

RANGE AND TRAINING REGULATIONS

All Personnel Shooting in this Facility Must have current Qualification

ALL TARGETS SHALL BE PLACED ON BULLET TRAPS

| | | | |
|---------------------------------|--|---|---|
| Range: R133 | Lateral Limits: Contained within structure | Min/max Engagement Distance: CMP/CQB: Min 1 meter (weapon dependent) Max Scenario dependent | Range Facilities: Ammo Table, Port-a-Johns, CQB/IBT live fire shoot & grenade house |
| Location: 62184 84700 | Boundaries: As Depicted | | |
| Type: CQB Shoot House | | | |
| Impact Area: X-Ray | Range Phone: (760) 725-0887 | Allowable Wpns: No Hollow Point Allowed Rifles, 5.56mm; pistols, .45 cal. and below (Ball Only); shotguns (Breaching Only); Flash Bangs; (FX Marking) SESAMS; M67 Fragmentation Grenades | Assigned to: CO, MCB Date Revised: 10 December, 2008 |

Scheduling

1. Scheduling of this range/facility is accomplished through MCB Camp Pendleton Range Scheduling.
2. Unit will utilize RFMSS to schedule range.
3. All personnel conducting live fire must have completed the required live fire qualification (NLT than 48 hours) prior to shooting on this range.
4. When conducting Force-on-Force no shooting member shall have conducted live fire within 24 hours of this event.

| Scheduling Conflicts | Conflict Notes |
|----------------------|--|
| Over flight of House | 1 Note (1) – No over flight is allowed of shooting house. |

GENERAL INSTRUCTIONS

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. Live Fire, SESAMS, Flash Bangs & BFX
 - i. OIC Requirement – GySgt or Above
 - ii. RSO Requirement - SSgt or Above
 - b. Blanks
 - i. OIC Requirement – SSgt or Above
 - ii. RSO Requirement - Sgt or Above
 - c. No Munitions
 - i. OIC Requirement – None
 - ii. RSO Requirement - Sgt or Above
 - iii. LASER (If Used) LSSO Requirement - Sgt or Above
4. IOT occupy this range unit must have the following personnel/equipment:
 - a. RSO
 - b. Corpsman & Safety Vehicle
 - c. Positive Communication with LONGRIFLE
 - d. An ORM reviewed and signed by the Command, RSO and OIC.
5. IOT go into a hot status on range unit must have the following personnel/equipment:
 - a. OIC
 - b. RSO
 - c. LSSO – If using Laser
 - d. Corpsman & Safety Vehicle
 - e. Positive Communication with LONGRIFLE
6. POVs are authorized to park in parking lot area without a POV pass.
7. The RSO & OIC will personally observe each event.
8. A non-participating Corpsman will be stationed with safety vehicle.
9. Ammunition will only be issued per event and accounted for on NAVMC 11381.
10. After each event, unit leaders will conduct a line out.
11. Each RSO/PSO will certify to the OIC that all weapons are in Condition 4 prior to exiting the range/facility and all ammunition is accounted for.

All weapon malfunctions shall be corrected per the appropriate TM/FM, and unit SOP.

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SPECIAL INSTRUCTIONS

1. All vehicles shall be parked in the designated parking area.
 2. OIC and RSO must have completed a training event "shadowing" a qualified OIC/RSO prior to acting in that capacity on this range.
 - a. Completion of this requirement shall be indicated on the unit ORM.
 3. **NO BURST FIRE/M249s ARE ALLOWED**
 4. No shots will be taken from outside to inside, a room to a room, hallway to a room or room to the hallway.
 5. No shots will be taken outside the authorized lateral limits of each room.
 - a. Square Room Center Door
 - i. #1 Man – Primary Sector:
 1. Corner to corner to Center wall – 1 meter overlap
 - ii. #1 Man – Secondary Sector:
 1. Corner to Center wall
 - iii. #2 Man - Corner to corner to Center wall – 1 meter overlap
 - iv. # 3 Man – Center wall to center wall
 - v. # 4 Man – Center wall to center wall
 - vi. # 5 Man – Center wall to corner
 - b. Square Room Corner Door
 - i. #1 Man – Primary Sector:
 1. Corner to corner – 1 meter overlap
 - ii. #1 Man – Secondary Sector:
 1. Corner to Center wall
 - iii. #2 Man - Corner to center wall
 - iv. # 3 Man – Center wall to center wall
 - v. # 4 Man – Center wall to center wall
 - vi. # 5 Man - Center wall to center wall
6. **Qualifications –**
 - a. All personnel conducting live fire must have completed the required live fire qualification prior to shooting on this range.
 - b. All Marine Corps Personnel must hold a current qualification as outlined (Min Qual is 75 out of 100):
 - i. Table 3A & 4A Service Long Gun (M16/M4 or Subgun).
 - ii. Table 3A & 4A Service Handgun.
 - c. "Current" qualifications must meet the following criteria:
 - i. Qualification must be completed within 48 hours of conducting training.
 - d. **Units other than USMC may submit an alternate course of fire to the RCO for approval.**
7. All personnel shall conduct a non live-fire rehearsal prior to conducting live-fire scenarios.
8. The OIC and RSO will accompany personnel as they execute both the rehearsal and the live -fire scenario.
9. Inside House (**NO M855 BALL/TRACER AMMO NO BURST FIRE/M249s ARE ALLOWED:**
10. **No shots will be taken from outside to inside, a room to a room, hallway to a room or room to the hallway.**
11. All personnel shall conduct a non live-fire rehearsal prior to conducting live-fire scenarios.
12. The RSO will accompany personnel as they execute both the rehearsal and the live -fire scenario.
13. **While conducting rehearsals and live fire with hand grenades, the RSO will ensure:**
 - During live-fire training at the Grenade House, all personnel within the SDZ shall wear a flak jacket, helmet, hearing protection, and ballistic eye protection.
 - The range safety officer will directly supervise and control the throwing of fragmentation grenades.
 - Hand grenades will be carried in accordance with FM 23-30. No individuals will be transported by vehicle while carrying grenades attached to web equipment.
 - Grenade House Road, within the SDZ, shall be closed when the Grenade House is in a hot status.
 - **Range guards shall be posted at the bridge to ensure all traffic is stopped until cleared by the RSO.** Radio or field telephone communication shall be established between the RSO and the road guard at all times when the Grenade House is in use.
 - All personnel shall conduct a non live-fire rehearsal prior to conducting live-fire scenarios.
 - During the conduct of live-fire training, only the OIC, RSO, personnel executing the live-fire scenario, and a maximum of two squads in the staging area are permitted within the SDZ.

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- All personnel will be staged directly behind the outer wall (Refer to figure).
- The RSO will accompany personnel as they execute both the rehearsal and the live-fire scenario.
- Fragmentation grenades shall be thrown LEFT CORNER OF THE FIRST ROOM ONLY, and only to the opposite corner of the stack position. (Refer to figure).
- No grenade shall be thrown if there is standing water or mud in the Grenade House.
- Only one grenade shall be thrown at a time.
- Once a pin is pulled on a fragmentation grenade, it will not be reinserted into the grenade.
- No sandbags are permitted in the Grenade House, except on the sewer grates.
- Once a grenade is thrown, all personnel executing the scenario and the RSO shall be against the protective walls, behind the first row of tires, with no portion of their bodies exposed to the room into which the grenade was thrown.
- If a dud grenade is experienced, all activities within the structure or danger area will stop, personnel will remain within a safe area for a minimum of 5 minutes and then evacuate the structure or area until EOD clears the dud.
- A dud fragmentation grenade will be reported immediately to LONGRIFLE and the MOUT Facility Staff. A cease-fire will go into effect immediately. Accurately note the time of the dud, as Explosive Ordnance Disposal personnel must wait thirty minutes prior to clearing the dud.
- EOD personnel will destroy dud grenades in place or safe and remove before troops enter the grenade impact area. If EOD personnel are unable to locate or destroy any dud grenades, troop maneuver through the impact area is not authorized.
- At no time is a second grenade to be thrown in an effort to dispose of a dud grenade.
- After throwing four fragmentation grenades, the sand floors will be restored by replacing sand and raking the floor. Rakes are available from the MOUT Staff in Building 17.
- **No practice grenades are permitted during live fire.**

SESAMS

1. A "SESAMS training In Progress" Sign shall be posted at each the entrance outside the building by the unit.

1. All participating Marines will be required to wear flak, Kevlar/Approved Helmet, throat/groin protector, contact gloves, utilities, hearing protection, and approved masks.
2. All personnel will wear the specified gear when inside the safety perimeter.
3. You shall have a minimum of two NCOs or higher act as safety controllers.
 - a. These Marines will ensure that there are no intentional headshots and no engagements closer than **5 feet**.
4. All Marines will be lined out before any SESAMS rounds are distributed.
5. All SESAMS magazines will be clearly marked, as will the barrels.
6. Following the completion of the training, all Marines will be lined out again
7. **Ensure all training is conducted IAW SOUM 1-02.**

Breaching Operations

1. All breaches will be set on doors supplied by the using unit that are mounted to approved framing to reduce any hazards to the building.
 - a. **Mechanical Breaching**
 - i. All mechanical breaching will be conducted utilizing tools from issued breaching kits.
 - b. **Ballistics Breaching**
 - i. Ammunition will only be issued per event.
 - ii. All ballistic breaching will directed 45° down into the room.
 - c. **Explosive Breaching**
 - i. The breach will consist of a field expedient urban breaches (duel primed) at no more than .25 lbs NEW (Any Requests for annual waivers for this requirement **shall not be approved**).
 - ii. Max Ord is 185 feet AGL for vertical or fragmentation hazard at .25 lbs NEW.
 - iii. A maximum K – Factor of 18 (3.5 PSI) will be utilized and all personnel are to follow the below unshielded safety standoffs.
 - iv. **If shielded, RSO may reduce standoff by 50%.**

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- v. Double hearing protection required for all PSIs at or above 1.68.
- vi. All personnel will be set in position prior to initiating the breach.
- vii. All exposed building material must be covered/framed IOT prevent any damage to the structure.
- viii. A safety Brief will conducted prior to each live fire event to all participants.
- ix. The RSO & OIC will personally observe each live fire event.
- x. Each breach will be inspected and approved by the RSO.
- xi. Time fuse will be cut and tested by RSO (30 Sec. Max. Time).
- xii. Any Electrical Systems will be tested by RSO.
- d. There will be additional safety personnel assigned as follows:
 - i. A PSO will travel with each breaching team.
 - ii. Each PSO will have positive communication with the RSO.
- e. Live Fire signs will be posted all times when the SACON House is hot as depicted in the graphics.
- f. The RSO is responsible for all charges, and ensuring all misfire procedures are in compliance with current directives.

K FACTOR

| | 40 1.2 -.9 PSI | 30 1.7 PSI | 24 2.3 PSI | 18 3.5 PSI | 11 8 PSI | 9 12 PSI | 6 27 PSI |
|--|-------------------|---------------|---------------|---------------|-------------|-------------|-------------|
|--|-------------------|---------------|---------------|---------------|-------------|-------------|-------------|

Distance in Feet From Detonation

| | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.005 | 6.839903787 | 5.12992784 | 4.103942272 | 3.077956704 | 1.880973541 | 1.538978352 | 1.025985568 |
| 0.01 | 8.61773876 | 6.46330407 | 5.170643256 | 3.877982442 | 2.369878159 | 1.938991221 | 1.292660814 |
| 0.015 | 9.864848297 | 7.398636223 | 5.918908978 | 4.439181734 | 2.712833282 | 2.219590867 | 1.479727245 |
| 0.02 | 10.85767047 | 8.14325285 | 6.51460228 | 4.88595171 | 2.985859378 | 2.442975855 | 1.62865057 |
| 0.025 | 11.69607095 | 8.772053215 | 7.017642572 | 5.263231929 | 3.216419512 | 2.631615964 | 1.754410643 |
| 0.03 | 12.42893002 | 9.321697518 | 7.457358014 | 5.593018511 | 3.417955757 | 2.796509255 | 1.864339504 |
| 0.035 | 13.08426524 | 9.813198931 | 7.850559144 | 5.887919358 | 3.598172941 | 2.943959679 | 1.962639786 |
| 0.04 | 13.67980757 | 10.25985568 | 8.207884544 | 6.155913408 | 3.761947083 | 3.077956704 | 2.051971136 |
| 0.045 | 14.22757322 | 10.67067991 | 8.536543931 | 6.402407948 | 3.912582635 | 3.201203974 | 2.134135983 |
| 0.05 | 14.73612599 | 11.0520945 | 8.841675597 | 6.631256698 | 4.052434649 | 3.315628349 | 2.210418899 |
| 0.055 | 15.21180984 | 11.40885738 | 9.127085906 | 6.845314429 | 4.183247707 | 3.422657215 | 2.281771476 |
| 0.06 | 15.65947056 | 11.74460292 | 9.395682339 | 7.046761754 | 4.306354405 | 3.523380877 | 2.348920585 |
| 0.065 | 16.08290303 | 12.06217728 | 9.649741821 | 7.237306365 | 4.422798334 | 3.618653183 | 2.412435455 |
| 0.07 | 16.4851412 | 12.3638559 | 9.89108472 | 7.41831354 | 4.53341383 | 3.70915677 | 2.47277118 |
| 0.075 | 16.86865331 | 12.65148998 | 10.12119198 | 7.590893988 | 4.638879659 | 3.795446994 | 2.530297996 |
| 0.08 | 17.23547752 | 12.92660814 | 10.34128651 | 7.755964884 | 4.739756318 | 3.877982442 | 2.585321628 |
| 0.085 | 17.58731869 | 13.19048902 | 10.55239121 | 7.91429341 | 4.836512639 | 3.957146705 | 2.638097803 |
| 0.09 | 17.92561899 | 13.44421424 | 10.75537139 | 8.066528544 | 4.929545221 | 4.033264272 | 2.688842848 |
| 0.095 | 18.25161054 | 13.68870791 | 10.95096632 | 8.213224744 | 5.019192899 | 4.106612372 | 2.737741581 |
| 0.1 | 18.56635533 | 13.9247665 | 11.1398132 | 8.354859901 | 5.105747717 | 4.17742995 | 2.7849533 |
| 0.105 | 18.87077592 | 14.15308194 | 11.32246555 | 8.491849165 | 5.189463378 | 4.245924582 | 2.830616388 |
| 0.11 | 19.16567943 | 14.37425957 | 11.49940766 | 8.624555743 | 5.270561843 | 4.312277871 | 2.874851914 |
| 0.115 | 19.45177652 | 14.58883239 | 11.67106591 | 8.753299436 | 5.349238544 | 4.376649718 | 2.917766479 |
| 0.12 | 19.72969659 | 14.79727245 | 11.83781796 | 8.878363468 | 5.425666564 | 4.439181734 | 2.959454489 |
| 0.125 | 20 | 15 | 12 | 9 | 5.5 | 4.5 | 3 |

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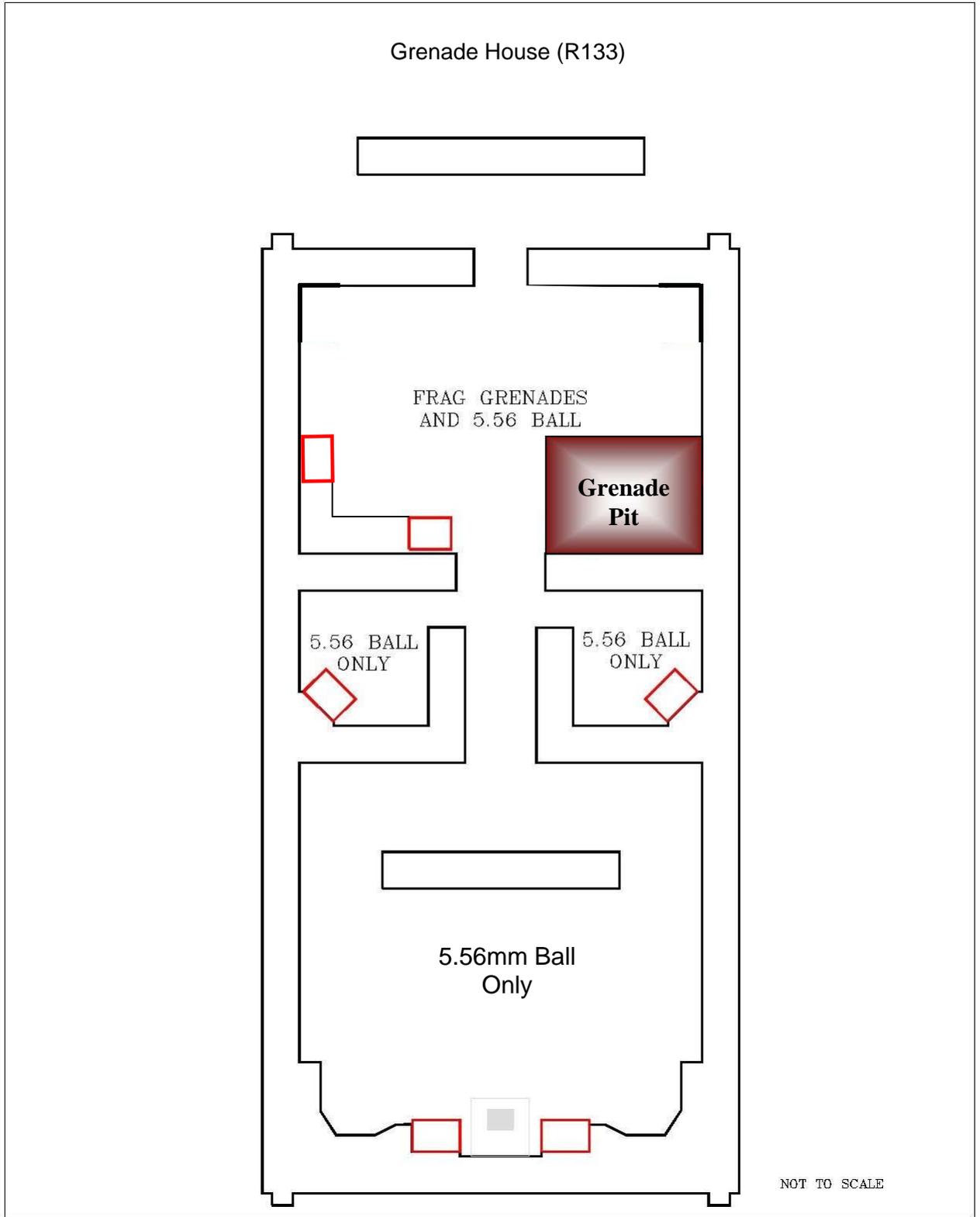
K FACTOR

| NEW OF CHARGE (TNT EQUIVALENT) | 40 1.2 -9 PSI | 30 1.7 PSI | 24 2.3 PSI | 18 3.5 PSI | 11 8 PSI | 9 12 PSI | 6 27 PSI |
|--------------------------------------|-------------------------|----------------------|----------------------|----------------------|--------------------|--------------------|--------------------|
|--------------------------------------|-------------------------|----------------------|----------------------|----------------------|--------------------|--------------------|--------------------|

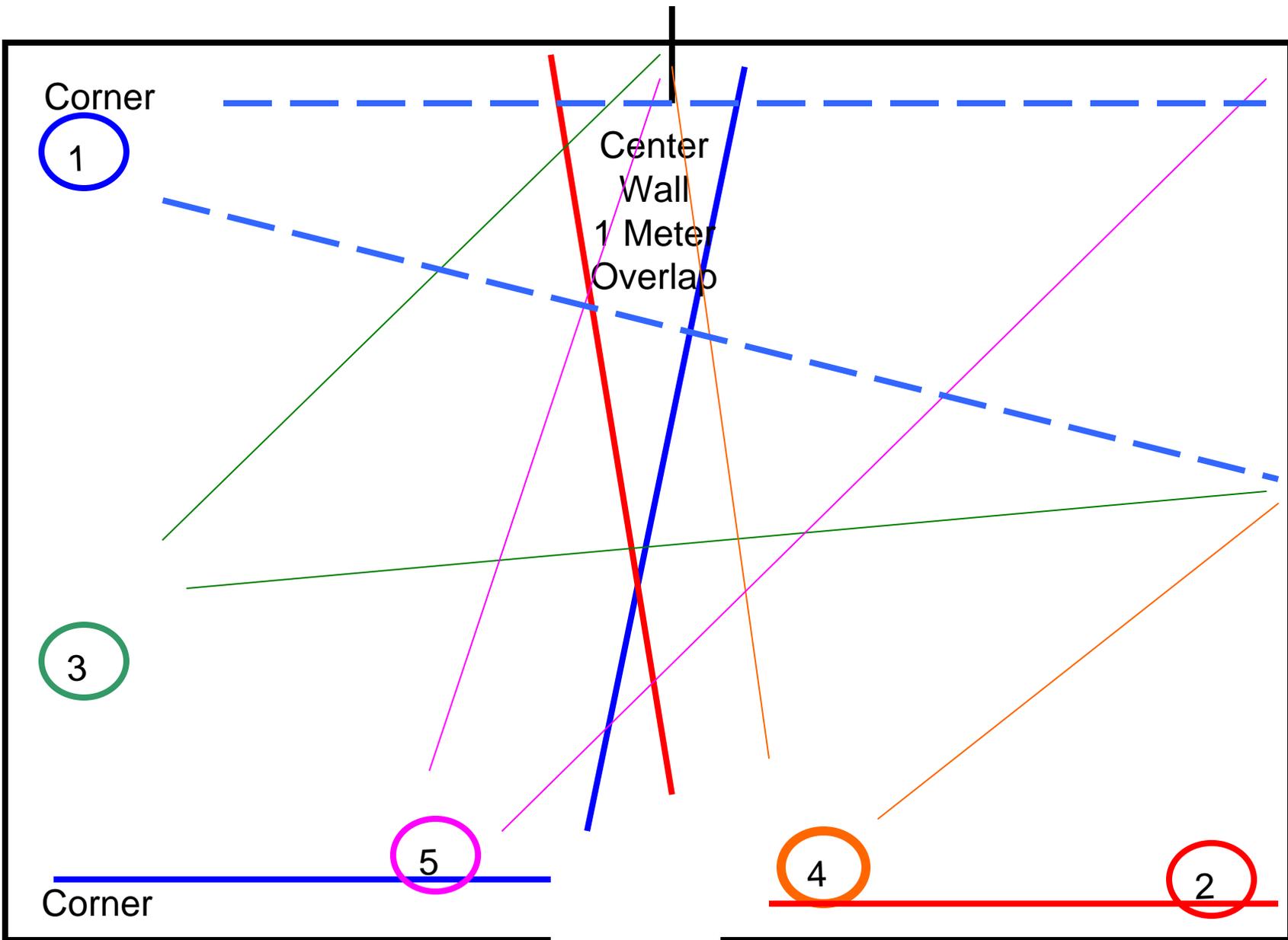
Distance in Feet From Detonation

| | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.13 | 20.26318808 | 15.19739106 | 12.15791285 | 9.118434634 | 5.572376721 | 4.559217317 | 3.039478211 |
| 0.135 | 20.51971136 | 15.38978352 | 12.31182682 | 9.233870112 | 5.642920624 | 4.616935056 | 3.077956704 |
| 0.14 | 20.76997641 | 15.57748231 | 12.46198584 | 9.346489383 | 5.711743512 | 4.673244692 | 3.115496461 |
| 0.145 | 21.01435149 | 15.76076362 | 12.60861089 | 9.45645817 | 5.77894666 | 4.728229085 | 3.152152723 |
| 0.15 | 21.25317138 | 15.93987854 | 12.75190283 | 9.563927123 | 5.844622131 | 4.781963561 | 3.187975708 |
| 0.155 | 21.48674142 | 16.11505606 | 12.89204485 | 9.669033639 | 5.90885389 | 4.834516819 | 3.223011213 |
| 0.16 | 21.71534093 | 16.2865057 | 13.02920456 | 9.77190342 | 5.971718757 | 4.88595171 | 3.25730114 |
| 0.165 | 21.93922621 | 16.45441966 | 13.16353573 | 9.872651794 | 6.033287208 | 4.936325897 | 3.290883931 |
| 0.17 | 22.15863303 | 16.61897477 | 13.29517982 | 9.971384862 | 6.093624082 | 4.985692431 | 3.323794954 |
| 0.175 | 22.37377884 | 16.78033413 | 13.4242673 | 10.06820048 | 6.152789181 | 5.034100239 | 3.356066826 |
| 0.18 | 22.58486469 | 16.93864852 | 13.55091882 | 10.16318911 | 6.210837791 | 5.081594556 | 3.387729704 |
| 0.185 | 22.79207686 | 17.09405765 | 13.67524612 | 10.25643459 | 6.267821137 | 5.128217294 | 3.418811529 |
| 0.19 | 22.99558832 | 17.24669124 | 13.79735299 | 10.34801474 | 6.323786787 | 5.174007371 | 3.449338247 |
| 0.195 | 23.19555999 | 17.39666999 | 13.91733599 | 10.438002 | 6.378778997 | 5.219000998 | 3.479333999 |
| 0.2 | 23.39214191 | 17.54410643 | 14.03528514 | 10.52646386 | 6.432839024 | 5.263231929 | 3.508821286 |
| 0.205 | 23.58547416 | 17.68910562 | 14.1512845 | 10.61346337 | 6.486005394 | 5.306731686 | 3.537821124 |
| 0.21 | 23.77568781 | 17.83176586 | 14.26541269 | 10.69905951 | 6.538314148 | 5.349529757 | 3.566353172 |
| 0.215 | 23.96290566 | 17.97217924 | 14.3777434 | 10.78330755 | 6.589799056 | 5.391653773 | 3.594435849 |
| 0.22 | 24.14724295 | 18.11043221 | 14.48834577 | 10.86625933 | 6.64049181 | 5.433129663 | 3.622086442 |
| 0.225 | 24.32880798 | 18.24660599 | 14.59728479 | 10.94796359 | 6.690422195 | 5.473981796 | 3.649321197 |
| 0.23 | 24.5077027 | 18.38077703 | 14.70462162 | 11.02846622 | 6.739618243 | 5.514233108 | 3.676155405 |
| 0.235 | 24.68402317 | 18.51301738 | 14.8104139 | 11.10781043 | 6.788106372 | 5.553905213 | 3.702603476 |
| 0.24 | 24.85786005 | 18.64339504 | 14.91471603 | 11.18603702 | 6.835911513 | 5.593018511 | 3.728679007 |
| 0.245 | 25.02929898 | 18.77197424 | 15.01757939 | 11.26318454 | 6.88305722 | 5.631592271 | 3.754394847 |
| 0.25 | 25.198421 | 18.89881575 | 15.1190526 | 11.33928945 | 6.929565774 | 5.669644725 | 3.77976315 |

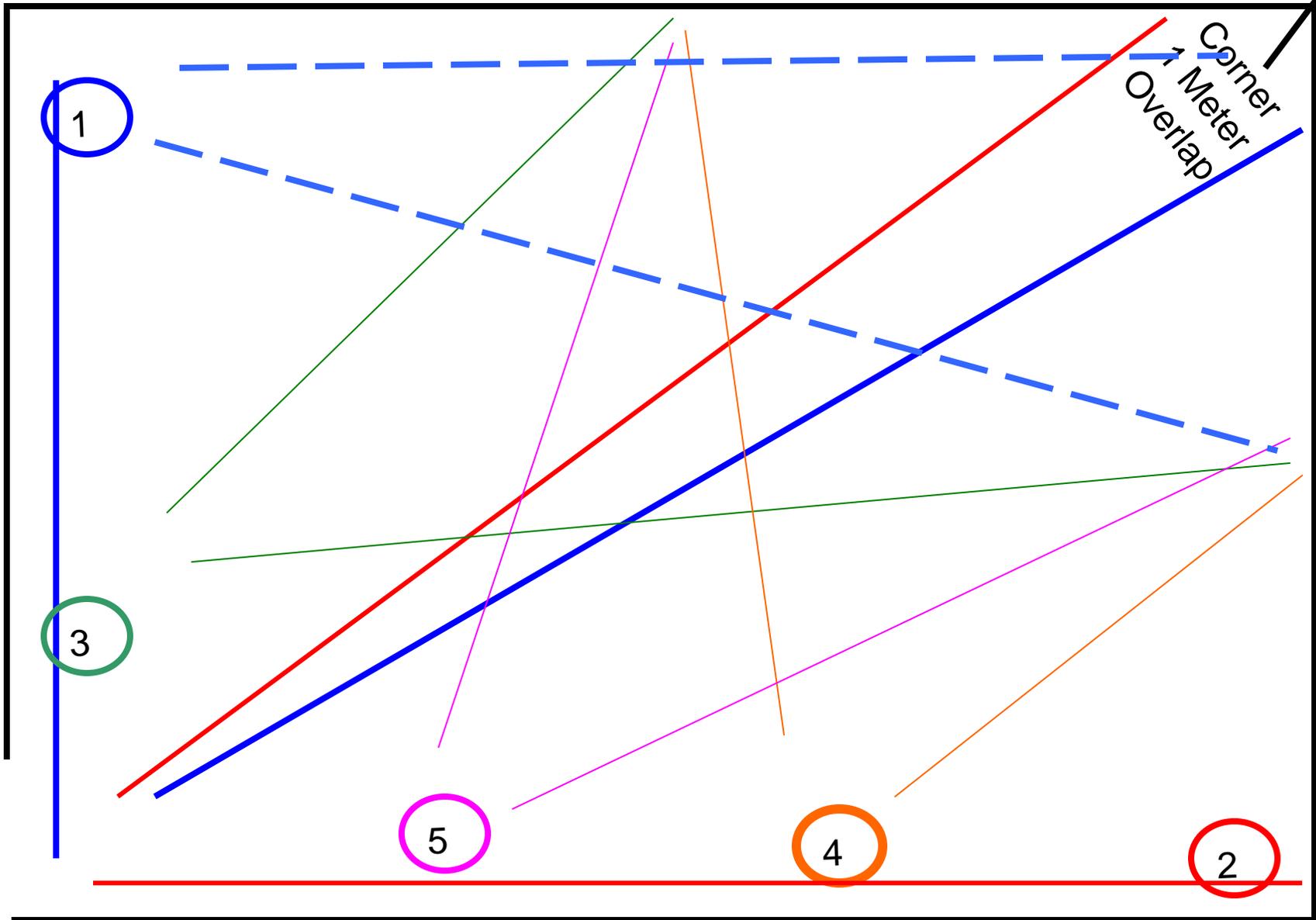
RANGE AND TRAINING REGULATIONS



Grenade House (R133)



Corner



Corner

Table 3A

| Stages | Yard line | Drill | Rounds per Iteration | Time(sec) | Position | Iteration | Rounds | Possible Score |
|----------------|-----------|-------------------------------|----------------------|-----------|----------|--------------|-----------|----------------|
| Stage 1 | 25 | Controlled Pair | 2 | 4 | Standing | 2 | 4 | 8 |
| Stage 2 | 25-15 | Fwd Mvt (Controlled Pair) | 2 | NA | Standing | 1 | 2 | 4 |
| | 15 | Pivot right (Hammer Pair) | 2 | 4 | Standing | 1 | 2 | 4 |
| | 15 | Pivot Left (Hammer Pair) | 2 | 4 | Standing | 1 | 2 | 4 |
| Stage 3 | 15-10 | Fwd Mvt (Hammer Pair) | 2 | NA | Standing | 1 | 2 | 4 |
| | 10 | Pivot right (Hammer Pair) | 2 | 3.5 | Standing | 1 | 2 | 4 |
| | 10 | Pivot left (Hammer Pair) | 2 | 3.5 | Standing | 1 | 2 | 4 |
| Stage 4 | 10-5 | Fwd Mvt (Failure to Stop) | 3 | NA | Standing | 1 | 3 | 6 |
| | 5 | Pivot right (Failure to Stop) | 3 | 3 | Standing | 1 | 3 | 6 |
| | 5 | Pivot left (Failure to Stop) | 3 | 3 | Standing | 1 | 3 | 6 |
| Stage 5 | 25 | Controlled Pair | 2 | 4 | Standing | 2 | 4 | 8 |
| Stage 6 | 25-15 | Fwd Mvt (Controlled Pair) | 2 | NA | Standing | 1 | 2 | 4 |
| | 15 | Pivot right (Hammer Pair) | 2 | 4 | Standing | 1 | 2 | 4 |
| | 15 | Pivot Left (Hammer Pair) | 2 | 4 | Standing | 1 | 2 | 4 |
| Stage 7 | 15-10 | Fwd Mvt (Hammer Pair) | 2 | NA | Standing | 1 | 2 | 4 |
| | 10 | Pivot right (Hammer Pair) | 2 | 3.5 | Standing | 1 | 2 | 4 |
| | 10 | Pivot left (Hammer Pair) | 2 | 3.5 | Standing | 1 | 2 | 4 |
| Stage 8 | 10-5 | Fwd Mvt (Failure to Stop) | 3 | NA | Standing | 1 | 3 | 6 |
| | 5 | Pivot right (Failure to Stop) | 3 | 3 | Standing | 1 | 3 | 6 |
| | 5 | Pivot left (Failure to Stop) | 3 | 3 | Standing | 1 | 3 | 6 |
| | | | | | | Total | 50 | 100 |

Table 4A

| Stages | Yard Line | Drill | Rounds per Iteration | Time (sec) | Position | Iterations | Rounds | Possible Score |
|--------|-----------|-----------------------------|----------------------|------------|----------------------|--------------|-----------|----------------|
| | 50 | Controlled Pairs | 4 | 8 | Standing to Kneeling | 1 | 4 | 8 |
| | 25 | Box Drill | 6 | 12 | Standing/Kneeling | 1 | 6 | 12 |
| | 25-15 | Controlled Pairs | 4 | NA | Forward Mvmt | 1 | 4 | 8 |
| | 15 | 90° Pivot Right, Box Drill | 6 | 5 | Standing | 1 | 6 | 12 |
| | 15 | 90° Pivot Left, Box Drill | 3 | 4 | Standing | 1 | 6 | 12 |
| | 15-10 | 180° Pivot Left, Box Drill | 6 | NA | Forward Mvmt | 1 | 6 | 12 |
| | 10 | 90° Pivot Right, Box Drill | 6 | 4 | Standing | 1 | 6 | 12 |
| | 10 | 90° Pivot Left, Box Drill | 6 | 4 | Standing | 1 | 6 | 12 |
| | 10-5 | 180° Pivot Right, Box Drill | 6 | NA | Forward Mvmt | 1 | 6 | 12 |
| | | | | | | Total | 50 | 100 |

Echo Hard Card Target
NSN:6920-00-795-1806

