Range Officer-in-Charge / Range Safety Officer Certification Course
For Non-DoD CAC Holders

22 June 2020
Range Safety Specialist
Range Management Branch
SCHEDULE

• Welcome/Introduction (5 min)
• Training Support Center (TSC) (15 min)
• Scheduling Process (15 min)
• Range Safety (~60 min)
• Knowledge Check (~30 min)

• Slide Count:
  • Brief: 104 (TSC-17) (Range Safety-87)
  • Intro, transition, photos, & POC: 22
  • Information: 65
  • Back-up: 20
  • Total: 124
WELCOME

• Food & Drink
• Heads
• Questions: Ask during the topic
• Location:
  • RMB/Range Control: Bldg 24157
  • Scheduling/TSC: Bldg 24144
  • Katmai: Bldg 24151
• This symbol indicates where details on a topic can be found in the Quantico Range Regulations (MCBO 3570.1A)
AGENDA

• TSC
  • Mission
  • Services
  • Equipment

• Scheduling Process and Procedures
  • Future Ops: Scheduling
    • Request: Process, Policy, and Best Practices
    • RFMSS: Use and Process
  • Current Ops: Fire Desk
    • Daily Operations
    • Changing A request Day-Of

• Range and Training Area (RTA) Check-out/in Procedures
AGENDA

• Range Safety
  • Regulations and references
  • OIC/RSO Certifications
  • Orders and SOP’s
  • Communications: Hot Brief, Radio Checks, and Post Inspections
  • MEDEVAC and Emergency Procedures
  • Conflicts and restrictions
  • General Safety

• Laser use

• Special Effects Small Arms Marking System/Close Combat Mission Capability Kit (SESAMS/CCMCK)

• Unmanned Arial Systems (UAS)
Location
TSC Information Brief for Officers in Charge/Range Safety Officers
TSCQ Mission

Marine Corps Base Quantico Training Support Center (TSC) matches existing and emerging technologies with unit training requirements to develop system supported training solutions and training enabler services in order to ensure realistic and relevant training environments in support of all units training aboard MCBQ.

TSC Quantico, in conjunction with Range Management Branch, provides a single point of contact for all range issues to reduce the administrative burden on training units.
TSCQ Services

• **Capability Briefs**
  • Availability and use of installation resources, training aids, and devices
  • Basic Mission Training Plan review

• **Range Tours**

• **Training Design Support**
  • Match training resources to Unit’s training objectives
  • Range scheduling support, coordination, RFMSS assistance and tracking

• **Training Device Support**
  • Targetry Systems Operation and Maintenance
  • Battlefield Effects Simulators

• **Instrumentation**
  • Facilitate AAR production
Training Systems Management & Support

*Additional information found in TSC Quantico Pamphlet*

- **Sound Effect Simulator (SES)**
- **Target Stands**
- **Potable Infantry Target (PITS)**
- **MIL-SIM-FX**
- **Badger AK-47**
- **Explotrain**
Instrumented - Tactical Engagement Simulation System (ITESS-II)
Premiere modular and mobile integrated instrumentation system that provides laser-based force-on-force training with Position Location Information reporting, battle tracking, data collection, and rapid After-Action Reviews for live-training
Equipment care and responsibility

Misuse or abuse may result in:
- Unit reimbursement
- Curtailment of future support
- Suspension of OIC/RSO certification

NOTE: It is highly recommended that the OIC/RSO or their trusted rep both sign for and return all equipment.
Support Request and Approval Overview

REQUEST INPUT (SAME RCNI)

EVENT SUPPORT
- SUPPORT ACTIVITY REQUIRED
- TRAINING ACTIVITY REQUIRED

SIMULATOR SUPPORT
- SUPPORT ACTIVITY REQUIRED

WAREHOUSE SUPPORT
- SUPPORT ACTIVITY REQUIRED

SUPPORT ACTIVITY (EVENT-SIMULATOR-WAREHOUSE)

TRAINING ACTIVITY (TRAINING FACILITY & EVENT)

RMB APPROVAL (RANGE CONTROL)

SSO APPROVAL (TRAINING SUPPORT CENTER)

ADDITIONAL UNIT CONFIRMATION

TSC CONTACTS UNIT TO CONFIRM SUPPORT ACTIVITY

TSC SSO HOLDS APPROVAL & DISAPPROVAL AUTHORITY.

RANGE CONTROL HOLDS APPROVAL & DISAPPROVAL AUTHORITY.

REQUEST APPROVED

RFMSS REQUEST PROCESSING

TRAINING FACILITY WITH COINCIDING TRAINING EVENT (i.e. R05 – LIVE FIRE 5.56)

SUPPORT TYPE WITH COINCIDING SUPPORT EVENT (i.e. R05 (SUPPORT SERVICES) – EVENT SUPPORT)

TSC CONTACTS UNIT TO CONFIRM SUPPORT ACTIVITY

13
"Event Support" involves support of Training Activities at Ranges, LZs, Training Areas, Training Facilities, and/or Roads (in this example, a Range). A Support Activity must be submitted along with a Training Activity as they are processed and approved by different sections. Both activities within one RFMSS request form a complete “Event Support” request.

*The Support Activity facility name should depict the same location as the Training Activity*

**UNIT SCHEDULERS MUST ACKNOWLEDGE THE RESTRICTION TAB BEFORE REQUEST SUBMISSION**

**Support Items are added to the Support Activity Support Tab. Drop off/pick up times for all support items and operation times for automated targets are required. Further information pertinent to the training event (i.e. course of fire description) may be added to the Communications* Tab.**

**Support Resources available at the requested support facility and can be added as items within the Support Tab.**
Support Contract
Government Responsibilities

Planning & Scheduling

• Weekly Schedule provided to contractor NLT 13:00 on the last work day of the week for following week’s support requirements

Support Timeline

• Reasonable changes must be made at least 24 hours in advance
• If the training unit fails to arrive within one hour of requested support, the support is forfeited
• If the training unit is present, but fails to employ the requested contractor support within 2 hours, the support is forfeited
• Units training with contractor support that place themselves into a voluntary check-fire will forfeit their support if they fail to resume firing within 2 hours.
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Training Support Center
POC LIST

**Head Training Support Center** – Joe Dennison: 703 784 5518
joseph.dennison@usmc.mil

**Systems Support Officer** – John Balko: 703 784 4492
jonathan.c.balko@usmc.mil

**Tactical Training Support Specialist** – Frank Topley: 703 432 7026
frank.topley@usmc.mil

**Tactical Training Support Specialist** – Matt Orr: 703 432 7974
matthew.s.orr.ctr@usmc.mil

**Tactical Training Support Specialist** – Jason Croy: 703 432 7031
Jason.m.croy.ctr@usmc.mil

**Tactical Training Support Specialist** – Chris Andres: 703 432 7969
christoper.andres.ctr@usmc.mil

**Range SME** – Meddie Knox: 703 432 7029
meddie.knox@usmc.mil
RFMSS is the final word; verbal agreements will only be honored after the change is made in RFMSS

QUESTIONS?

MISSION, GOAL, AND CAPABILITIES

- RANGE CONTROL MISSION: To ensure the safe and efficient use of Quantico Ranges and Training Areas (RTA) within the Guadalcanal Training Complex

- GOAL: To increase training efficiency, effectiveness, value, relevance, and realism

- Range and Training Areas (RTA) = 51,000 Acres
  - 38 Training Areas
  - 33 Fixed Ranges/Range Series
  - 67 Landing Zones (LZ)
  - 3 Drop Zones (DZ)
  - 3 Explosives/Demolitions Ranges
  - 3 Dedicated/Sensitive Fuse Impact Areas
MCINCR - Marine Corps Base Quantico

"Crossroads of the Marine Corps"

Important Notices

- MARADMIN 104/19: RANGE SAFETY-RELATED AMMUNITION INFORMATION NOTICE (AIN) POLICY FOR CLASS V/M:
  All Marine Corps Range OIC's and Range Safety Officers (RSO's) must comply with this message. This is a strong recommendation and best policy practice for all others.

- The new Quantico Military Installation Map is published and available from the RMB Scheduling Office in 1:25,000 and 1:50,000.

- SOUM R 091272 JUL 19: SAFETY OF USE MESSAGE FOR THE M2A1, TAMCN E01237M, IDN 12142A, NSN 1006-01-511-1250 Directs new procedures for the live-fire of the M2A1 50 caliber machine gun that supersedes all previous guidance. All Range OIC’s and Range Safety Officers (RSO) must comply with this message.

MCB Quantico Ranges and Training Area

With over 50,000 acres of training area, over 40 separate live fire ranges and training facilities, and Special Use Airspace up to 15,000 feet, Marine Corps Base Quantico offers the only DoD live fire range complex in the National Capital Region. This complex can support the full scope of military and law enforcement training from small arms familiarization all the way to combined arms exercises including the delivery of live close air support fires. Just 36 miles south of Washington, DC, Quantico routinely supports the training needs of numerous federal agencies, as well as units and organizations from all DoD components.

To see what training opportunities are available aboard Quantico, just click the "Explore the Ranges" tab.

To start the process of scheduling training at Quantico, click the "Training on Quantico" tab for more information.

Details on how to contact us by phone or how to visit Range Control and Training Support Center Quantico, click the "About Us" tab.

Questions about obtaining Range OIC/Range Safety Officer qualifications for Quantico? Click the "OIC/RSO Qualification" tab.

We look forward to helping you achieve your training goals.
SCHEDULING

- **Future Operations:** Scheduling Office: 703-784-5502
  - Scheduling office handles all new requests and modifications submitted in RFMSS that are more than 24 hours out from the day of training.

- **Current Operations:** Fire Desk: 703-784-5321/5322
  - The Fire Desk handles all adjustments to approved training, all “Same Day” requests, and requests submitted after 1100 the day prior if there is sufficient cause and no conflicts.

- **Scheduling Timelines:** RMB Policy Letter 1-15
  - All requests must be submitted at least 30 days in advance or risk being disapproved.
  - Requests received after 30 days to 15 days out will require phone call/email from the Unit Operations Section (OpsO, Ops Chief, Senior Supervisor) and receive the approval of the Range Control Officer.
  - Requests received at 14 days or less will require a request letter signed by the Unit Commander or appropriate representative with “By Dir” authority before the RCO will approve.
  - Any request that includes the use of airspace must be submitted no later than 14 days prior.
  - No changes to scheduled events or same-day requests requiring additional airspace will be approved.
  - Less than 10 days or Hunting Season??

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SCHEDULING

• Range Facility Management Support System (RFMSS)
  • All new requests are submitted for approval through RFMSS
  • All requests must include accurate weapon/ammo information
  • All requests must have an up to date Operational Risk Assessment on file with the Range Safety Specialist (RSS)
  • All requests must have a brief and concise Scheme of Maneuver (SOM) in the communications tab (5 W’s) or a more complete SOM on file
  • All requests must list VALID AND CERTIFIED OIC/RSO for the event
  • All requests must list an accurate POC phone number to both the OIC/RSO as well as the individual submitting in the RFMSS User Fields
  • All requests will be automatically assigned a Request Control Number Identifier (RCNI)

• NO PLACE HOLDERS
  • Incomplete requests will not be processed and precedence lost

• Accounts and training
  • Requests for new RFMSS accounts and training can be made by contacting the RFMSS Functional Administrator: (703) 432-6611
SCHEDULING

- **OIC/RSO:**
  - First opportunity to view safety conflicts
SCHEDULING

• PITFALLS: Talk to your S-3 or Training Section about...
  • Scheduled TA (i.e. TA-16G) does not include facilities such as LZ’s, CBT, etc
  • Accuracy of requests: Hot/Cold Times, support tab, etc
  • **AIRSPACE OR LOUD NOISE EXTENSIONS & USE OF ALCOHOL REQUESTS!**
  • Bad contact info in the User Tabs
  • Scheme of Maneuver (5 W’s) in the communications tab
  • Certs for OIC/RSO on the request are no longer valid
  • OIC/RSO certs NOT on file with Range Control
  • Unresolved conflicts and Co-Use
  • Weapons/Ammo do not match event
  • Frequency approval
  • Civilian participation/observation
  • Non-standard weapons/ammo
  • Recreational firing
SCHEDULING

QUESTIONS?

INSPECT WHAT YOU EXPECT:
- READ ONLY RFMSS ACCOUNT
- CALL TSC
- CALL SCHEDULING
RTA CHECK-OUT PROCEDURES

SCHEDULING OFFICE IS OPEN 0700-1600 MON-FRI

• RTA’s may be checked out:
  • 24 hours in advance
  • Friday for Saturday, Sunday, and Monday

• **OIC or RSO must come in person to check out the RTA**
  • Receive range brief/confirm training
  • Sign for radios, keys, flags, Range SOP, etc

• OIC/RSO must have in their possession:
  • *Copy of the Quantico Range Regulations (MCBO 3570.1A)*
  • *The Request Summary (RCNI)*

• All RTA’s (except WTBn Ranges) must be checked out from Range Control

• WTBn Ranges (Calvin A. Lloyd Range Complex) will be checked out from the WTBn S-3/OOD
  • WTBn OOD will contact the Fire Desk to confirm the OIC/RSO are certified and in RFMSS
RTA CHECK-OUT PROCEDURES

SCHEDULING OFFICE IS OPEN 0700-1600 MON-FRI

• OIC/RSO will READ and sign the **RANGE/TRAINING AREA SIGN OUT/IN CHECKLIST**
• OIC/RSO will receive a copy and Scheduling will retain a copy
• Pay close attention to:
  • **RTA**
  • **EVENT**
  • **OCCUPY DATE/TIME**
  • **END DATE TIME**
  • **SERVICEABILITY/SIGN**
RTA CHECK-OUT PROCEDURES

SCHEDULING OFFICE IS OPEN 0700-1600 MON-FRI

- OIC/RSO will READ and sign the LIVE FIRE BRIEF
- OIC/RSO will STATE verbatim lines in bold:
  - Pay close attention to:
  - Safety Brief
  - Medical Coverage
  - Items 1-10
- You are verifying that you have read and understand the Range Safety Order Range SOP, Range Regulations, all 10 items and WILL COMPLY (This is recorded)
  - New Item: (4) Blank & Live Ammo
  - New Item: (10) MAKE website for AIN’s

LIVE FIRE BRIEF

OIC/RSO: Read Items 1-10 below. Have names, DODICS, secondary comm number, and number of personnel training ready when making request to “ Occupy”. When requesting a “SOE” time, read the live brief below to verbally verify you understand and will comply by stating:
- "Range Control this is Range___. I (Rank/Race) am the (OIC or RSO). I certify that:
  - All personnel have received a detailed Safety Brief.
  - Adequate Medical Coverage is present.
  - The Safety Vehicle is present.
  - Left/Right Lateral Limit Markers are identified/visible per Range SOP.
  - Range lights &/or horns are turned on and will not be bypassed.
- "I have read and understand the Range Safety Order, Range Regulations, SOP for this range, Items 1-10 of this brief, and will comply.

   1. The OIC/RSO will immediately contact Range Control and request a pre-inspection if the range or training area is found in a poor state of police or will accept the condition and responsibility to police.
   2. The OIC/RSO MUST maintain (in their possession) two forms of communication with Range Control AT ALL TIMES: Primary/Secondary: Issued Radio/Cell Phone or land line. The OIC/RSO will make radio checks every 30 min for live fire/3 hrs for non-live fire events on the hour/half-hour.
   3. The OIC/RSO will cease fire/training immediately if communication is lost. If OIC/RSO fails to make radio checks the unit will be placed into a check-fire until communication is restored.
   4. OIC/RSO must ensure all blank and live ammunition is: Stored and issued separately. NEVER used at the same time, blanks fired before live rounds never after, ensure every participant, weapon, magazine, etc are cleared/ thoroughly checked before issuing live rounds or departing.
   5. OIC/RSO will IMMEDIATELY contact Range Control and await further instructions as soon as a fire starts. NEVER enter undamaged area.
   6. OIC/RSO will immediately cease fire and contact Range Control if any aircraft (to include UAV/UGV) enters the RZ for that range.
   7. MEDIVAC: Regardless of severity, the OIC/RSO will immediately contact Range Control to initiate emergency procedures.
   8. Civilian participation requires prior approval from Commander, MCINCO. No Quantico. OIC/RSO will ensure the Hold Harmless/Waivers of Liability are signed, on-hand, and notify Range Control when complete.
   9. Completion of training: OIC/RSO will contact Range Control to request Post Inspection, “COLD” Time, and pass “End of Training” report (form signed by DODIC, number personnel trained/vehicles in support.
   10. Marine Corps OIC/RSO: Range Safety Related AIN’s have been checked and read as part of detailed safety brief as required.

I (print) ___________________ CERTIFY I UNDERSTAND ANY/ALL CONFLICTING RESTRICTIONS, HAVE READ AND WILL COMPLY WITH THE RANGE SAFETY ORDER, RANGE REGULATIONS, RANGE SOP, AND THE ITEMS ABOVE.

(SIGNATURE) ___________________ (DATE) ___________________
RTA CHECK-OUT PROCEDURES

SCHEDULING OFFICE IS OPEN 0700-1600 MON-FRI

• PITFALLS!
  • Checking out the range (even same day) is NOT the same as calling in occupied/hot with the Fire Desk
  • UNIT IS NOT PERMITTED TO OCCUPY UNTIL OIC/RSO HAVE CHECKED OUT THE AREA AND ARE ON DECK
  • Late: The Rule of 2:
    • 2 hours late: Request will be CANCELLED (No-Show)
    • 2 hours late: Contractor support is lost
    • 2 hours without firing: Contractor support departs
    • MITIGATE ISSUES, CALL THE FIRE DESK: (703) 784-5321
      • Scheduling is NOT open on weekends and holidays!
      • Improperly scheduled Post-Inspection
RTA CHECK-OUT PROCEDURES

• QUESTIONS?

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• Range Officer In Charge (OIC)
  • Successfully complete USMC Range Safety Course (Basic)
  • Successfully complete the Quantico OIC/RSO course
  • Must be KNOWLEDGEABLE in the weapons systems, munitions and training devices for which they are responsible
  • NOTE: This billet can NOT be held by a Civilian Contractor

• Range Safety Officer (RSO)
  • Successfully complete USMC Range Safety Course (Basic)
  • Successfully complete the Quantico OIC/RSO course
  • Must be weapons system QUALIFIED for all systems, munitions and training devices to be used in the event for which they are accountable and fully understand the entire training evolution
  • NOTE: This billet can be held by a Civilian Contractor
RANGE SAFETY: OIC/RSO

• OIC and RSO MUST:
  • Have read and understand **MCO 3570.1C**
  • Have read and possess **MCBO 3570.1A**
  • Have read and understand the **Range SOP**
    • Each Range, Training Area, and Facility has a specific SOP that must be read, understood, and strictly adhered to
  • Ensure their certificates are current and on file at Range Control
  • Be able to fully influence the safe conduct of those range and training events to which they have been assigned

• OIC and RSO **WILL NOT**:
  • Participate in **LIVE FIRE** training events
  • Relinquish responsibilities to another without prior approval from the Fire Desk

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RANGE SAFETY: OIC/RSO

• OIC and RSO MUST:
  • Maintain positive communication with Range Control:
    • Two forms of comm: Primary Radio/Secondary Cell Phone or land-line
    • Cell phone MUST reach either the OIC or RSO on the range
    • If either form of comm is lost, CEASE FIRE immediately and re-establish
  • OIC/RSO must maintain the radio in THEIR possession
    • Required for the immediate response to emergency procedures
    • Failure to respond will result in immediate cease fire.
    • Continued failure to maintain communication will result in notification of the parent command and corrective action by the Range Control Officer and/or the Range Safety Specialist
  • May result in suspension of OIC/RSO certifications
• Non-Live Fire OIC Requirements:
  • RMB Policy Letter 1-16:
    • Defined as training that does not include use of ordnance
    • Blanks, SESAMS (SIM/UTM), and pyrotechnics are ordnance
    • Rank of Sergeant (E-5 or civilian equivalent)
    • Single OIC may supervise single event occurring over multiple areas
    • Multiple OIC’s required for multiple events
    • Check-out procedures, radio check requirements, and safety apply
  • Non-Live Fire training includes:
    • Stand alone UAV operations
    • Unit Hikes/PT
    • Land Navigation
    • Patrolling
    • Other non-kinetic training
• OIC and RSO PITFALLS:
  • Fail to answer radio
  • Engages in instruction or otherwise participates in the training without turning over with new OIC/RSO
  • Assigns a radio watch and is nowhere nearby
  • Does not understand the “HOT BRIEF” that is given over the radio
  • Does not have the list of DODICS, Weapons, number of personnel, or vehicles in support on hand when calling the Fire Desk
• Post Inspection:
  • Not properly scheduled
  • Not present, prepared, or professional
  • Gives the Patrolman grief
• FAILS TO CALL IN THE END OF DAY TRAINING REPORT!
• SAFETY NET RADIOS WILL NOT BE USED FOR INTERNAL COMMUNICATION! DO NOT “ROLL” TO ANOTHER NET!
• QUESTIONS?
• Required communications with Range Control:
  • ALL MEDEVACS
  • ALL FIRES
  • MISSING PERSONNEL
  • ANY INCIDENT INVOLVING AMMUNITION (I.E. ROUNDS OUT OF IMPACT AND NEGLIGENT DISCHARGE)
• Required communications with Range Control:
  • ALL MEDEVACS
  • ALL FIRES
  • MISSING PERSONNEL
  • ANY INCIDENT INVOLVING AMMUNITION (I.E. ROUNDS OUT OF IMPACT AND NEGLIGENT DISCHARGE)
  • Requesting to “Occupy” a Range, TA, or Facility
• Required communications with Range Control:
  • **ALL MEDEVACS**
  • **ALL FIRES**
  • **MISSING PERSONNEL**
  • **ANY INCIDENT INVOLVING AMMUNITION (I.E. ROUNDS OUT OF IMPACT AND NEGLIGENT DISCHARGE)**
  • Requesting to “Occupy” a Range, TA, or Facility
  • Requesting a “Hot” status prior to live-fire
RANGE SAFETY: COMMUNICATIONS

- Required communications with Range Control:
  - ALL MEDEVACS
  - ALL FIRES
  - MISSING PERSONNEL
  - ANY INCIDENT INVOLVING AMMUNITION (I.E. ROUNDS OUT OF IMPACT AND NEGLIGENT DISCHARGE)
  - Requesting to “Occupy” a Range, TA, or Facility
  - Requesting a “Hot” status prior to live-fire
  - Requesting to switch OIC or RSO
RANGE SAFETY: COMMUNICATIONS

- Required communications with Range Control:
  - **ALL MEDEVACS**
  - **ALL FIRES**
  - **MISSING PERSONNEL**
  - **ANY INCIDENT INVOLVING AMMUNITION (I.E. ROUNDS OUT OF IMPACT AND NEGLIGENT DISCHARGE)**
  - Requesting to “Occupy” a Range, TA, or Facility
  - Requesting a “Hot” status prior to live-fire
  - Requesting to switch OIC or RSO
  - Radio Check:
    - Every 30 minutes on the hour/half hour for live fire
    - Every 3 hours on the hour for a non-live fire training
    - When placing yourself in a “check fire” status for any reason
    - When requesting a “Cold” status for live-firing ranges/airspace
    - End of Training Reports/departing the RTA
  - **Range Control must be notified even when working through WTBn**
RANGE SAFETY: COMMUNICATIONS

• Means of Communication:
  • Primary: Radio issued by Range Control
  • Secondary: Cell Phone (Verify signal)

• Call signs
  • Range Control Facility: Range Control
  • You: Specific Range/Training Area (Range 12, UTC-Bravo, or TA-16G)

• Proper radio procedures will be followed
  • Non-essential administrative communications over the Range Control Safety Net is prohibited
  • Be Advised: ALL radio and telephone communications with the RCF are recorded
  • Fire Desk Operators do not make decisions (execute procedures)

• EMERGENCIES: KEEP ALL RADIO CHANNELS CLEAR
  • If not involved directly in the emergency, cease all radio transmissions
  • Range Control has not forgotten about you
Additional Required Communications:

- Fires in the RTA (When they start)
- Aircraft, UAS, and vehicle accidents (spill out of airspace)
- Unintentional jettison of any material from an aircraft
- Any explosive mishap, to include duds, misfires, and hang fires
- Rounds out of impact (outside left/right lateral limits)
- Negligent discharges
- Missing, lost, found or stolen munitions
- Missing or lost personnel
• QUESTIONS?
• IN THE EVENT OF ANY MEDEVAC, CONTACT RANGE CONTROL IMMEDIATELY!
  • The radio is the primary means of communication
  • Cell phones are secondary
  • Urgent/Mass Casualty and Priority cases; if not directly involved in the Medevac, GO INTO A CHECK FIRE, keep off the radio and landline, and await instructions
• OIC and RSO MUST maintain radio contact with Range Control at ALL times
• Range Control must verify all ranges have ceased firing and the airspace is clear
  • All ranges have ceased firing
  • All UAV/UAS are grounded
  • All other aircraft are clear of airspace required

• General Rule: **LIFE, LIMB, OR SIGHT**
• Categories of MEDEVAC
  • URGENT
  • PRIORITY
  • ROUTINE
  • MASS CASUALTY

• CHECK-FIRE PROCEDURES:
  • When a MEDEVAC occurs, all live firing in the RTA shall cease
  • Firing/training may resume only upon permission from the RCF
  • In the event an investigation is warranted, the unit involved in the mishap exercise must terminate training.
• **URGENT:** Urgent (Life Threatening) (Includes Mass Casualty)

  • Emergency patients for whom speedy evacuation is necessary to save life, limb, eyesight, or to prevent complication of serious illness or to avoid permanent disability

  • Evacuation of critically wounded or injured that requires early hospitalization is an urgent precedence and is a matter of life or death

• Injuries requiring URGENT MEDEVAC include: **HEAT STROKE**

  HEAT STROKE IS CORE TEMP OF 104+ WITH ALTERED MENTAL STATUS OR ANYTHING AT 107+

- Gun shot wounds
- Deep lacerations with uncontrollable bleeding
- Compound fractures
- Chest pain that doesn’t go away when sitting for a few minutes
- Head injury with loss of consciousness or eye damage
- Intense and uncontrollable pain
- Chemicals splashed in the eyes
- Severe asthma attacks with shortness of breath that prevents talking
- Possible poisoning or overdose
- Sudden weakness on one side of the body
- Snake bites
MEDEVAC DECISION POINT DIAGRAM: URGENT/MASS CAS

Field Medical Technician
HM/8404
Corpsman/Medical Personnel Treat Injured Personnel

OIC Evaluates and Notifies the RCF

OIC Requests EMS MEDEVAC from RCF

EMS Provides Ground Transport

EMS Transports to Most Expedient Medical Facility/RCF Coordinates EMS Response

EMS Informs RCF of Final Destination

EMS Provides Air Transport

EMS Transports to Most Expedient Medical Facility/RCF Coordinates EMS Response

EMS Informs RCF of Final Destination

1-41/1-43
• **PRIORITY:** Priority (Non-Life Threatening)

  - Patients who require specialized treatment not available locally and who are liable RANGE REGULATIONS to suffer unnecessary pain or disability unless evacuated with the least possible delay.

  - Evacuation of seriously wounded or injured personnel and require early hospitalization, but whose evacuation is not a matter of life or death is a prioritized event.

  - Injuries requiring priority MEDEVAC include: **HEAT EXHAUSTION** Elevated core temp with extreme fatigue, profuse sweating, and cramping.

- Nausea and vomiting that won’t stop
- Asthma
- Minor reactions to medications
- Headaches

- Minor cuts that need to be sutured, but the bleeding is controllable
- Possible fractures of wrist or ankles but no deformity, numbness or bluish discoloration
RANGE SAFETY: MEDEVAC PROCEDURES

• MEDEVAC DECISION POINT DIAGRAM: PRIORITY

Field Medical Technician
HM/8404
Corpsman/Medical Personnel Treat Injured Personnel

OIC Evaluates and Notifies the RCF

OIC Transports by Unit Safety Vehicle

OIC Informs RCF of Intended Treatment Facility

RCF Notifies Ray Hall of Incoming Casualty

OIC Notifies RCF upon Arrival at Off Base Facility

OIC Requests EMS MEDEVAC from RCF

EMS Provides Ground Transport

EMS Transports to Most Expedient Medical Facility/RCF Coordinates EMS Response

EMS Informs RCF of Final Destination
• **ROUTINE: Routine (Minor Injuries)**

  - Patients whose immediate treatment requirements are available locally but would definitely benefit by ambulance evacuation on routine travel
  
  a patient with minor illness, or a patient requiring transfer between medical facilities for further treatment is a routine event

  - Injuries requiring routine MEDEVAC include: **HEAT CRAMPS**

    Profuse sweating and cramping

    - Colds, flu, sore throats
    - Skin rashes
    - Minor cuts and scrapes
MEDEVAC DECISION POINT DIAGRAM: ROUTINE

- Field Medical Technician HM/8404 Corpsman/Medical Personnel Treat Injured Personnel
- OIC Evaluates and Notifies the RCF
- Injured Personnel able to Continue Training
- OIC Transports by Unit Safety Vehicle
- OIC Informs RCF of Intended Treatment Facility
- RCF Notifies Ray Hall of Incoming Casualty
- OIC Notifies RCF upon Arrival at Off Base Facility
• **SPECIAL CONSIDERATIONS:**
  
  • POVs will not block access to any RTA
  • POV’s will not be used as safety vehicles or to transport injured*
  • Unrestricted access must be maintained for safety and MEDEVAC considerations
  • **The OIC/RSO or unit Field Medical support will not bypass the RCF when calling for medical support**
  • Launch Authority: In the event of an actual MEDEVAC the RCF will contact the EMS Dispatch Center
  • Quantico EMS will determine the plan for evacuating the casualty based on the medical attention required, the most expeditious method to transport the patient, the type of treatment center best equipped to handle the casualty, and the current weather and traffic conditions
MEDEVAC PROCEDURE:

- OIC or RSO will IMMEDIATELY contact the RCF!
- Fire Desk Operator will IMMEDIATELY contact Quantico Dispatch
- ALL details and requests from OIC/RSO are relayed in REAL TIME
- OIC or RSO will be the on-scene commander and will initiate action for the MEDEVAC until Quantico EMS personnel arrive
- The RCF will relay the direct steps to take to accomplish the MEDEVAC
- A RMB Patrolman will be immediately dispatched to the scene to assist the OIC/RSO in any way necessary and provide additional information to/from the scene
- Additional RMB personnel will be dispatched to open any gates to facilitate the MEDEVAC in the most direct and expeditious manner
• REQUIRED INFORMATION IN INITIAL REPORT:
  • Location (Range, TA, LZ name or grid coordinate, etc.)
  • If the victim(s) are conscious or unconscious
  • Number and types of victim(s) (i.e. Urgent- a threat to life, limb or eye-sight; Priority- Non-life threatening, Routine- Minor injuries)
  • Type(s) of injury(ies), victim(s) present condition, if a medical professional is on-scene, and what medical aid has been provided
  • HEAT CASE: Body Core Temp and mental status
• ADDITIONAL INFORMATION:
  • Victim(s) name, rank and unit
  • Victim(s) known medicals (blood type, etc.)
  • Source of injury /illness (i.e. snake bite, gun shot, shrapnel, etc.)
  • Hazards to aircraft, vehicle, or surface craft at the casualty collection
• MEDICAL COVERAGE REQUIREMENTS:
  • Units will coordinate and arrange for their own medical support
  • MCBQ units and tenant commands will request medical support from Naval Health Clinic Quantico 30 DAYS IN ADVANCE
  • Appropriate medical support defined as:
    • Field Medical Technician Navy Corpsman (HM/8404)
    • Army Medic (68W)
    • Emergency Medical Technician (EMT)
    • Tactical Combat Casualty Care (TCCC)*
    • Combat Life Savers (CLS)*
    • Reservists or other personnel who are medically qualified by their civilian occupation (Doctor, Surgeon, Nurse, etc)*
  • * Must be vetted by the Medical Officer at Ray Hall 45 days in advance.
• MEDICAL COVERAGE REQUIREMENTS:
  • EMT
    • A civilian possessing a current Emergency Medical Technician or higher certification from an approved UNITED STATES DEPARTMENT OF TRANSPORTATION NATIONAL EMERGENCY MEDICAL SERVICES EDUCATION STANDARDS CURRICULA, which is current and recognized in the State of residence
    • Qualified medical personnel WILL NOT be assigned other duties while providing medical support for live-fire training events
    • Medical personnel WILL have adequate medical equipment on site for the training activity
• BOTH A QUALIFIED MEDICAL PERSONNEL AND SAFETY VEHICLE REQUIRED FOR:
  • All live, blank, pyrotechnics and signaling devices; or Special Effects Small Arms Marking System (SESAMS) firing
  • Night movement
  • EOD Range sweeps
  • Explosive training
  • Parachute operations
  • Military Operations in Urban Terrain
  • HRST operations and rappelling
  • All RTA use by units of 25 personnel or larger
• MEDICAL SUPPORT NOT REQUIRED

SAFETY VEHICLE REQUIRED WHEN CONDUCTING:

• Sniper Stalks
• Terrain Walks
• Non-live-fire training
• Non-live-fire rehearsals and set-up
• Land navigation (less than 25 personnel)
MEDEVAC/MEDICAL COVERAGE PITFALLS:

- **Calling 911 directly (NO!)**
- If medical coverage departs, training must cease
- If safety vehicle departs, training must cease
- WTBn Corpsman is for WTBn training ONLY
- Unauthorized transport of injured by POV
- Assuming Range Control owns a helicopter
- Assuming the FDO has launch authority
- Passing too much initial information
- Use of phrases such as “Stand-by” or “Wait one”
- Non-Live Fire training may continue in the training areas but the radio and land-line traffic must be minimized (we will forgive you if your required 3 hour radio check is a little late)
• QUESTIONS?
CONFLICTS AND RESTRICTIONS

• Each Range, Training Area, and Facility will have its own unique conflicts and restrictions

• **OIC’s AND RSO’s MUST** read and understand the Quantico Range Regulations, the [SOP](#) for each Range, TA, and Facility they are responsible, and RFMSS Conflicts Tab!

• Information in SOP under “Special Instructions/Comments”

• Current Conflicts: **6,662** (was 8,507)
  
  • Facility to Facility: 141 (was 91)
  
  • Facility to Event: 2,782 (was 3,328)
  
  • Facility to Ammunition: 3,739 (was 5,188)

• All conflicts are visible in RFMSS at the time the request is generated.
CONFLICTS AND RESTRICTIONS

• CONFLICTS AND RESTRICTIONS PITFALLS:
  • In the SDZ of another range
  • In the SDZ and BEYOND (forward) of targets on an adjacent range
  • Gates and barriers
  • Blanks/Live Ammo use and storage and Delinking Tracers
  • Static, Firing on the Move, and Fire and Maneuver
  • Steel Targets: SOUM 2-02 (MINIMUM 150M FOR RIFLE)
  • NREA/Environmental: Hunting/Forestry
    • Endangered Species: Bats, Dwarf Wedge Mussel, Small Whorled Pogonia
    • Cultural resource concerns
    • Digging is prohibited unless authorized by Range Control
    • Cutting trees, field sanitation
What you see
What the Fire Desk Operator sees
SAT Range/Range 305 Conflicts

This image depicts the SDZ conflicts from the SAT Range to Range 305. This is NOT to allow downrange movement but to show the dangers of making downrange movement without appropriate coordination with Range Control. This includes:
- Katmai target maintenance
- Ground maintenance
- Target placement by users

QUESTIONS?
GENERAL SAFETY

• Gates & Barriers
• Ammunition Handling
• UXO
• Steel Targets
• Fire Danger Class
• Weather
• Quiet hours
• Airspace
• Unassociated Civilians
GENERAL SAFETY: GATES & BARRIERS

- **DO NOT BYPASS LOCKED GATES OR BARRIERS**
- **NO ENTRY TO A RANGE OR TRAINING AREA WITHOUT APPROVAL FROM RANGE CONTROL**
- You WILL NOT be issued keys that access another SDZ
- You MUST inform all personnel about gates/barriers during safety brief
- Patrolman escort may be required for some movements
- Gates must be locked or have a road guard posted
- Road Guards must have comm with OIC/RSO
- Always call the Fire Desk before opening and entering any locked gate
GENERAL SAFETY: AMMO HANDLING

- Pre-Staging is authorized if approved in RFMSS
  - POV’s will not be used to transport ammunition
  - **NO AMMUNITION IN HEADS/PORTA-JOHNS!**

- Blanks:
  - Blank & live ammunition will never be mixed
  - Blank & live ammunition will not be stored in or issued from the same location
  - Blank & live ammunition will not be utilized or stored on the same range
  - The safe separation distance for firing blanks at personnel is 5 meters (17 feet)
  - **BLANKS WILL NEVER BE FIRED AFTER LIVE FIRE ON THE SAME DAY/SAME RANGE**

- Delinking tracers to comply with Fire Danger Classification is **allowed** IAW guidance in AIN 043-2012 and the Quantico ASP Supported Unit Guide (SUG)
  - This practice is discouraged and units must have a Delinking SOP
  - Military Units may conduct a 1:1 swap of ball/tracer mix for straight ball (ASP)
  - When returning unused ammunition to the ASP, the belted ammunition must be returned to its original factory configuration as issued or it will be Grade 3

- Chemical Agents: Riot Control Agents (RCA)
  - Used under the supervision of an officer, SNCO, or NCO who has received formal training in the characteristics, capabilities, and training applications of these agents.
GENERAL SAFETY: AMMO HANDLING

• MARADMIN 104/19: RANGE SAFETY-RELATED AMMUNITION INFORMATION NOTICE (AIN) POLICY FOR CLASS V(W)

• “The Range OIC or Range Safety Officer (RSO) will incorporate the precautionary information into the range safety brief.”

• WEBSITE: https://make.mceits.usmc.mil/make/ammo/Home.aspx

• PHONE: 864-625-3457 EMAIL: ammo_supportcenter@usmc.mil
GENERAL SAFETY: UXO

- **UXO/EOD Support:**
  - **DO NOT** enter the dud impact area to fight fires, retrieve equipment, or any other reason.
  - MCBQ EOD escort/support is required to enter any High Hazard (dud) Impact area (Ranges 3A, 7, 8, 8A, 9, and 15).
  - If any UXO is encountered in the RTA, immediately contact the RCF.
  - **DO NOT** retrieve any Full Range Practice Mortar Rounds (FRP) IAW SOUM 13-15: Only EOD or ORC personnel may retrieve the rounds due to potential energetic hazard.
  - **DO NOT** collect, stack, kick, disturb, move, or consolidate any UXO to include energetic hazards such as 60mm FRP and illumination rounds that fail to function.

- **Dud Impact areas:** All of TA-9A, Range 3A impact area, and portions of TA-7B as indicated on the Quantico MIM (TA-14B is no longer restricted).
GENERAL SAFETY: UXO

• UXO/EOD Support: MCBQ EOD (703) 784-5314

• MCBQ EOD will not respond in hours of darkness
• MCBQ EOD will not respond to ordnance that can be rendered safe and returned to the ASP as Code H

• **EOD support must be coordinated prior to training with live hand grenades or target placement in duded impact areas**

• When safe to do so: Take a picture, note the GPS coordinates, and mark the area of found UXO as best as possible
• Steel Targets: SOUM 2-02
  • **EYE PROTECTION MANDATORY**
  • 7 yard minimum engagement distance for pistol calibers
  • 10 yard minimum engagement distance for 12ga buckshot
  • 50 yard minimum engagement distance for 12ga slug

• NO GIMMICK TARGETS
• 500 Brinell hardness (AR-500) steel only

• 150 yard minimum engagement distance for ALL rifle calibers*
• M855A1 & M80A1 (EPR) ammo is not authorized for steel targets
• KATMAI will not issue steel targets for EPR ammo or any DODIC larger than AA11 (7.62 Special Ball)
• **Fire Danger Classifications (FDC)**
  • Set by the Base Fire Chief and Director, Natural Resource and Environmental Activity (NREA) in conjunction with the U.S. Forest Service
  • FDC-1: Fire danger is low
  • FDC-2: Fire danger is moderate
  • FDC-3: Fire danger is intermediate
  • FDC-4: Fires start easily, spread rapidly, and quickly increase in intensity
  • FDC-5: Fires start quickly, spread furiously and burn intensely

• **BE ADVISED!!!!**
  • FDC CAN CHANGE ANYTIME BUT MORE LIKELY IN THE SPRING
  • FDC CAN NEGATIVELY IMPACT YOUR ABILITY TO TRAIN
  • **TRACERS MAY BE DELINKED OR AMMO EXCHANGED AT ASP**
GENERAL SAFETY: WEATHER

• Weather
  • Heat conditions and extreme cold
  • HOT SOP: Wet Bulb Globe Temperature Index (WBGT)
    • GREEN FLAG: The WBGT Index reads from 80 to 84.9 degrees
    • YELLOW FLAG: The WBGT Index reads from 85 to 87.9 degrees
    • RED FLAG: The WBGT Index reads from 88 to 89.9 degrees
    • BLACK FLAG: The WBGT Index exceeds 90 degrees
    • ADMIN BLACK FLAG: All training stops. EMS/Ray Hall at capacity

WARNING: PUSH FLUIDS, (WATER/SPORTS DRINKS) AND MONITOR PERSONNEL

NOTE: WBGT is read from 1 May to 30 September
**GENERAL SAFETY: WEATHER**

- **Destructive Weather: Tropical Storm/Hurricane Conditions**
  - **Thunder and Lightning Storm/Tornado Condition II**
    - Destructive winds accompanying thunderstorms are reported or expected within 50 miles of MCBQ
  - **Thunder and Lightning Storm/Tornado Condition I**
    - Thunderstorms/tornados are imminent. They have formed or are forecasted within 25 miles of MCBQ
  - **Thunder and Lightning Storm/Tornado Condition IA**
    - Thunderstorms are imminent. They have formed within or are forecasted to move within 10 miles of MCBQ
- **Local Wind Warning**
  - Possible sustained wind or gusts of 20-30 knots
• Destructive Weather: Major Cyclone Storms (Hurricanes)
  • **Hurricane Condition IV**
    • The path of the storm has been adequately established and its trend indicates a possible threat of winds in excess of 64 knots within 72 hours
  • **Hurricane Condition III**
    • Winds in excess of 64 knots are anticipated within 48 hours
  • **Hurricane Condition II**
    • Winds in excess of 64 knots are expected within 24 hours
  • **Hurricane Condition I**
    • Winds in excess of 64 knots are expected within 12 hours

• Flood Warnings: RTA may be restricted
GENERAL SAFETY: WEATHER

• Destructive Weather: Snow and Ice Storms
  • Snow Accumulation:
    • ROUTINE: Up to 2 inches of snowfall expected
    • NON-ROUTINE: 2 – 6 inches of snowfall expected
    • BLIZZARD: Greater than 6 inches of snowfall within 24 hours
  • **Winter Storm/Blizzard Condition IV**
    • Solid or freezing precipitation is possible within 72 hours
  • **Winter Storm/Blizzard Condition III**
    • Solid precipitation is forecast within 48 hours. Accumulation is expected to be blizzard type or non-routine
  • **Winter Storm/Blizzard Condition II**
    • Storm is possible within 24 hours. The accumulation is expected to be blizzard type or non-routine
  • **Winter Storm/Blizzard Condition I**
    • Storm is possible within 12 hours. Accumulation is expected to be blizzard type or non-routine
MCB QUANTICO WEATHER CODES

CODE GREEN (Condition Normal) - The base is open on time. Employees are expected to report to work on time. Will not be announced on local radio and television stations.

CODE YELLOW (Open With Reasonable Delays) - The base is open on time. Reasonable delays for reporting to work are excused. Unscheduled leave may be authorized. Will be announced on local radio and television stations.

CODE BLUE (Open At Specified Time) - The base opens at a specified time. Unscheduled leave may be authorized. Will be announced on local radio and television stations.

CODE RED (Closed For Non-Essential Personnel) - Weather conditions are severe and the base is closed for normal operation, only emergency and essential personnel are expected to report to work. Will be announced on local radio and television stations.
GENERAL SAFETY: QUIET HOURS/AIR

• Quiet Hours extensions: **14 days in advance**
  • 2200-0600 Monday-Saturday
  • 2200-1200 Sunday
  • Loud Noise is anything greater 7.62mm
  • Training after 2200 requires a special request

• Airspace extensions: **14 days in advance**
  • Special Use Airspace is based on ordnance requested
  • Also applies to UAV Ops
  • Quantico Airspace is lowered at 2359 daily
  • Airspace is turned back over to the FAA
  • Short fuse extensions of airspace will not be considered
GENERAL SAFETY: CIVILIANS

• Civilian observation and participation in Military Training:

  • Requires authorization from the Installation Commander
    • Requests for civilian observation/participation must be signed by the Unit Commander
    • By-Direction and Acting signatures are acceptable
    • No one under 12 years old may participate in live-fire events
    • For Hunting and limited recreational activities, 8 years old is authorized

• Prohibitions on civilian participation: MCO 3570.1C
  • THROWING LIVE HAND GRENADES
  • USING DIVERSIONARY DEVICES, (I.E., FLASH BANGS/PYROTECHNICS)
  • PARTICIPATING IN LIVE-FIRE IN A SHOOTING HOUSE (CLOSE QUARTER BATTLE)
  • PARTICIPATING IN LIVE-FIRE ON MANEUVER RANGES WHILE UNITS ARE MANEUVERING
  • FAST ROPE/RAPPELLING FROM HELICOPTERS/SPIE RIGGING
  • PARACHUTING
  • OTHER ACTIVITIES, AS DETERMINED BY A COMMANDER THAT COULD CAUSE, OR REASONABLY BE PERCEIVED AS CAUSING, AN INCREASED SAFETY RISK
GENERAL SAFETY

QUESTIONS?

- REMINDER!
- During detailed safety brief always include:
  - Explain MEDEVAC process to all
  - Always cover the 4 Safety Rules
  - Cover all Range Safety AIN’s pertaining to ammunition
  - Do Not go around locked gates or barriers
  - Do Not pick up any suspected UXO
  - Do Not take Weapon, Ammunition, or Gear into Porta-Johns
  - Do Not throw Ammunition, Dunnage, or Trash in Porta-Johns
  - Do Not attempt to fight fires in dud contaminated impact areas

UNCLASSIFIED
• Laser use in the RTA:
  • **TREAT ALL LASERS AS YOU WOULD ANY DIRECT FIRE WEAPON**
  • Ensure complete familiarity with laser system operation and the associated hazards
  • Only remove the lens cap when ready to fire the laser down range. Remove the lens cap before applying power source
  • Do not leave the power source connected to the laser while not lasing
  • Laser systems that do not have lens caps or disconnects from power source must ensure that the down range area of the laser is clear, that the system is safe, and that the operator is not touching the trigger to the laser system

• Laser Range Safety Officer (LRSO)
  • Complete and pass the Laser Range Safety Computer Based Training module on MarineNet
Laser use in the RTA:

- Class 1, Class 2, and Class 3R lasers are authorized for use in all MCBQ RTA
- Use of all safety features that limit power output are mandatory on ranges not certified for Class 3B and higher lasers
- RSO will ensure use of applicable safety features per laser technical manuals
- Use of Class 3R and below lasers for force-on-force operations must be coordinated with the RSS
- DoD exempt, unfiltered Class 3B, and Class 4, laser use is restricted to Ranges 7, 8, 15 and GP44. Use of Class 3B and higher lasers are not authorized for force-on-force operations unless safety switch is engaged, reducing the Laser to Class I
- RSO may also assume duties as LRSO if so qualified
LASERS, **SESAMS**, & UAS

- Special Effects Small Arms Marking System (SESAMS) and Close Combat Mission Capability Kit (CCMCK)
- This section satisfies the requirement for SESAMS OIC/RSO Certification and applies to SESAMS, CCMCK, Simunitions, Paintball, and Airsoft use in the RTA

- Minimum safe engagement distances:
  - Safety zone: **150m**
  - Minimum safe engagement: **2m (9mm)/4m (5.56)**

- Prohibited Temperatures: **NO FORCE-ON-FORCE TRAINING**
  - 9mm DODICs (AA12) and (AA21) **below 38 degrees (F)**
  - 5.56mm DODICs (AB05) and (AB06) **below 18 degrees** or above 104 degrees (F)

- **PPE mandatory**
- **NO INTENTIONAL HEAD SHOTS**
- **SESAMS is considered live fire (NO live ammo)**
- **SESAMS ammo WILL NOT leave the RTA.**
- **NO AMMO IN THE CONTRACTOR WAREHOUSES!**
- **NO CLEANING OF KITS AT CONTRACTOR WAREHOUSE!**
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).

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.

A balaclava, towel, or neck scarf will be worn so as not to expose any portion of the neck and throat.

The FX 8000 Protective Throat Collar is also authorized.

Gloves and Groin protection is highly encouraged.

Ensure that the 150 m safety distance (zone) remains clear of unprotected personnel.
LASERS, **SESAMS**, & UAS

- During SESAMS firing:
  - Ensure qualified medical personnel/appropriate medical equipment on hand during all SESAMS training *(same as live-fire)*.
  - Ensure all personnel wear approved PPE during all SESAMS training.
  - Ensure minimum safe engagement distance of 2 m (6.5 ft) for 9mm SESAMS and 4 m (13 ft) for 5.56mm is established and maintained.

- After SESAMS firing:
  - **CLEAR ALL WEAPONS, MAGAZINES, AND EQUIPMENT OF SESAMS AMMO!**
  - Ensure all weapons are CLEARED, CLEANED, and returned to their operational state prior to turn-in. Cleaning WILL NOT be conducted at the warehouse.
  - Account for and return all unused ammunition to the appropriate location in accordance with current applicable directives
  - **NOTE: ANY AMMO FOUND IN THE WAREHOUSE AT TURN-IN WILL RESULT IN IMMEDIATE SUSPENSION OF OIC/RSO CERTIFICATION.**
Unmanned Aerial Systems (UAS) Operations

NOTE: Regulations, Requirements, and Restrictions change almost daily.
CONTACT RANGE CONTROL 30 DAYS IN ADVANCE
LASERS, SESAMS, & UAS

- **UAS Groups:** Only Group 1 and 2 can be flown here
- **UAS Types:**
  - Naval Waiver Board (NWB)
  - Office of Sec. of Defense (OSD)
    - Government Off The Shelf (GOTS)
    - Program Of Record (POR)
    - Non-Program Of Record (NPOR)
    - Commercial Off The Shelf (COTS)

-NWB and OSD approved UAS may be operated in restricted AIR SPACE when scheduled and approved

**Hobbyist UAS operations are not authorized in restricted air space**

-ALL commercial UAS operations MUST be coordinated and approved by the RCO and Installation Commander
• Privately Owned UAS:
  • Hobbyist: NOT authorized for operations in restricted airspace
  • Commercial: Owner must have contract or formal agreement with Government agency and must be approved by the RCO and Installation Commander prior to flying in the restricted airspace
  • Approved by the NWB or OSD

- Reference (a): 14 CFR Part 101, subpart E; Special Rule for Model Aircraft
- Reference (b): 14 CFR Part 107; Small Unmanned Aircraft Systems
- May require letter from Installation Commander to request unlocking of geo-fence
### LASERS, SESAMS, & UAS

<table>
<thead>
<tr>
<th>UAV OR UAS OPERATIONS:</th>
<th>RMB Airspace Manager requires detailed information in order to safely manage airspace aboard MCBQ and surrounding communities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name of system.</td>
<td></td>
</tr>
<tr>
<td>2. Is the system COTS, GOTS, POR, or RDT&amp;E?</td>
<td></td>
</tr>
<tr>
<td>3. Provide DoD waiver for COTS, GOTS systems.</td>
<td></td>
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<tr>
<td>4. Laser use with system. (Onboard or ground based)</td>
<td></td>
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<tr>
<td>5. Power source.</td>
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<tr>
<td>6. Photography or image capture.</td>
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<tr>
<td>7. Provide AGL or MSL.</td>
<td>Need the minimum to accomplish mission; don’t ballpark.</td>
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<tr>
<td>8. Provide launch and recovery locations.</td>
<td></td>
</tr>
<tr>
<td>9. List any specific facilities for overflight.</td>
<td></td>
</tr>
<tr>
<td>10. Provide 4 corner grid coordinates of ROZ.</td>
<td>(1)</td>
</tr>
<tr>
<td>11. Daily schedule of actual flight windows.</td>
<td>e.g. 13MAR19</td>
</tr>
<tr>
<td>12. Submit MCBQ request for temporary frequency assignments and FCC part 15 to Base G-6.</td>
<td>Units submitting a request are responsible for following up on their requests prior to the training start date. Do not assume the request has been approved once it has been submitted, that is only the first step of the process. Processing time for NEW frequency authorizations is 45 to 90 days. Standard tactical communication equipment processed within 3-5 days. Do close in coordination with POC on form.</td>
</tr>
<tr>
<td>13. Provide approved G-6 temporary frequency assignment.</td>
<td>Forward G-6 approval email to RMB or TSC. RFMSS request reservation status will be updated based on G-6 permissions.</td>
</tr>
<tr>
<td>14. Have on hand required documentation and certificates.</td>
<td>Air worthiness statement, Operator training certificates, Unit UAS/UAV SOP to include lost link procedures. RMB may request documents for review.</td>
</tr>
</tbody>
</table>

• **UAS Scheduling:**
  • In RFMSS no less than thirty days prior to execution
  • MUST include:
    • Type of UAV
    • **Frequency approval from the MCB Quantico Spectrum Manager for each specific type of UAS being flown**
      • Required for each specific type of UAS flown
      • Not a blanket approval for the platform or event
    • Airspace: MUST provide max altitude (AGL) for flight operations

• **Scheme of maneuver:**
  • Select one of 24 pre-approved ROZ’s in RFMSS
  • Flight box (four corners) marked by grid coordinates
  • Point of origin marked by grid coordinate with radius of flight
  • Launch and Recovery Site (LRS) for the Ground Control Station (GCS)
  • Lost link procedures MUST be noted, checked, and functional
• OIC Requirements:
  • Unit Commanders shall designate knowledgeable and qualified OIC/RSO for UAS/UAV on their CO’s Certification Letter
    • OIC will ensure UAV operator is qualified IAW references
  • OIC for independent UAS operations shall be a qualified OIC/RSO AND qualified UAS system operator E-5 or above
  • Contact Range Control (5) minutes prior to launch for their air brief
  • Upon completion, OIC will notify FDO with number of flights conducted
  • Any time a UAS is lost during flight the OIC will notify Range Control immediately with last known:
    • Grid coordinates
    • Altitude and approximate speed
    • Principle direction of flight

REstrictions:
*Manned and unmanned aircraft will not occupy the same airspace without prior approval
**UAS will not fly over any live fire range without prior approval
***MUST remain minimum 500 meters within the RTA boundary and/or Restricted Airspace
• Hobbyist use of UAS aboard MCB Quantico & RTA: MCBQ Policy Letter 4-17 w/ch 1

• Micro Drones (.5lb and less) are authorized in the Military Housing areas with privacy restrictions
• UAS (Drones 55lb and less) are authorized in LZ Thrush but may not interfere with Military training
• Contact the Fire Desk prior to using LZ Thrush
• Some UAS (DJI products) may not fly due to Geo-Fencing

CONTACT RANGE CONTROL IF THERE ARE ANY QUESTIONS OR AN ISSUE NOT COVERED HERE TODAY!
LASERS, SESAMS, & UAS

http://knowbeforeyoufly.org/for-public-entities/

Questions?
NOTE: ALL TESTS, CERTIFICATES, AND OTHER DOCUMENTS WILL BE COLLECTED AT THE END

Tests will be graded in place when all are finished
Print Information Clearly
No Talking Please
Clearly CIRCLE Your Answer
Use Your Resources
If You Have A Question, Please Raise Your Hand
When Finished: Turn Test Over, Quiet Please
• Personally Owned Vehicles: Pg 1-33 & 6-2
• Speed Limits: Pg 5-10 (MPH:10/35/45)
• Recreational Vehicles (Off-Roading): Pg 1-33
• Hunting: Pg 1-31, 3-5 & 3-13
• Fishing: Pg 1-31, 3-5, & 3-13
• Personally Owned Weapons: Pg 1-33 & (MCBO 8000.1)
• OIC Qualifications: RMB Policy Letter 1-16
• Must be a commissioned officer, warrant officer, staff non-commissioned officer or civilian as outlined in MCO 3570.1C
• Must have successfully completed the MarineNet Range Safety Course (Basic) - distance learning (course #Cl060120CA)
• Must be certified (knowledgeable) to operate the weapon systems for which they are responsible. For weapon systems equipped with or dependent upon lasers, the OIC will be knowledgeable of associated laser hazards and proper employment. The OIC is responsible and accountable for the conduct of the activity and the adherence to governing regulations and guidance. The OIC must be able to fully influence the conduct of the event. For aviation weapon systems, the OIC must be weapons system knowledgeable.
• Must have satisfactorily completed the MCBQ Range Safety Certification Program.
OIC DUTIES

• Assume responsibility for the RTA prior to occupying by signing for the scheduled RTA at RMB (WTBn S-3 for WTBN ranges) no earlier than 24 hours prior to occupying the scheduled RTA. For any RTA scheduled on a weekend, the RTA must be signed out prior to close of business on Friday.

• Be responsible for the check-in/checkout process for all RTAs

• Ensures the overall safe conduct of training and the proper use of the training complex

• Receives range safety briefing from the installation range control organization on use of the RTAs

• Ensures the RSO is physically present and executing the duties of the RSO during the conduct of the training exercise.

• Sign for all ammunition and explosives on the appropriate ASP issue document and enter the quantity received by DODIC, document number, and lot number on the expenditure report, ensuring the quantity matches the appropriate document
OIC DUTIES

• Responsible for ammunition accountability. The OIC is responsible for personnel shakedown and police call
• The OIC shall inventory and sign for ammunition and explosives
• The OIC ensures all ammunition malfunctions and accidents are reported to Range Control
• Ensures the RSO has receipt of final clearance to fire from Range Control
• Ensures dual means of communications are established and maintained with the RCF allowing instant communication between the actual OIC/RSO and the RCF
• WTBn ranges will maintain continuous direct communication with the RCF. Radios are provided by WTBn S-3
• WTBn ranges will maintain direct communication with WTBn S-3. WTBn S-3 will maintain continuous direct communication with the RCF. The direct communication with WTBn S-3 satisfies the dual communication requirement with the RCF
OIC DUTIES

- Ensures ammunition and explosives are properly handled, transported, stored, and accounted for within the training complex from the time of receipt to the time of expenditure or turn in.
- Reports the number and type of munitions expended by Department Of Defense Identification Code (DODIC) to Range Control upon conclusion of training event.
- Ensures confirmation briefs for firing and/or maneuver exercises are coordinated with Range Control.
- Ensures coordination and approval has been granted from the Range Scheduling Office for civilian personnel entering the training site.
- Briefs the RSO on the duties to be performed in support of the training event. Requires the RSO to brief the OIC on the safety of the facility and unit, and the preparedness to commence live-fire operations.
OIC DUTIES

• Implements ORM for all phases of the training event. The OIC shall have in their possession, at all times during the conduct of training, a detailed ORM worksheet signed by the unit commander covering all phases of training

• Is physically present and capable of influencing the conduct of training (live-fire or non-live-fire) during the entire event

• The OIC of WTBn ranges will be physically present on the WTBn range complex during all live-fire training

• The range complex consists of the Weapons Training Battalion area to include Ranges 1-4, Requalification and Competition Pistol Ranges, the Small Arms Tactical (SAT) Range, the shotgun range, and Range 305

• The OIC must be physically present on the range during live fire with foreign weapons and live fire on Range 1
• Ensures all personnel wear the appropriate Personal Protective Equipment (PPE), which at a minimum includes eye protection and hearing protection during all live-fire events. All military and civilian personnel conducting live-fire training will wear the appropriate PPE equivalent for their services or agency.

• Ensures the RSO is qualified with the weapon(s) or weapon system(s) being used.

• Reports all information to Range Control from the Live-Fire Brief provided in the Range Standard Operating Procedures and all other information directed by Range Control.

• In the event of a MEDEVAC/casualty evacuation, the OIC or an appointed representative will suspend fire and follow procedures as outlined in paragraph 1024 of this Chapter.
OIC DUTIES

• Ensures the environmental requirements in Chapter 2 of this Order have been met
• Additional OIC responsibilities prior to, during, and after firing can be found in Appendix F of MCBO 3570.1A
• Must be aware of any conflicts that exist between their scheduled RTA and all adjacent RTAs
• Ensure no misconduct occurs in the assigned RTA
• Request permission to enter live fire status from the RCF
• Orders immediate "cease fire" and notifies the RCF when ordnance impacts outside of the impact areas
• Must order an immediate “cease fire” and take appropriate corrective action when any unsafe act is observed. Report all violations to the RCF immediately
RSO QUALIFICATIONS

• The RSO must be a commissioned officer, warrant officer, staff noncommissioned officer or civilian. Civilian contractors may act as RSOs when approved by the installation commander/senior commander. Grade requirements will be in accordance with MCO 3570.1C

• Personnel assigned as RSO will have no other duties during that period of training. Assistant Range Safety Officers (ARSOs) may be appointed as RSOs as required

• Must have successfully completed the MarineNet Range Safety Course (Basic)

• Must be qualified on the weapon systems for which they are responsible. For weapon systems equipped with or dependent upon lasers, the RSO will be certified on the laser system and proper employment. The RSO bears responsibility and accountability for the safety of the activity and the adherence to governing regulations and guidance. As such, the RSO must be able to fully observe the conduct of the event

• Must have satisfactorily completed the MCBQ Range Safety Certification Program
RSO DUTIES

- The RSO is responsible for the enforcement of applicable safety regulations contained in this Order, reference (a), and all applicable Marine Corps Warfighting Publications (MCWPs), Marine Corps Reference Publications (MCRPs), FMs, Fleet Marine Force Manuals (FMFMs), TMs, and ordnance publications.
- Receives range safety briefing from the installation range control organization on use of the RTAs.
- Ensures the range flag is raised before commencing live-fire and lowered after informing Range Control of the intent to cease live-fire. During times of darkness or low lighting, a red flashing light shall be utilized in place of the flag.
- Determines when it is safe to fire in accordance with applicable regulations and this Order.
RSO DUTIES

• Ensures proper supervision of personnel performing misfire, hang-fire, and cook-off procedures
• Ensures control of target areas to prohibit entry by unauthorized personnel
• Ensures that a Field Medical Technician HM/8404 Corpsman/Army or Air Force medic and dedicated emergency vehicle with driver are present on the range
• Fully familiar with MEDEVAC/CASEVAC procedures contained in paragraph 1024 of MCBO 3570.1A. In the event of an emergency situation/accident, the RSO will notify Range Control
The RSO ensures the following before granting clearance to fire:

- Proper coordination, instruction, and positioning of road guards assigned throughout the RTAs. At a minimum, road guards shall be posted in pairs and shall:
  - Have and maintain positive two-way communication with the OIC and RSO
  - Have sufficient water if separated from other Marines
  - Restrict access to RTAs by unauthorized personnel
  - Clear the access of personnel into the RTAs with the OIC
- Proper positioning of weapons and personnel
- Use of authorized ammunition and explosives to include proper charge, fuse, and fuse settings in conjunction with the current fire condition
- Verify the firing settings and ensure the weapons systems are within the prescribed safety limits
- Ensures the SDZ is clear of all unauthorized personnel
- Ensure personnel wear PPE
- Permission is received from Range Control to commence training and live-fire operations
**RSO DUTIES**

- Maintains positive two-way communication with Range Control at all times. If communication is lost, the RSO will stop training and/or order a check-fire until communication is re-established with Range Control.

- Conducts radio checks with Range Control every 30 minutes while in a “Hot” status. When in a “Cold”, check-fire or occupied status, the OIC/RSO will send a situation report to Range Control every 3 hours on the hour and continue to monitor the safety network. The OIC/RSO will provide the final radio check when displacing. Training units will establish their own internal communications network for all administrative needs (road guards, etc.). Range Control will not provide radios or communication networks for internal communication needs.

- Orders immediate cease-fire or check-fire when any unsafe condition occurs.

- **Physically present during all live-fire training**
RSO DUTIES

• Verify, upon the completion of firing or firing order, to the OIC that all weapons and weapons systems are clear and safe before allowing the removal of weapons from the firing area
• Verify to the OIC, upon the completion of the RTA police call that all personnel have been checked and are clear of all ammunition and ordnance before they secure from the area
• Ensures a qualified, school-trained rappel/Helicopter Rope Suspension Training (HRST) master (or other DoD service equivalent), per reference (j) is present at all times during rappel/HRST operations
• Ensures a certified assault climber, per reference (d) is present at all times during training for assault-climbing events
• During laser operations the RSO will:
• Ensure unit personnel employing lasers receive thorough safety briefs, to include explanations of specific laser-related hazards, safety equipment, detailed range safety procedures, and comply with procedures outlined in MCO 3570.1C
• Know and observe horizontal and vertical safety limits of the laser range
• Ensure unit SOPs comply with range safety procedures and MCO 3570.1C and follow unit SOPs for laser operations and training exercises
• Cease laser operations immediately if positive control of the laser beam is lost
• Ensures a qualified Laser Range Safety Officer (LRSO) is present, per MCO 3570.1C. The RSO may serve as both, if qualified
IMPORTANT CONTACTS

• Address: 24157 Montezuma Ave. Quantico, VA. 22134

• Hours of Operation:
  • Range Control Facility (RCF) 24/7 (Closed Federal Holidays)
  • Scheduling Mon-Fri: 0700-1600

• Scheduling Office (703) 784-5502/5507

• Range Control Facility (RCF) (703) 784-5321/5322

• Training Support Center (TSC) (703) 784-4492/5518

• Points of Contact:
  • Range Control Officer (RCO) (703) 784-5366
  • Range Safety Specialist (RSS) (703) 432-6552
  • RCF Supervisor (703) 784-6722
  • RFMSS Functional Administrator (703) 432-6811
  • RFMSS/Airspace Specialist (703) 784-5370
**UNCLASSIFIED**

**KNOW YOUR EVENT**

UNIT:

OIC/RSO:

CELL PHONE NUMBER:

RTA:

EVENT:

DATE/TIME OUT: 11/13/2019 2:17:52 PM

OCCUPY DATE/TIME: 

END DATE/TIME: 

RMB SIGN OUT: SGT MONCLOVA

DATE/TIME IN: 

RMB SIGN IN: 

<GEAR BELOW HAS BEEN ISSUED>

**SERVICABLE: YES NO**

SOP:

RED RANGE FLAG: QTY

MISC GEAR:

KEYS:

EXTRA BATTERY OR CHARGER: BATTERY QTY: CHARGER

* UNIT IS REQUIRED TO POSSESS A COPY OF THE MCO 3570.1A (DIGITAL/PAPER) AT ALL TIMES WHEN OCCUPYING ANY MCOQ RANGES, TRAINING AREAS, FACILITIES, OR LIE:US.

** ALL ITEMS ABOVE MUST BE ACCOUNTED FOR AND VerIFIED SERVICABLE UPON ISSUE.

*** ALL ITEMS ABOVE MUST BE ACCOUNTED FOR AND VERIFIED SERVICABLE BEFORE RANGE OR FACILITY CAN BE TURNED IN.

OIC/RSO SIGNATURE CHECK OUT 

OIC/RSO SIGNATURE CHECK IN 

***POST INSPECTION REQUIRED EXCEPT FOR ROADS/TA’S RANGE/GEAR SIGN IN (PATROLMAN)

PATROLMAN WHO CONDUCTED POST (PRINT): 

DATE/TIME IN 

PATROLMAN INITIAL ONE-

☐ PATROLMAN VERIFIED SERVICABILITY AND COLLECTED ALL GEAR ( )

☐ UNIT KEPT ALL GEAR; WILL VERIFY SERVICABILITY AT TURN IN ( )

☐ UNIT DID NOT RETURN ALL ISSUED GEAR; TIME: ___ DATE: ___( )
LIVE FIRE BRIEF

OIC/RSO: Read Items 1-10 below. Have names, DODICS, secondary comm number, and number of personnel training ready when making request to "Occupy": When requesting a "HOLD" time, read the hot brief below to verbally verify you understand and will comply by stating:
"Range Control this is Range___, I (Rank/Name) am the (OIC or RSO). I certify that:
-All personnel have received a detailed Safety Brief.
-Adequate Medical Coverage is present.
-The Safety Vehicle is present.
-The Range Flag is posted.
-Left/Right Lateral Limit Markers are identified/visible per Range SOP.
-All Gates and Barriers are secured or manned and will not be bypassed.
-I have read and understand the Range Safety Order, Range Regulations, SOP for this range, items 1-10 of this brief, and will comply."

(1) The OIC/RSO will immediately contact Range Control and request a pre-inspection if the range or training area is found in a poor state of police or will accept the condition and responsibility to police.
(2) The OIC/RSO MUST maintain (in their possession) two forms of communication with Range Control AT ALL TIMES. Primary/Secondary: Issued Radio/Cell Phone or land line. The OIC/RSO will make radio checks every 30 min for live fire/3 hrs for non-live fire events on the hour/half-hour.
(3) The OIC/RSO will cease fire/training immediately if communication is lost. If OIC/RSO fails to make radio checks the unit will be placed into a check-fire until communication is restored.
(4) OIC/RSO must ensure all Blank and Live ammunition is: Stored and issued separately, NEVER used at the same time, blanks fired before live rounds never after, ensure every participant, weapon, magazines, etc are cleared/thoroughly checked before issuing live rounds or departing.
(5) OIC/RSO will IMMEDIATELY contact Range Control and await further instructions as soon as a fire starts. NEVER enter dud impact area.
(6) OIC/RSO will immediately cease fire and contact Range Control if any aircraft (to include UAV/UAS) enters the SDZ for that range.
(7) MEDEVAC: Regardless of severity, the OIC/RSO will immediately contact Range Control to initiate emergency procedures.
(8) Civilian participation requires prior approval from Commander, MCINCR, MCB Quantico. OIC/RSO will ensure the Hold Harmless/Waivers of Liability are signed, on-hand, and notify Range Control when complete.
(9) Completion of training: OIC/RSO will contact Range Control to request Post Inspection, "COLD" Time, and pass "End of Training" report (Ammo expended by DODIC, number personnel trained/vehicles in support.
(10) Marine Corps OIC/RSO: Range Safety Related AIN's have been checked and read as part of detailed safety brief as required.

I (print) _____, CERTIFY I UNDERSTAND ANY/ALL CONFLICTS, RESTRICTIONS, HAVE READ AND WILL COMPLY WITH: THE RANGE SAFETY ORDER, RANGE REGULATIONS, RANGE SOP, AND THE ITEMS ABOVE.

(SIGNATURE)______ (DATE)______
22. Units that are training with contractor support (i.e., automated targets, PITS targets, battlefield effects simulators, etc.) that place themselves voluntary into check fire for 2 hours during the approved support operational hours will forfeit all support for the day.

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

23. There is no downrange movement on Range 15A (Treeline) when Range 8A is firing 5.56, 7.62, 7.62 Special Ball and SMAW.

24. There is no downrange movement on Range 15 (Dudded Impact Area) when Range 8A is firing 5.56, 7.62, 7.62 Special Ball, SMAW, AT-4 Trainer or M72A7 LAAW.

25. Range 15 Cannot be occupied when Range 8A is firing AT-4 84mm HEAT.

26. Range 8A cannot be occupied when Range 15A is conducting live-fire maneuver/envelopment.

27. 81mm mortars can be fired from Range 8A into the Range 7 high hazard impact area.
The term "non-lethal" does not mean zero mortality or nonpermanent damage. Fatal injuries can occur if munitions are employed at a distance that is less than the determined minimum safe engagement range.

For the Marine Corps, SESAMS/CCMCK is the exception to the use of NLW in force-on-force scenarios.

For the Marine Corps, if force-on-force training with NLW is conducted under an approved deviation, Marines may be in the NLW danger zone but must remain outside the minimum target engagement distance at all times.

For the Army, Soldiers participating in force-on-force training with NLW may be in the NLW SDZ, but must remain outside the minimum engagement distance at all times.

Head shots with NLW are not authorized. This includes SESAMS.
LASERS, **SESAMS**, & sUAS

- Ensure that only Marine Corps procured adapter kits and marking cartridges are used.
- Force-on-force training with SESAMS 9mm DODICs (AA12) and (AA21) is prohibited when temperatures are below 38 degrees (F).
- Training with SESAMS 5.56mm DODICs (AB05) and (AB06) is prohibited when temperatures are below 18 degrees or above 104 degrees (F).
- Account for and remove all live ammunition from the designated training area prior to commencement of SESAMS training exercises.
- Instruct all participants that **head shots are not authorized**.
- Ensure that all personnel within the 150 m safety distance (zone) wear PPE Level 0 protective equipment and clothing.
- The use of groin protection and gloves is highly encouraged.