIVELENT)</b>	<b>Safe Distance in Feet for Over Pressure (3.5 PSI)</b>	<b>Safe Distance in Feet for Over Pressure (1.2 PSI)</b>	<b>Safe Distance in Feet for Over Pressure (0 PSI)</b>	<b>Missile hazard in feet</b>
<b>In Pounds</b>	<b>K-Factor = 18</b>	<b>K-Factor = 40</b>	<b>K-Factor = 300</b>	
0.18	10.2	22.6	169.4	185.2
0.23	11.0	24.5	183.8	201.0
0.25	11.3	25.2	189.0	206.6

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## Safe Distance & Vertical Hazard for IED Simulators

### Personel Protection Equipment (PPE) Requirements

Black Powder Grams	Equivalent TNT RE Factor .55 In Pounds	Double Hearing Protection and Eye Protection	Single Hearing Protection and Eye Protection	Eye Protection	Missile hazard in feet
		Safe Distance in Feet for Over Pressure (3.5 PSI)  K-Factor = 18	Safe Distance in Feet for Over Pressure (1.2 PSI)  K-Factor = 40	Safe Distance in Feet for Over Pressure (0 PSI)  K-Factor = 300	

1	0.001	1.9	4.3	32.1	35.1
1.5	0.003	2.7	6.0	44.8	49.0
2	0.004	3.0	6.6	49.3	53.9
2.5	0.006	3.2	7.1	53.1	58.1
3	0.007	3.4	7.5	56.5	61.7
3.5	0.008	3.6	7.9	59.4	65.0
4	0.009	3.7	8.3	62.1	67.9
4.5	0.010	3.9	8.6	64.6	70.7
5	0.011	4.0	8.9	66.9	73.2
5.5	0.012	4.1	9.2	69.1	75.6
6	0.013	4.3	9.5	71.1	77.8
6.5	0.014	4.4	9.7	73.1	79.9
7	0.016	4.5	10.0	74.9	81.9
7.5	0.017	4.6	10.2	76.6	83.8
8	0.018	4.7	10.4	78.3	85.6
8.5	0.019	4.8	10.7	79.9	87.4
9	0.020	4.9	10.9	81.4	89.0
9.5	0.021	5.0	11.1	82.9	90.7
10	0.022	5.1	11.2	84.3	92.2
10.5	0.023	5.1	11.4	85.7	93.7
11	0.024	5.2	11.6	87.1	95.2
11.5	0.026	5.3	11.8	88.4	96.6
12	0.027	5.4	12.0	89.6	98.0
12.5	0.028	5.5	12.1	90.9	99.3
13	0.029	5.5	12.3	92.1	100.6
13.5	0.030	5.6	12.4	93.2	101.9
14	0.031	5.7	12.6	94.4	103.2
14.5	0.032	5.7	12.7	95.5	104.4
15	0.033	5.8	12.9	96.5	105.6
15.5	0.034	5.9	13.0	97.6	106.7
16	0.036	5.9	13.2	98.6	107.9
16.5	0.037	6.0	13.3	99.7	109.0
17	0.038	6.0	13.4	100.7	110.1
17.5	0.039	6.1	13.6	101.6	111.1
18	0.040	6.2	13.7	102.6	112.2
18.5	0.041	6.2	13.8	103.5	113.2
19	0.042	6.3	13.9	104.5	114.2
19.5	0.043	6.3	14.0	105.4	115.2
20	0.044	6.4	14.2	106.3	116.2

**Double Hearing Protection Required for PSI Above 1.68 lbs**

## Safe Distance & Vertical Hazard for IED Simulators

### Personel Protection Equipment (PPE) Requirements

<b>Black Powder Grams</b>	<b>Equivalent TNT RE Factor .55 In Pounds</b>	<b>Double Hearing Protection and Eye Protection</b>	<b>Single Hearing Protection and Eye Protection</b>	<b>Eye Protection</b>	<b>Missile hazard in feet</b>
		<b>Safe Distance in Feet for Over Pressure (3.5 PSI)  K-Factor = 18</b>	<b>Safe Distance in Feet for Over Pressure (1.2 PSI)  K-Factor = 40</b>	<b>Safe Distance in Feet for Over Pressure (0 PSI)  K-Factor = 300</b>	
20.5	0.046	6.4	14.3	107.1	117.1
21	0.047	6.5	14.4	108.0	118.1
21.5	0.048	6.5	14.5	108.9	119.0
22	0.049	6.6	14.6	109.7	119.9
22.5	0.050	6.6	14.7	110.5	120.8
23	0.051	6.7	14.8	111.3	121.7
23.5	0.052	6.7	15.0	112.1	122.6
24	0.053	6.8	15.1	112.9	123.5
24.5	0.054	6.8	15.2	113.7	124.3
25	0.056	6.9	15.3	114.5	125.2
25.5	0.057	6.9	15.4	115.2	126.0
26	0.058	7.0	15.5	116.0	126.8
26.5	0.059	7.0	15.6	116.7	127.6
27	0.060	7.0	15.7	117.4	128.4
27.5	0.061	7.1	15.8	118.2	129.2
28	0.062	7.1	15.9	118.9	130.0

**Double Hearing Protection Required for PSI Above 1.68 lbs**