



Marine Corps Base Quantico



Range Officer-in-Charge / Range Safety Officer Certification Course

v 10.4

Updated Dec 06, 2023

Installation Range Safety Officer
Range Management Branch

UNCLASSIFIED



PURPOSE & SCHEDULE




- PURPOSE: This brief will meet the requirements for the Installation Level Range Safety OIC and RSO and the Special Effects Small Arms Marking Systems (SESAMS) and Steel Reactive Targets (SRT) OIC/RSO training.
- Welcome/Introduction (5 min)
- Scheduling Process (15 min)
- Range Safety (~90 min)
- Knowledge Check (~30 min)
- Slide Count:
 - Brief: 97
 - Intro, transition, photos, & POC: 16
 - Information: 81
 - Back-up/reference: 19
 - Total: 116



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 3570.1B) or Safety Of Use Message (SOUM)



AGENDA



- 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
- Range Safety
 - Regulations and references
 - OIC/RSO Certifications
 - Orders and SOP's
 - Communications: Hot Brief, Radio Checks, and Post Inspections



AGENDA



- Range Safety (continued)
 - MEDEVAC and Emergency Action Plan Procedures
 - Conflicts and restrictions
 - UXO
 - Fire Danger Class and Weather
- Laser Use
- Steel Reactive Target Use
- Special Effects Small Arms Marking System/Close Combat Mission Capability Kit (SESAMS/CCMCK)
- Unmanned Aerial Systems (UAS)
- Post Inspection Process and Checklist



Location



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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



Home > Offices & Staff > G-3 Operations > Range Management Branch

G-3 RANGE MANAGEMENT BRANCH

OFFICIAL U.S. MARINE CORPS WEBSITE
Crossroads of the Marine Corps

MCB QUANTICO OIC/RSO DISTANCE LEARNING

DoD CAC HOLDERS: THE MCB QUANTICO OIC/RSO DISTANCE LEARNING COURSE

NON-DoD CAC HOLDERS: THE SCHEDULE FOR THE REDUX IN-PERSON BRIEFING

RANGES & TRAINING AREAS

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.

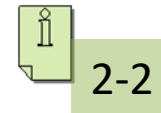
- NOISE ADVISORIES
- ABOUT US
- TRAINING ON QUANTICO
- EXPLORE THE RANGES
- OIC/RSO QUALIFICATION
- REFERENCES/RESOURCES



SCHEDULING



- Future Operations: Scheduling/Safety: 703-784-5502/5507/6090
 - Scheduling office handles all new requests and modifications submitted in RFMSS.
- Current Operations: Range Control (Fire Desk): 703-784-5321/5322
 - The Fire Desk handles all adjustments to approved training, all “Same Day” requests.
- **Scheduling Priority and Priority of use apply 60 days or more from start of training.**
- Scheduling Timelines:
 - RTA requests submitted 30-59 days from the start of training are reviewed and approved on a first-come, first-served basis.
 - Training requests are to be submitted in RFMSS (NLT) 30 days prior to the event.
 - Requests submitted **less than** 30 days from the start of training are “Short Fused” and reviewed and approved on a first-come, first-served basis.
 - These Short-Fused” requests require the unit operations or training officer to contact RMB/TSC with justification for the short fuse request and to conduct additional coordination efforts.
 - Event must not require a waiver or deviation from this Order, the SOP, or any other regulation.
 - Event must not involve any non-standard weapons or ammunition.
 - Event must not interfere with any already-approved RTA requests or require changes to scheduled airspace.
 - Hunting Season causes additional conflicts.





SCHEDULING



- All requests will be submitted in the Range Facility Management Support System (RFMSS) and **MUST** include:
 - Accurate weapon/ammo information that matches the event
 - Deliberate Risk Assessment on file with the Installation Range Safety Officer
 - Include a brief but concise Scheme of Maneuver (SOM) in the communications tab (5 W's) or a more complete SOM on file
 - List **VALID AND CERTIFIED** OIC/RSO for the event
 - Accurate phone number/email for the Event Coordinator, POC, and OIC/RSO.
 - Requests are assigned a 6 digit Request Control Number Identifier (RCNI)
- **NO BLANKET SCHEDULING OR PLACE HOLDERS**
 - Incomplete requests will not be processed and precedence lost
- Read-Only RFMSS Accounts: **REQUIRED FOR ALL OIC'S AND RSO'S**
 - MARINE CORPS USERS: <https://rfmss.quantico.usmc.mil/Quantico/Pages/Login.aspx>
 - CAC USERS: <https://rfmssbackup.belvoir.army.mil/quantico/pages/login.aspx>
 - NON-CAC USERS: <https://rfmss.belvoir.army.mil/quantico/pages/login.aspx>
 - **Functional Administrator: (703) 432-6611**



2-1/2-6



SCHEDULING



- OIC/RSO: RFMSS Read-Only Accounts are now **required**.
- First opportunity to view safety conflicts.
- Ensure what you think you are doing and what is scheduled are the same thing.
- Ensure all Support is correct and approved.

Conflict Type	RCNI	Facility	Event	Unit	Start Date/Time	End Date/Time	Status	Sub Status	Classification	Description
SCHEDULING	191551	WTBN IRONMAN	LIVE FIRE 7.62 AND BELOW*	WTBN FMTC	02/03/2022 07:30 L	02/03/2022 12:00 L	RES		SCHEDULING	
SAFETY	192259	WTBN SAT	LIVE FIRE 5.56 AND BELOW*	SECURITY BN SRT	02/02/2022 06:00 L	02/02/2022 16:00 L	RES		FAC-EVENT	SCHEDULING WTBN SAT FOR LIVE FIRE 5.56 AND BELOW (FROM ALL BAYS) RESTRICTS DOWNRANGE MVT ON IRONMAN. USE OF BAYS 1-3 ALLOW FULL USE OF MAIN FIRING LINE OF IRONMAN. USE OF BAY 4 WILL CLOSE LANE 1-2 ON IRONMAN
SAFETY	192477	WTBN SAT	LIVE FIRE PISTOL*	SECURITY BN	02/01/2022 07:00 L	02/02/2022 17:00 L	RES		FAC-EVENT	SCHEDULING WTBN SAT FOR LIVE FIRE PISTOL (FROM ALL BAYS) RESTRICTS DOWNRANGE MVT ON IRONMAN. USE OF BAYS 1-3 ALLOW FULL USE OF MAIN FIRING LINE OF IRONMAN. USE OF BAY 4 WILL CLOSE LANE 1-2 ON IRONMAN.



SCHEDULING



- **PITFALLS: Inspect what you Expect!**
 - **Scheduled TA does not automatically include facilities within that TA**
 - **Accuracy of Event, Weapons/Ammo, Hot/Cold Times, Continuous/Non-Continuous, and Post Inspection**
 - **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
 - OIC/RSO on the request are no longer valid or certs not submitted
 - Unresolved conflicts and Co-Use
 - Weapons/Ammo do not match event
 - Frequency approval for UAV/UAS
 - Civilian participation/observation
 - Non-standard weapons/ammo
 - Recreational firing



SCHEDULING



INSPECT WHAT YOU EXPECT:

- READ ONLY RFMSS ACCOUNT: REQUIRED
- CALL SCHEDULING
- CONTACT THE TRAINING SUPPORT CENTER

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RTA CHECK-OUT PROCEDURES



RANGE SAFETY IS OPEN 0700-1600 MON-FRI FOR CHECKOUT



3-1

- 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 with Range Safety Specialist (RSS) or Installation Range Safety Officer (IRSO)
 - Sign for radios, keys, flags, Range SOP, etc
- OIC/RSO must have in their possession:
 - **Copy of the Quantico Range Regulations (MCBO 3570.1B)**
 - **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 S-3/OOD will confirm training info and contact the Fire Desk to confirm the OIC/RSO are certified and in RFMSS



RTA CHECK-OUT PROCEDURES



RANGE SAFETY IS OPEN 0700-1600 MON-FRI FOR CHECKOUT

- 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

START DATE/TIME
END DATE TIME

SERVICEABILITY/SIGN

UNIT	OIC / RSO	EVENT	CELL PHONE#
RTA			
START DATE	Click or tap to enter a date.		END DATE Click or tap to enter a date.
GEAR ISSUE / SCHEDULING		TURN-IN / POST-INSPECTION	
RADIO (N/W)		← VERIFIED	YES NO
EXTRA BATTERY	① ② ③	← VERIFIED	YES NO
KEY(S)		← VERIFIED	YES NO
RANGE FLAG	① NONE	← VERIFIED	YES NO
CHARGER	① ② ③ NONE	← VERIFIED	YES NO
SERVICEABLE	YES NO	← VERIFIED	YES NO
I certify I understand all conflicts, restrictions, have read and will comply with the Range Safety Order, Range Regs, Range SOP and items 1-10.			
OIC/RSO SIGN	X	UNIT KEPT GEAR	YES NO
DATE OUT	X	INSPECTION DATE	
		OIC/RSO SIGN	X
		PATROLMAN PRINT	X
		SCHEDULER IN PRINT	X
		RMB INIT	X

ALL ITEMS ABOVE MUST BE ACCOUNTED FOR AND VERIFIED AS SERVICEABLE DURING GEAR ISSUE AND TURN-IN
POST INSPECTIONS ARE REQUIRED FOR ALL RTA FACILITIES, EXCEPT FOR ROADS

OCCUPY BRIEF INFO → WHEN REQUESTING TO OCCUPY YOUR RANGE/RTA, HAVE THE BELOW INFORMATION PREPARED:
OIC/RSO NAME(S) • CELL PHONE # • DODIC(S) TO BE FIRED • NUMBER OF PERSONNEL

BELOW REQUIREMENTS WILL BE FOLLOWED AT ALL TIMES DURING OCCUPATION OF THE MCBQ RTA ("ITEMS 1-10")

- ① OIC/RSO will immediately contact Range Control and request a pre-inspection if the RTA is found in a poor state of police or will accept the condition/responsibility to police.
- ② OIC/RSO MUST maintain (in their possession) two forms of communication with Range Control AT ALL TIMES. The OIC/RSO will conduct radio checks every 30min when HOT and every 3hrs when COLD, on the hour/half-hour.
- ③ OIC/RSO will cease 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/Issued separately, NEVER used at the same time, blanks fired before live rounds-never after, ensure every participant, weapon, magazine, etc are cleared/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.
- ⑥ MEDEVAC Regardless of severity, OIC/RSO will immediately contact Range Control to initiate MEDEVAC.
- ⑦ 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.
- ⑧ Marine Corps OIC/RSO Range Safety Related AIN's have been checked and read as part of detailed safety brief as required.
- ⑨ OIC/RSO will immediately cease fire and contact Range Control if any aircraft (to include UAS) enters the SDZ.
- ⑩ Completion of training OIC/RSO will contact Range Control to request Post Inspection, "COLD" time, and pass "End of Training" report (Blank/Pyro DODICs expended, number personnel trained/vehicles in support).

HOT BRIEF INFO → READ THE BELOW WHEN REQUESTING HOT BRIEF OVER RADIO:

- 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/understand the Range Safety Order, Range Regs, SOP for this range, items 1-10 of this brief, and will comply.

SCHEDULING 703-784-5502/5507
FIRE DESK 703-784-5321/5322

TRAINING SUPPORT CENTER (TSC)
703-432-7026/7029/7031/7969

SUPPORT WAREHOUSE
703-630-0656



RTA CHECK-OUT PROCEDURES



RANGE SAFETY IS OPEN 0700-1600 MON-FRI FOR CHECKOUT

- OIC/RSO will READ and sign the **LIVE FIRE BRIEF**
- OIC/RSO will STATE verbatim lines in bold:
- Pay close attention to:
 - Items 1-10 (Pre-Inspection)
 - Medevac Procedure
 - Hot Brief (When Requested)
- 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) Mixing Blank & Live Ammo prohibition
- New Item: (10) MAKE website for AIN's

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 FIRE DESK 703-784-5321/5322

TRAINING SUPPORT CENTER (TSC)
 703-432-7026/7029/7031/7969

SUPPORT WAREHOUSE
 703-630-0656



RTA CHECK-OUT PROCEDURES



RANGE SAFETY IS OPEN 0700-1600 MON-FRI FOR CHECKOUT

- 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: CALL THE FIRE DESK ASAP!
 - **2 hours late without contact is the general line for cancel**
 - **Fire Desk may cancel training at any point past scheduled start time**
 - **2 hours without firing: Contractor support departs**
 - **MITIGATE ISSUES, CALL THE FIRE DESK: (703) 784-5321**
 - Range Safety is **NOT** open for checkout on weekends and holidays!
 - Improperly scheduled/conducted Post-Inspection
 - Failure to conduct a Pre-Inspection and report discrepancies



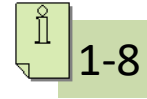
RTA CHECK-OUT PROCEDURES



• **QUESTIONS?**



RANGE SAFETY: OIC/RSO



- **Range Officer In Charge ([OIC](#))**
 - Successfully complete USMC Range Safety Course (MarineNet)
 - Successfully complete the Quantico OIC/RSO course
 - Appointed by CO: 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 (MarineNet)
 - Successfully complete the Quantico OIC/RSO course
 - Appointed by CO: 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 3570.1B
 - Have read and understand the Range SOP
 - Each Range, Training Area, LZ, 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



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 Installation Range Safety Officer**
 - **May result in suspension of OIC/RSO certifications**



RANGE SAFETY: OIC/RSO



- **Non-Live Fire OIC Requirements:**
 - **MCBO 3570.1B:**
 - Defined as training that does not include use of ordnance
 - Blanks, SESAMS (SIM/UTM), and pyrotechnics are ordnance (Live Fire)
 - 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 still apply
 - **Non-Live Fire training includes:**
 - Stand alone UAV operations
 - Unit Hikes/PT
 - Land Navigation
 - Patrolling
 - Other non-kinetic training



RANGE SAFETY: OIC/RSO



- **OIC and RSO PITFALLS:**
 - **Proper Medevac Procedures!**
 - **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**
 - **Ammunition accountability, list of DODICS, weapons, number of personnel, or vehicles in support on hand when calling to occupy**
 - **Post Inspection:**
 - **Not properly scheduled, requested too late, or did not follow checklist**
 - **Not present, prepared, or professional**
 - **Gives the RSS grief and friction**
 - **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!**



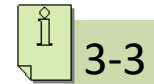
RANGE SAFETY: OIC/RSO



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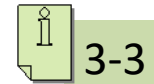
RANGE SAFETY: COMMUNICATIONS



- **Required communications with Range Control:**
 - **ALL MEDEVACS**
 - **ALL FIRES**
 - **MISSING PERSONNEL**
 - **ANY INCIDENT INVOLVING AMMUNITION (I.E. ROUNDS OUT OF IMPACT AND NEGLIGENT DISCHARGE)**



RANGE SAFETY: COMMUNICATIONS

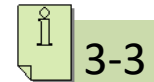


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 - **Requesting to “Occupy” a Range, TA, or Facility**





RANGE SAFETY: COMMUNICATIONS

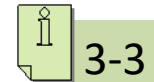


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 - **Requesting a “Hot” status prior to live-fire**





RANGE SAFETY: COMMUNICATIONS

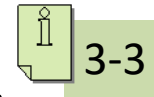


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 - **Requesting to “Occupy” a Range, TA, or Facility**
 - **Requesting a “Hot” status prior to live-fire**
 - **Requesting to switch OIC or RSO**





RANGE SAFETY: COMMUNICATIONS



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 - **ALL MEDEVACS**
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 - **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 Required:
 - 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**



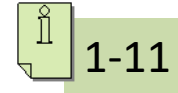
RANGE SAFETY: COMMUNICATIONS



- Means of Communication:
 - Primary: Radio issued by Range Safety
 - Secondary: Cell Phone (verify you have signal)
- Call signs
 - Range Operations Control Center: “Range Control” or “Control”
 - You: Specific Range/Training Area (Range 12, UTC-Bravo, 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 Range Control 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



COMMUNICATIONS/PITFALLS



- Additional Required Communications:
 - Fires in the RTA (When they start)
 - Aircraft, UAS, and vehicle accidents (spill out of airspace)
 - 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
- **HAZARDS of ELECTROMAGNETIC RADIATION (HERO):**
 - ELMR Radios required to maintain 19ft (6m) separation from HERO unsafe ordnance and 10ft (3m) separation from HERO susceptible ordnance. Cell Phones are required to maintain 10ft (3m) from HERO unsafe and HERO susceptible ordnance.
- Pitfalls:
 - Calling in hot without occupying: **Must Occupy First**
 - Requesting hot status second day of continuous request without occupying: **Must Occupy First**



RANGE SAFETY: COMMUNICATIONS



- **QUESTIONS?**

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RANGE SAFETY: MEDEVAC PROCEDURES



UNIT LEVEL
INTEGRATED MEDICAL RESPONSE PLAN
OR
EMERGENCY ACTION PLAN
MUST ALIGN WITH THE MCB QUANTICO PROCEDURES
THAT FOLLOW.



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RANGE SAFETY: MEDEVAC PROCEDURES



- **IN THE EVENT OF ANY MEDEVAC, CONTACT RANGE CONTROL IMMEDIATELY!**
 - DO NOT MOVE THE INJURED UNLESS DIRECTED BY RANGE CONTROL.
 - 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 prior to Air Medevac entering restricted air space
 - All ranges have ceased firing
 - All UAV/UAS are grounded
 - All other aircraft are clear of airspace required
- General Rule: **LIFE, LIMB, OR SIGHT**



1-14



RANGE SAFETY: MEDEVAC PROCEDURES



- 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.



RANGE SAFETY: MEDEVAC PROCEDURES



- **URGENT: Life Threatening (Includes Mass Casualty)**
- Emergency patients for whom immediate evacuation is necessary to save life, limb, eyesight, or to prevent complications of serious illness or to avoid permanent disability.
- An urgent precedence and is a matter of life or death.
- Injuries requiring URGENT MEDEVAC include: **HEAT STROKE**

HEAT STROKE IS CORE TEMP OF 102+ WITH ALTERED MENTAL STATUS OR ANYTHING AT 107+

- Gun shot wounds
- Deep lacerations with uncontrollable bleeding
- Compound fractures
- Loss of consciousness
- Chest pains
- Head injury with loss of consciousness or eye damage

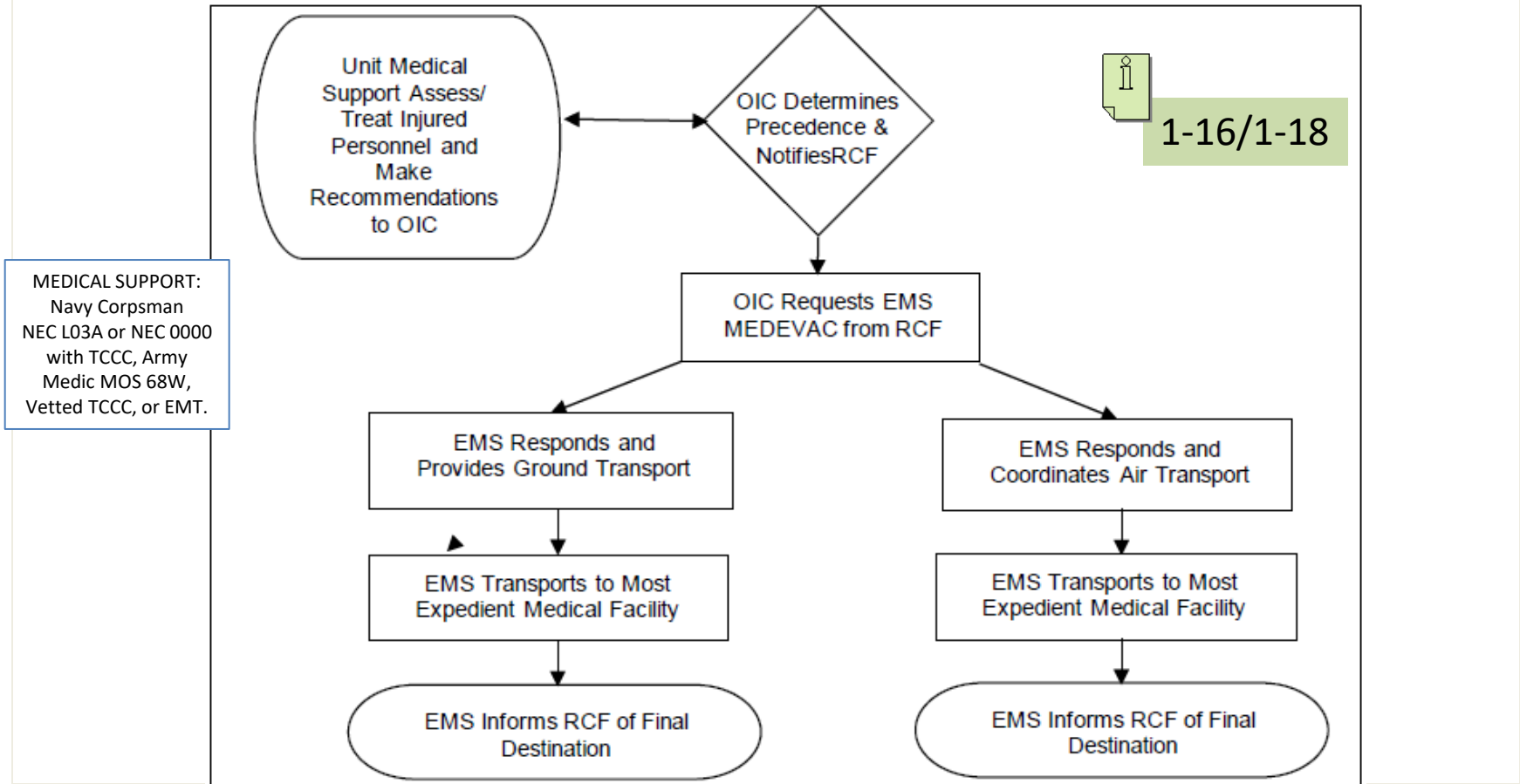
- Intense and uncontrollable pain
- Chemicals splashed in the eyes
- Severe asthma attacks with shortness of - breath that prevents talking
- Possible poisoning or overdose
- Sudden weakness on one side of the body
- Snake bites



RANGE SAFETY: MEDEVAC PROCEDURES



• MEDEVAC DECISION POINT DIAGRAM: URGENT/MASS CAS



MEDICAL SUPPORT:
Navy Corpsman
NEC L03A or NEC 0000
with TCCC, Army
Medic MOS 68W,
Vetted TCCC, or EMT.

Figure 1-1 Urgent MEDEVAC/Mass Casualty Decision Tree

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RANGE SAFETY: MEDEVAC PROCEDURES



- **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

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RANGE SAFETY: MEDEVAC PROCEDURES



• MEDEVAC DECISION POINT DIAGRAM: PRIORITY

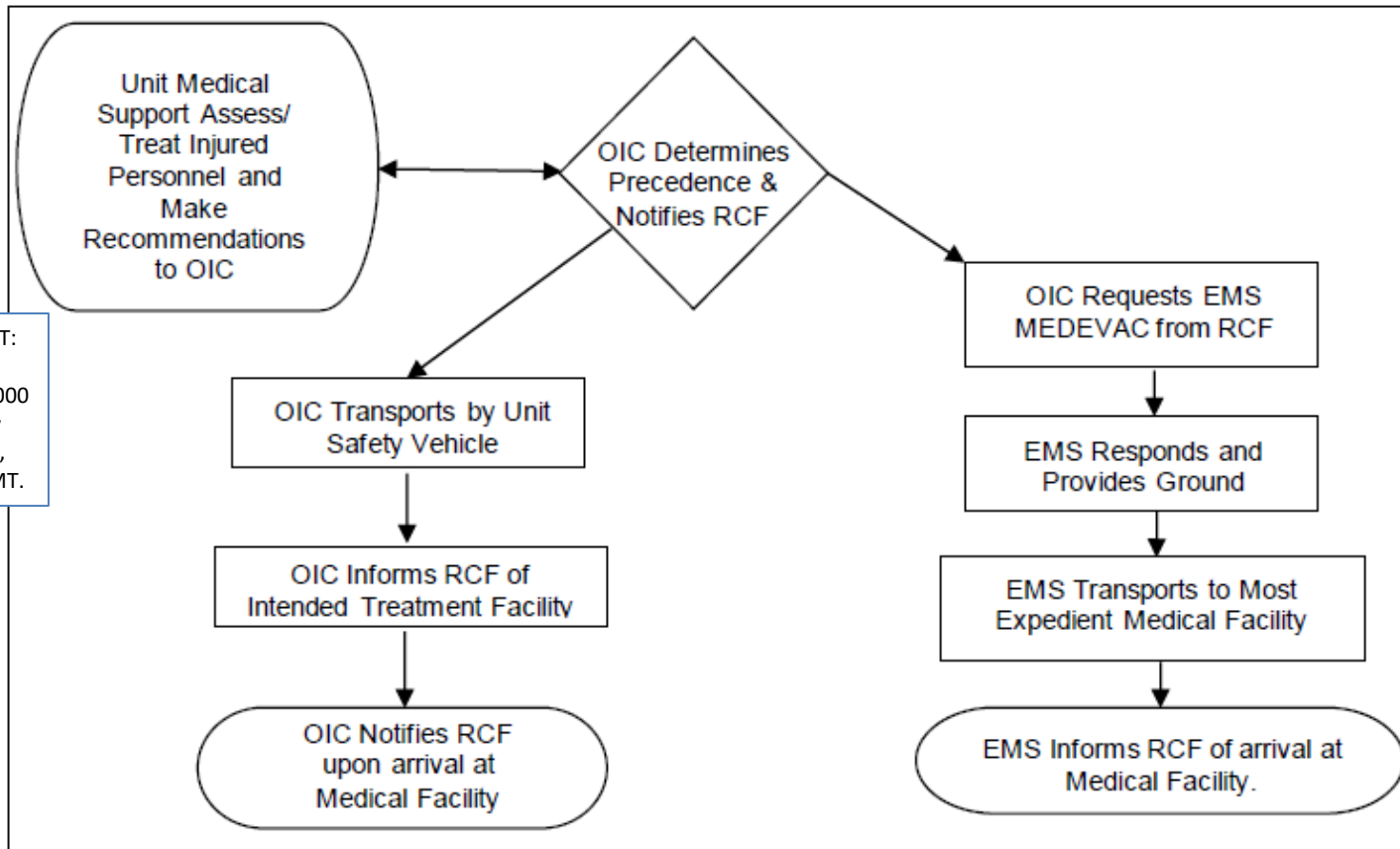


Figure 1-2 Priority MEDEVAC Decision Tree



RANGE SAFETY: MEDEVAC PROCEDURES



- **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



RANGE SAFETY: MEDEVAC PROCEDURES



• MEDEVAC DECISION POINT DIAGRAM: ROUTINE

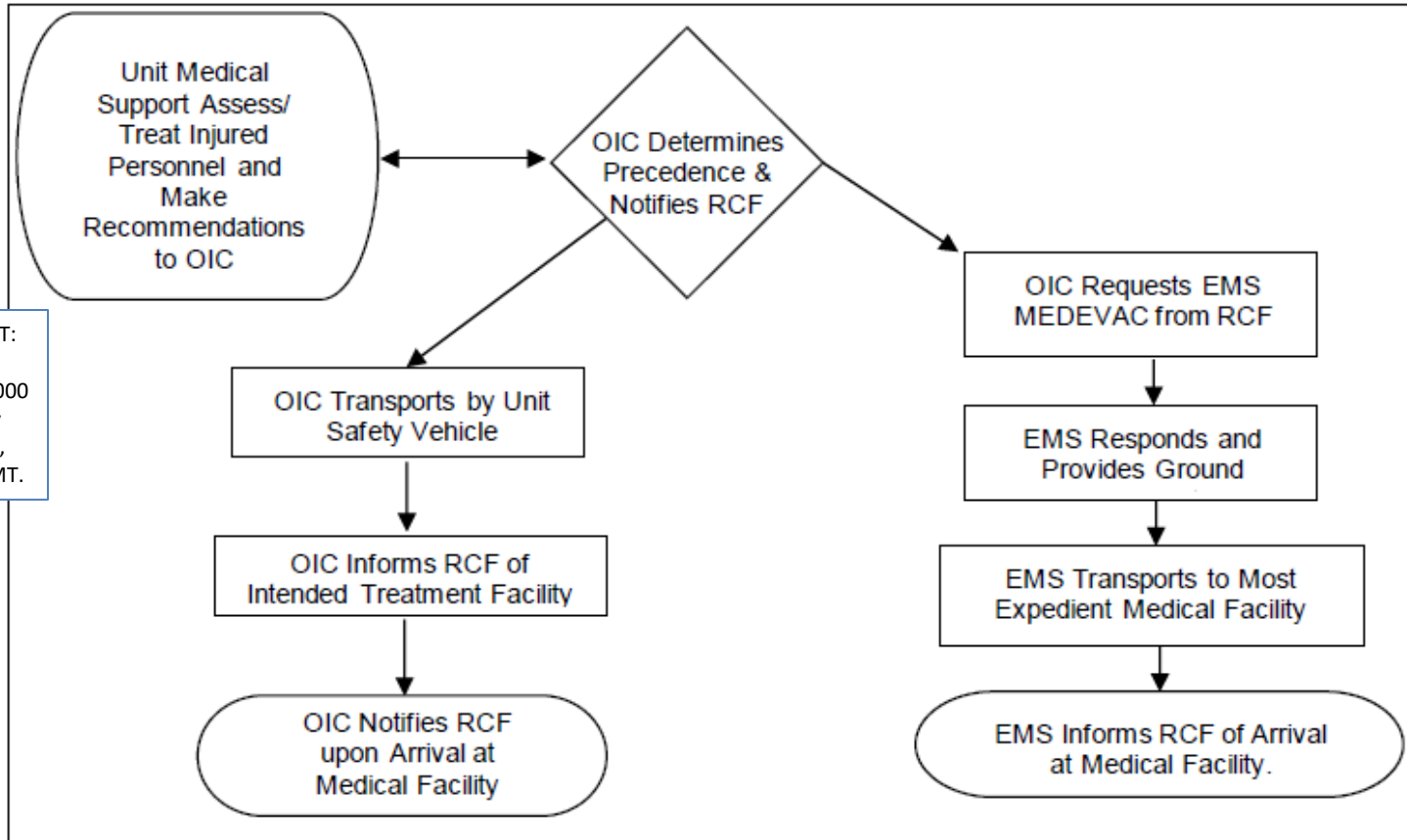


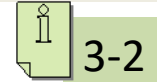
Figure 1-3 Routine MEDEVAC Decision Tree



RANGE SAFETY: MEDEVAC PROCEDURES



- **SPECIAL CONSIDERATIONS:**



- **The OIC/RSO or unit Medical Support will not bypass the RCF when calling for MEDEVAC**
- **QFES will determine the plan for evacuating the casualty based on:**
 - **Proximity or Mutual Aid Agreement necessity**
 - **Medical attention required**
 - **Most expeditious method to transport injured**
 - **Treatment center best equipped to handle the casualty**
 - **Current weather and traffic conditions**
- **Launch Authority For Life Flight Helicopter: Quantico Fire & Emergency Services (QFES) Dispatch Center**
- **POVs will not block access to any Range or Training Area**
- **POV's will not be used as safety vehicles or to transport injured**
- **Unrestricted access must be maintained for safety and MEDEVAC considerations**



RANGE SAFETY: MEDEVAC PROCEDURES



- **MEDEVAC PROCEDURE:**
 - **OIC or RSO will IMMEDIATELY contact Range Control!**
 - **Fire Desk Operator (FDO) will IMMEDIATELY contact QFES 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 QFES personnel arrive**
 - **The FDO will relay the direct steps to take to accomplish the MEDEVAC**
 - **A Range Safety Specialist (RSS) is 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**



RANGE SAFETY: MEDEVAC PROCEDURES



1-19

- **REQUIRED INFORMATION IN INITIAL REPORT:**
 - Location (Range, TA, LZ, or grid coordinate) In an open area or deep in tree line. Triggers additional support.
 - Slow-Go or remote area such as E-Course, Land Nav, or Raid Facility
 - 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/types of injury/injuries, 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



RANGE SAFETY: MEDICAL SUPPORT



1-12

- **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 (NEC L03A/0000 w/TCCC)
 - Army Medic (68W)
 - Emergency Medical Technician (EMT)
 - Tactical Combat Casualty Care (TCCC)*
 - 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.



RANGE SAFETY: MEDICAL SUPPORT



SOUM 11-17

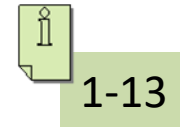
- **MEDICAL COVERAGE REQUIREMENTS:**
 - **EMT**
 - **A civilian possessing a current Emergency Medical Technician or higher certification from an approved UNITED STATES DEPARTMENT OF TRANSPORTATION NATIONAL EMERGENCY MEDICAL SERVICES EDUCATION STANDARDS CURRICULA, which is current and recognized in the 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**



RANGE SAFETY: MEDICAL SUPPORT



- **Events requiring full Medical Support and Safety Vehicle:**
 - 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





RANGE SAFETY: MEDICAL SUPPORT



- **Events not requiring full Medical Support but require Safety Vehicle and evac plan:**
 - **Sniper Stalks**
 - **Terrain Walks**
 - **Non-live-fire training**
 - **Non-live-fire rehearsals and set-up**
 - **Land navigation (less than 25 personnel)**



1-13



RANGE SAFETY: MEDEVAC PROCEDURES



- **MEDEVAC/MEDICAL COVERAGE PITFALLS:**
 - **Calling 911 directly (NO!)**
 - **Attempts to move to “link-up” point without prior instruction by QFES via Fire Desk**
 - **Transport of injured to the Fire Station is NOT authorized and strongly discouraged**
 - **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 the FDO has launch authority**
 - **Passing too much initial information**
 - **Use of phrases such as “Stand-by” or “Wait one”**



RANGE SAFETY: MEDEVAC PROCEDURES



• **QUESTIONS?**

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CONFLICTS AND RESTRICTIONS



- Each Range, Training Area, and Facility will have it's 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"

Weapon/Ammo* (3) Communications (4) Vehicle (0) Conflict (3) Restriction (3) Support (0) User Fields Documents (0) History

• Current Conflicts: **6,662** (was 8,507)

Conflict Type	RCNI	Facility	Event	Unit	Start Date/Time	End Date/Time	Status	Sub Status	Classification	Description
SCHEDULING	181551	WTBN IRONMAN	LIVE FIRE 4.62 AND BELOW	WTBN ATC	02/03/2022 17:30 L	02/03/2022 12:00 L	RES		SCHEDULING	
SAFETY	182259	WTBN IRONMAN	LIVE FIRE 5.56 AND BELOW*	WTBN FBT	02/02/2022 16:00 L	02/02/2022 16:00 L	RES		FAC-EVENT	SCHEDULING WTBN SAT FOR LIVE FIRE 5.56 AND BELOW (FROM ALL BAYS) RESTRICTS DOWNRANGE MVT ON IRONMAN. USE OF BAYS 1-3 ALLOW FULL USE OF MAIN FIRING LINE OF IRONMAN. USE OF BAY 4 WILL CLOSE LANE 1-2 ON IRONMAN
SAFETY	182477	WTBN IRONMAN	LIVE FIRE PISTOL	WTBN FBT	02/03/2022 17:30 L	02/03/2022 17:30 L	RES		FAC-EVENT	SCHEDULING WTBN SAT FOR LIVE FIRE PISTOL (FROM ALL BAYS) RESTRICTS DOWNRANGE MVT ON IRONMAN. USE OF BAYS 1-3 ALLOW FULL USE OF MAIN FIRING LINE OF IRONMAN. USE OF BAY 4 WILL CLOSE LANE 1-2 ON IRONMAN.

• Facility to Facility: 141 (was 91)

• Facility to Event: 2,782 (was 3,328)

• Facility to Ammunition: 3,739 (was 5,188)

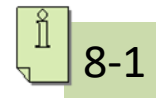
- All conflicts are visible in RFMSS at the time the request is generated



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 and Movement, and Fire and Maneuver
 - Steel Targets: SOUM 15-23 Dictates stand-off distances
 - 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



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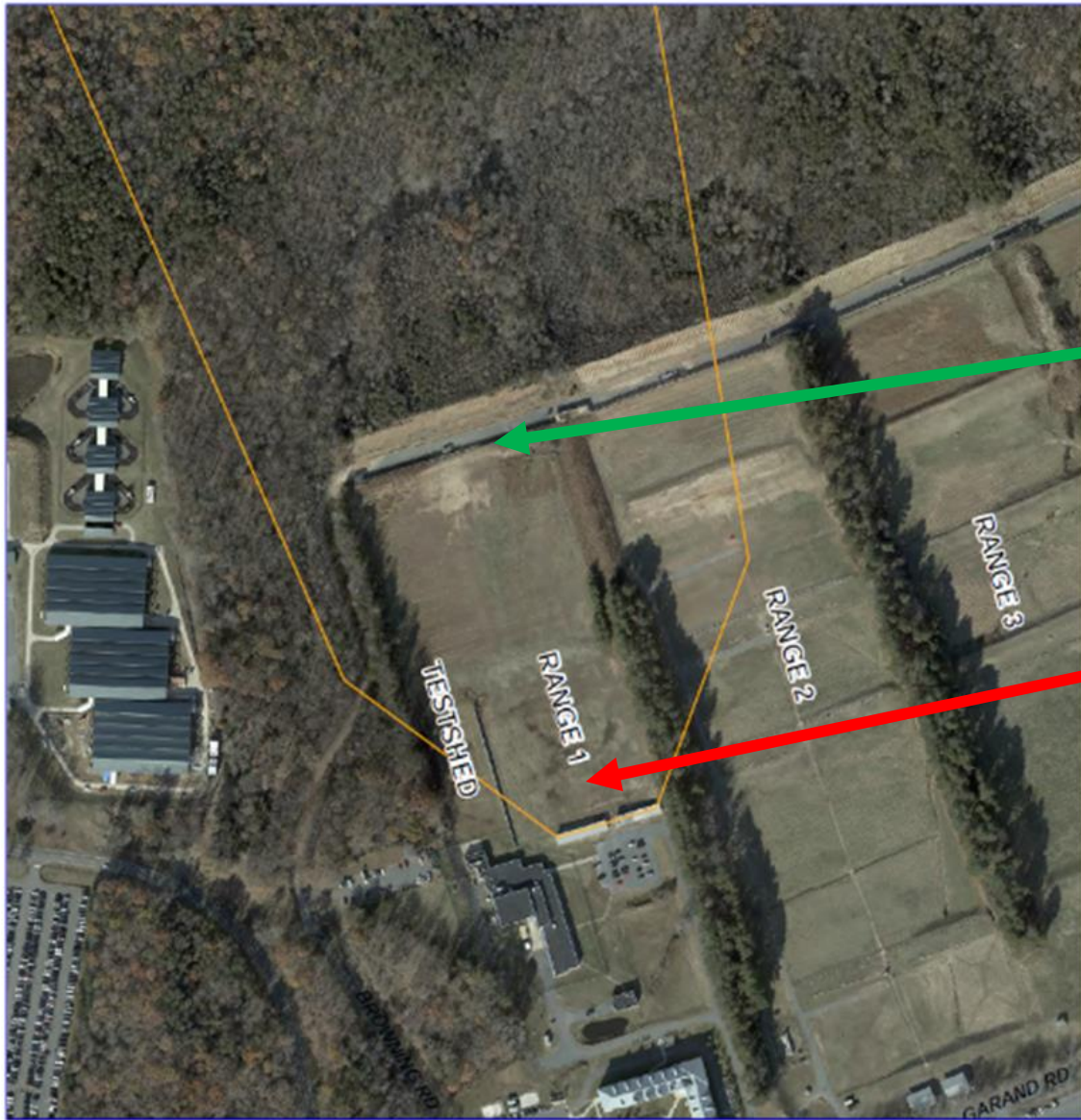
What the Fire Desk Operator sees



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CONFLICTS AND RESTRICTIONS



Target Placement
WTBN Range 1:

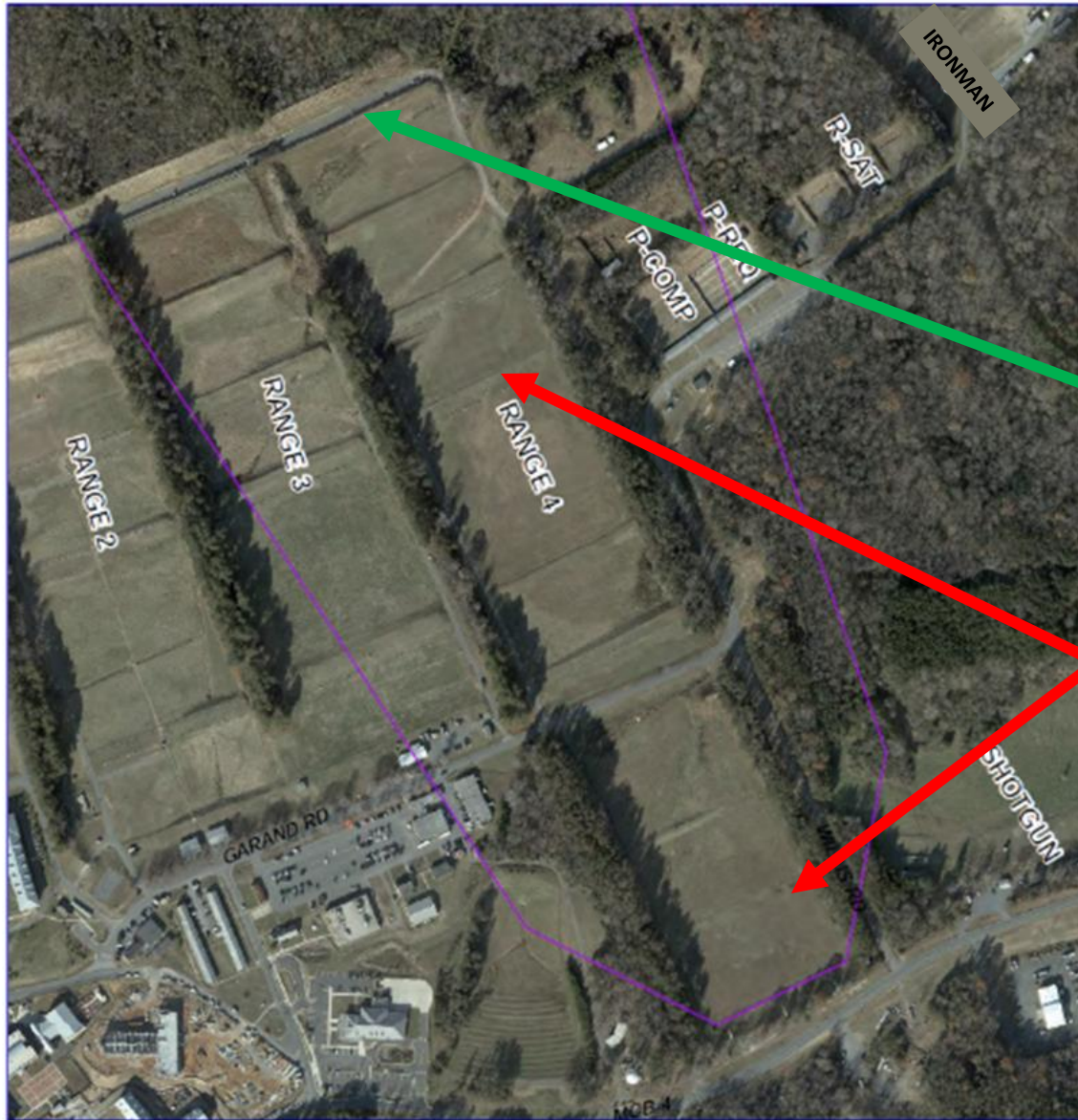
Down Range: **SAFE**
Personnel In
Range 1 SDZ on
Range 2 Are Safe
Except For Pits

Uprange: **UNSAFE**

Personnel On
Range 2 Are Now
In Significant
Danger



CONFLICTS AND RESTRICTIONS



Target Placement:

In Pits: **SAFE**

Conflicts are in pits and known

Uprange: **UNSAFE**

Placing Targets Anywhere Up Range Creates Extremely Dangerous Conflicts

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CONFLICTS AND RESTRICTIONS



BYPASSING GATES:

TARGETS ARE
HERE

CHECKPOINT 7 IS
HERE

BYPASSING HERE
IS DANGEROUS

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CONFLICTS AND RESTRICTIONS

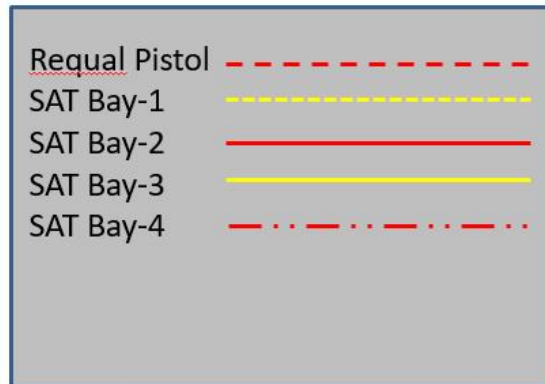


SAT Range/Ironman Conflicts

This image depicts the SDZ conflicts from the SAT Range to Ironman. 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?



RANGE SAFETY



- Gates & Barriers
- Ammunition Handling
- UXO
- Fire Danger Class
- Weather
- Quiet hours
- Airspace
- Unassociated Civilians
- Laser Use
- Steel Reactive Targets
- SESAMS use
- UAS Requirements
- Post Inspections

IGNORABLE GATE™

"When it's in the way...IGNORE-IT!"

Models:
The Charles Darwin
The Stevie Wonder



DANGER
LIVE FIRE IMPACT AREA DO NOT ENTER
FOR ACCESS CONTACT
RANGE CONTROL AT 703-784-5321/5322

BOLD. POWERFUL. EYE-CATCHING. ...IGNORABLE.
Ignorable Gate is proud to partner with the U.S. Marine Corps

At MCB Quantico, safety is paramount. That's why they choose Ignorable Gate with patented "IGNORE-IT" technology for "Individuals Generally Never Obeying Restrictive Entryways Indicating Trespass). Whatever your need, Ignorable Gate can take your barrier from an effective deterrent to basically pointless, overnight!

The Charles Darwin
Guarantees your diligence in safety will be ignored for years to come, ensuring sleepless nights for your organizations Safety Professionals.

The Stevie Wonder
The ultimate example in next generation Physically Physical Yet Somehow Invisible barrier technology.

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GATES & BARRIERS



3-2

- **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 an SDZ
- You MUST inform all personnel about gates/barriers during safety brief
- RSS escort may be required for some movements
- Gates must be locked or have a road guard posted
- Road Guards must have direct comm with OIC/RSO
- Always contact Range Control before opening and entering any locked gate





GATES & BARRIERS



- **DO NOT FOLLOW GPS INSTRUCTIONS WHEN NAVIGATING THE RTA**
- Always check in with the Range Safety Office before heading out into the RTA:
 - If making a Leader's Recon.
 - Directing support personnel to your training.
 - Expecting any stragglers.
- Come by in person or call: **703-432-7466**.
- Call the Fire Desk if you encounter a locked gate or barrier and your GPS is insisting this is the route you should take. It isn't.
- Do not take any alternate routes your GPS gives you. They are likely to get you in a bad position.





AMMUNITION HANDLING



4-1

- 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.





AMMUNITION 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

MAKE
MARINE AMMUNITION KNOWLEDGE ENTERPRISE

NOTE: Effective immediately, the Ammo Support Center phone number has been changed to **864-MAKE-HLP / 864.625.3457**.
ammo_supportcenter@usmc.mil (ammo_supportcenter@usmc.mil)

New Items: as of 17 August 2018

All [local](#) welcome.

Library Updates:
NAR Manual updated by 15 AUGUST 18 version

MAKE
MARINE AMMUNITION KNOWLEDGE ENTERPRISE

Home
Business Apps
Search
Customer Surveys
Library
Utilities

Handbook / Guides

Title
Ammunition Maintenance Process Guide for Quality (AMPGQ)
Cataloging Handbook
Component Handbook
Condition Codes from MCO 8010.13 Appendix O dated 2013
Emergency Response Guide (ERG)
M72 LAW Repackaging Criteria
MIRR Guide
NAVSEA SW020-AF-HBK-010 - Glove Box 7th revision
Packaging Digest, December 2016
TB 9-1340-238-13 Field Information guide for HE rockets
Tech Data Sheet Handbook
Yellow Book - HAZARD CLASSIFICATION OF U.S. MILITARY EXPLOSIVES AND MUNITIONS- Rev 17, dated April 2017

NARs / AINs / OHFs

Title	Description
NAR Manual and Messages	Internal Link

Range Safety Related AINs

Title	Description
Range Safety Related AINs (Printer Friendly) (20181204)	Word Doc
Range Safety Related AINs (20181204)	Excel



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)



SOUM 13-15





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 dud 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





FIRE DANGER CLASS: DEFINITIONS



1-20

- 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**; fires are not likely to become serious and are relatively easy to control
 - **FDC-2**: Fire danger is **MODERATE**; fires are still not likely to become serious and are relatively easy to control
 - **FDC-3**: Fire danger is **INTERMEDIATE**; fires **MAY** become serious and difficult to control unless extinguished when small
 - **FDC-4**: Fire danger is **HIGH**; Fires start easily, spread rapidly, and quickly increase in intensity.
 - **FDC-5**: Fire danger is **HAZARDOUS**; Fires start quickly, spread furiously and burn intensely



FIRE DANGER CLASS: RESTRICTIONS



1-20

- Fire Danger Classifications (FDC)
 - **FDC-1:** No restrictions on authorized munitions in the RTA. Normal safety precautions will be followed. “Warming fires” may be authorized by Range Control upon request.
 - **FDC-2:** No restrictions on authorized munitions in the RTA. Normal safety precautions will be followed. “Warming fires” may be authorized by Range Control upon request.
 - **FDC-3:** (1) When FDC III is reached, Range Control will notify all units training within the RTA. Extra caution will be exercised in the use of all blanks, pyrotechnics, tracer, and incendiary ammunition. “Warming fires” will be used only in designated locations and must be under constant supervision.
 - **FDC-4:** Blanks, tracers, incendiary rounds, pyrotechnics, and flame-producing machine gun simulators are **PROHIBITED**. Demolitions and high-explosive ordnance will only be permitted within a fire-resistant perimeter, such as bare mineral soil. **Authorization is granted at the discretion of the COMDR, MCBQ.** Range Control will staff and forward requests to continue firing as expeditiously as possible.
 - **FDC-5:** **No live fire will be conducted** without approval of COMDR, MCINCR-MCBQ.
 - **BE ADVISED!!!!**
 - FDC CAN CHANGE ANYTIME AND NEGATIVELY IMPACT YOUR ABILITY TO TRAIN
 - **TRACERS MAY BE DELINKED IAW UNIT SOP AND AIN 064-2012 OR EXCHANGED AT ASP***



WEATHER NOTICES



- Weather
- Except for training involving explosives, the OIC will determine the best course of action when responding to weather events

- Heat Stress Conditions:

- **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**

NOTE: Heat Stress conditions are read from 1 May to 30 September and will be passed to all units in the field

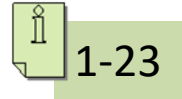
Extreme Cold Weather: Warming Fires may be authorized but require approval from Range Control and may be denied based on current FDC. (Range Control does not provide burn barrels)



WEATHER NOTICES



- 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





WEATHER NOTICES



- 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



WEATHER NOTICES



- 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



QUIET HOURS/AIR SPACE USE



- 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:
 - Type of ordnance requested
 - Type of aircraft (fixed/rotary) and event (CAS/Dry-CAS, Helo-Ops) 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



CIVILIAN PARTICIPATION



- Civilian observation and participation in Military Training:
- **Requires authorization from the Range Control Officer**
 - Requests for civilian observation/participation must be signed by or originate from the Unit Commander or equivalent or their "By Direction" representative
 - By-Direction and Acting signatures/emails 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 RANGE 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



1-10

Appx-G



LASER USE



- 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



- 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



STEEL REACTIVE TARGET USE



- Steel Reactive Targets (SRT): SOUM 15-23
- Updated DA/PAM expected soon
- Lead abatement: Wear gloves/wash hands
- PPE Level-0 Required (within 50m of firing line)
- **EYE PROTECTION/GLOVES MANDATORY (within 15m of firing line)**
- **MIN-SAFE ENGAGEMENT DISTANCES:**
 - 7 meters for all pistol calibers
 - 10 meters for 12ga buckshot/birdshot
 - 45 meters for 12ga slug
 - 23 meters for soft-core 5.56mm
 - 69 meters for steel penetrator 5.56 (M855)
 - 150 meters for 7.62mm
 - 375 meters for .300 WM/NM, .338 LM/NM, and .50cal
 - **M855A1 & M80A1 (EPR) ammo not authorized for SRT or TMITs aboard MCB Quantico.**

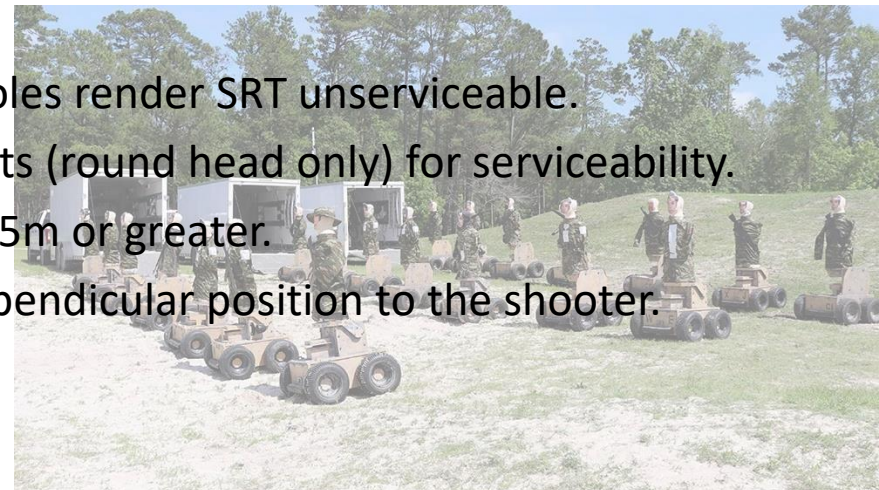




STEEL REACTIVE TARGET USE



- SRT SOUM 15-23
- Min-Safe distances apply to Trackless Mobile Infantry Targets (TMITS) as noted in SOUM 11-23.
- Additional SRT Considerations:
 - Brinell Hardness Number (BHN) of AR 500-550. (Certificate Required)
 - Ranges 50m or less, SRT placed on soft ground or mitigated.
 - Stationary targets set to 20° downward facing angle to the shooter.
 - Targets that flip, swing, or fall must move freely, move as intended, and set to fall easily.
 - 1/32" dimples, warped, dented, or holes render SRT unserviceable.
 - Lubricate moving parts and check bolts (round head only) for serviceability.
 - Unserviceable SRT may be used at 375m or greater.
 - Rotating targets must return to a perpendicular position to the shooter.
 - **Spinning targets are prohibited.**
 - **Automatic Fire on SRT is prohibited.**



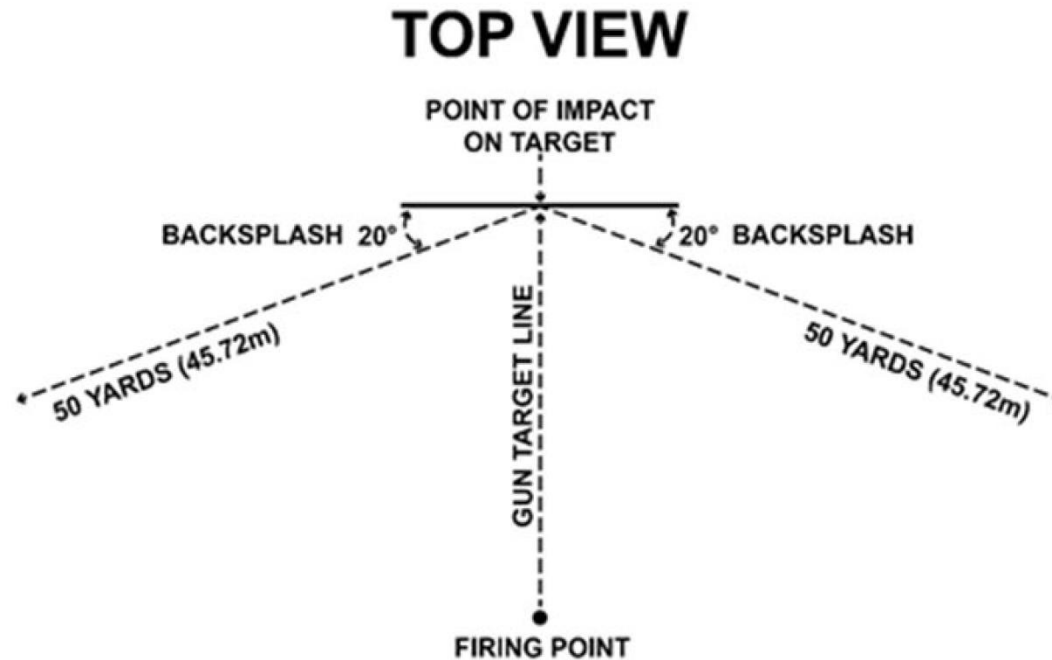
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STEEL REACTIVE TARGET USE



- SRT SOUM 15-23
- WHERE THE 20° DISPERSION AREA CROSSES THE FIRING LINE SHOOTERS COULD BE HIT BY FRAGMENTATION FROM TARGETS TO THE LEFT AND RIGHT.

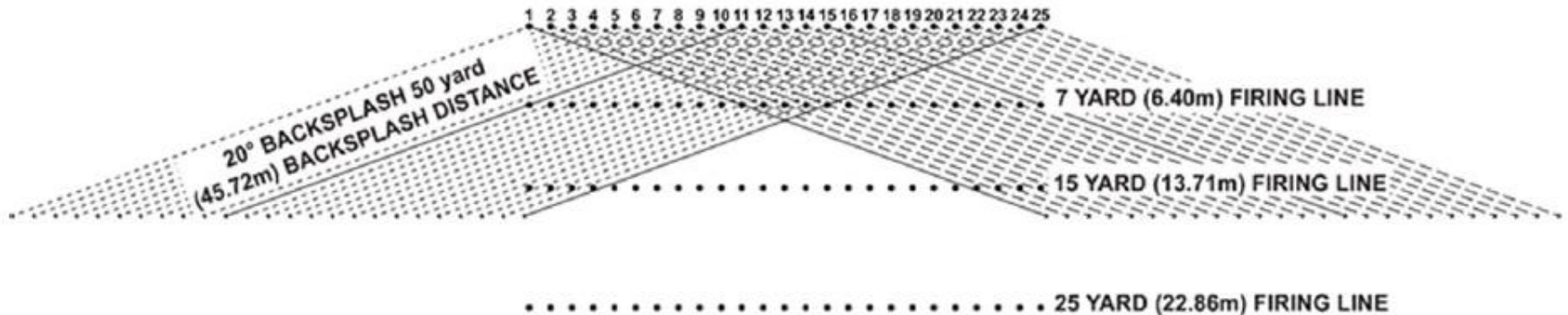




STEEL REACTIVE TARGET USE



- SRT SOUM 15-23
- **CAREFUL CONSIDERATION OF THE 20° SAFETY ZONE MUST BE TAKEN INTO ACCOUNT FOR EACH TARGET AND EACH FIRING POSITION.**
- **For SRT on line at less than 15m with multiple shooters, additional engineering controls are required to mitigate backslash on adjacent shooters.**
 - **Covering / shielding structural supports and frames with material capable of absorbing bullet fragments (e.g. sandbags, wood frames, ballistic rubber).**
 - **Placing portable barriers (e.g. wooden partitions) between multiple SRTs to absorb / deflect bullet fragments.**





SESAMS USE: GENERAL SAFETY



SOUM 1-24

- Special Effects Small Arms Marking System (SESAMS) and Close Combat Mission Capability Kit (CCMCK)
- This section satisfies the SESAMS OIC/RSO Certification and applies to USMC SESAMS, US Army CCMCK, all other “FX”, “Simunitions”, “UTM”, Paintball, and Airsoft use.
- Ensure only approved SESAMS kits and associated authorized ammunition combinations are utilized.
 - Authorized Weapons, UTM SESAMS, and FX SESAMS Ammunition combinations are found in SOUM 1-24.
- **GENERAL SAFETY REQUIREMENTS:**
 - **PPE mandatory for ALL personnel within the 150m Safety Zone, observing or actively participating.**
 - **NO INTENTIONAL HEAD SHOTS to include inadvertent “head-shot-only” scenarios.**
 - **OIC/RSO will direct the demonstration of the minimum safe engagement distance for the DODIC used.**
 - **Do not use Suppressors with SESAMS.**
 - **SESAMS has live fire qualities but must never be mixed with live ammo!**
 - **SESAMS ammo WILL NOT leave the RTA.**
 - **NO AMMO IN THE CONTRACTOR WAREHOUSES!**





SESAMS USE: DODIC CLASSIFICATION



- SESAMS Ammunition by Classification, Caliber, and DODIC
- M1041: 9MM DODICS: AA12, AA21, AB13, AB14, AC36, AC37
- M1042: 5.56MM (MANUFACTURED AFTER 2010) DODICS: AB09, AB10, AB11
- M1042: 5.56MM (MANUFACTURED UP TO AND INCLUDING 2010) DODICS: AB09, AB10, AB11
- M1042: 5.56MM DODICS: AC39, AC40, AC41
- MK302 MOD-1/MK303 MOD-1: 5.56MM DODICS: AB05, AB06



SOUM 1-24

M1041



M1042

MK302/303



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UTM 9mm Ammo: Not in inventory yet



SESAMS USE: MIN-SAFE & TEMPS



- SESAMS SAFETY ZONE IS 150M, no less
- Minimum safe engagement distances:
 - M1041 (DODICS AA12, AA21, AB13, AB14, AC36, AC37) the minimum safe engagement distance: **1.5m (5ft)**
 - M1042 (DODICS AB09, AB10, AB11) manufactured AFTER 2010, AC39, AC40, AC41 the minimum safe engagement distance: **1.5m (5ft)**
 - M1042 (DODICS AB09, AB10, AB11) manufactured UP TO AND INCLUDING 2010, the minimum safe engagement distance: **5m (17ft)**
 - MK 302 MOD-1/303 MOD-1 (DODICs AB05, AB06) the minimum safe engagement distance: **4m (13ft)**
- FORCE-ON-FORCE TRAINING MUST CEASE WHEN OUTSIDE TEMPERATURES ARE:
 - M1042: Below **23°F** or above **104°F**
 - M1041, MK302 MOD 1, and MK303 MOD 1: Below **18°F** or Above **104°F**
 - Above 104°F, the plastic softens and may rupture or lodge in the barrel upon firing. At temperatures below 23°F or 18°F respectively, the marking dye compound becomes too hard and brittle for proper performance and creates a safety hazard due to increased penetration.



SOUM 1-24





SESAMS USE: PPE



- **PPE REQUIREMENTS:**

- All personnel within the 150m safety zone are required to wear Level-0 PPE and the correct protective face mask.
- All personnel participating in the force-on-force training must wear the following PPE:
 - Clothing capable of completely covering the body, the arms down to the hands, and the legs down to the boots
 - Head protection
 - Full face and eye protection
 - Throat protection
 - Groin protection
 - Single hearing protection
 - Gloves
- Legacy PPE in serviceable condition may continue to be utilized.
- Current UTM Face Mask and ESS Night Vision Goggle combination is authorized for use with all M1041 and M1042 ammunition.
- The legacy Eye Tactical CM121 Protective Mask is authorized for use with all M1041 and M1042 ammunition.
- Current FX Mask Protector and all legacy series of FX Protective Face Masks are authorized for use with M1041 and M1042 ammunition.
- The FX 9002/9003/9004 Protective Face Masks are **specifically authorized and required** for use with MK 302 MOD-1/MK 303 MOD-1 5.56MM marking cartridges (DODICs AB05, AB06).
- The FX 9002/9003/9004 Face Masks are also authorized for use when firing all SESAMs munitions.



SESAMS USE: BEFORE, DURING, and AFTER FIRING



- Before and During SESAMS firing:
- Safety Brief MUST include:
 - **NO INTENTIONAL HEAD SHOTS**
 - **NO USE OF SUPPRESSORS**
 - **DEMONSTRATION OF THE MIN-SAFE ENGAGEMENT DISTANCES**
- **OIC/RSO must recognize. Mitigate, and continually monitor for scenarios where the potential of head-shot-only engagements might exist.**
- Ensure qualified medical personnel/appropriate medical equipment on hand during all SESAMS training (**same as live-fire**).
- Ensure all personnel wear approved PPE specific to the type of SESAMS used.
- **Verify DODICS** and ensure all personnel are briefed on and adhere to all min-safe engagement distances and temperature ranges specific to that DODIC of SESAMS ammunition.

- 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.
 - **NOTE: ANY AMMO FOUND IN THE WAREHOUSE AT TURN-IN WILL RESULT IN IMMEDIATE SUSPENSION OF OIC/RSO CERTIFICATION.**



UAS REQUIREMENTS



Unmanned Aerial Systems (UAS) Operations



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

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UAS REQUIREMENTS



- **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



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UAS REQUIREMENTS



- NPOR UAS: Naval Message Prohibits Use Of The Following Without Exemption or Approved Waiver:

- All DJI products
- Indago
- InstantEye
- SkyRanger
- Black Hornet III
- WASP
- RAVEN



- 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

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UAS REQUIREMENTS



UAV OR UAS OPERATIONS:	RMB Airspace Manager requires detailed information in order to safely manage airspace aboard MCBQ and surrounding communities.		
1. Name of system.			
2. Is the system COTS, GOTS, POR, or RDT&E?			
3. Provide DoD waiver for COTS, GOTS systems.			
4. Laser use with system. (Onboard or ground based)			
5. Power source.			
6. Photography or image capture.			
7. Provide AGL or MSL.			Need the minimum to accomplish mission, don't ballpark
8. Provide launch and recovery locations.			LZ, Facility, or other RTA.
9. List any specific facilities for overflight.			UTC, Roads, LZ, Ranges
10. Provide 4 corner grid coordinates of ROZ.	(1) (3)	(2) (4)	Restricted Operating Zone that unit is requesting for overflight.
11. Daily schedule of actual flight windows.	e.g. 13MAR19 e.g. 14MAR19 e.g. 15MAR19	e.g. 1300-1500 e.g. 0800-1000 e.g. 0700-1600	List actual flight windows that unit will operate the UAV not to include setup, teardown, data review, or maintenance times.
12. Submit MCBQ request for temporary frequency assignments and FCC part 15 to Base G-6.	 Quantico freq request form.docx	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.	
13. Provide approved G-6 temporary frequency assignment.	Forward G-6 approval email to RMB or TSC. RFMSS request reservation status will be updated based on G-6 permissions.		
14. Have on hand required documentation and certificates.	Air worthiness statement, Operator training certificates, Unit UAS/UAV SOP to include lost link procedures. RMB may request documents for review.		

➤ EXCELLENT RESOURCE: <http://knowbeforeyoufly.org/for-public-entities/>

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UAS REQUIREMENTS



- 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



UAS REQUIREMENTS



- **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**

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UAS REQUIREMENTS



- 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!





UAS REQUIREMENTS



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



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POST INSPECTION PROCESS



- Post Inspections:
 - Can and should be scheduled in RFMSS
 - Will not be conducted in darkness
 - Will be conducted by an RSS or IRSO
 - Will follow the checklist given to OIC/RSO
 - Will be conducted professionally (By OIC and RSS)
 - Will be conducted thoroughly
- Strongly Recommend:
 - Maintain a working party sized to complete the task
 - Press to all personnel to not leave trash in the RTA
 - **RANGE CONTROL PERSONNEL ARE NOT YOUR WORKING PARTY**



POST INSPECTION PROCESS



- Timeliness:
 - Request a Post Inspection once you have thoroughly policed your Range, Training Area, Facility, or LZ
 - Allow for time to complete in daylight (MOOUT and UTC require far more time to inspect than Range 12)
 - If the inspection fails, RSS will point out deficiencies and provide a time of return for re-inspection
 - RSS is under no obligation to assist
 - If daylight is insufficient, Post Inspection will be pushed to following morning
 - Will be conducted thoroughly



POST INSPECTION CHECKLIST



Range 3-A/ LZ Robin Post Inspection Checklist



The following checklist will be used to assist the OIC/RSO and RMB Patrolman when conducting post inspections. If any discrepancies are noted they will be addressed prior to the unit departing. If maintenance is required, patrolman will inform the Range Operations Control Center (ROCC) supervisor.

Required Task	SAT/ UNSAT	Discrepancy
Gate/gates properly marked with signs, no obvious damage, pins, locks and keys serviceable		
Flagpole: serviceable all items in place		
Road condition: obvious damage/down trees		
Porta-J's cleaned, upright, in proper location		
Porta-J's accounted for: Number Assigned: 3		
Ammo Break-out shed/roll-up; clean, swept, secured, obvious damage reported		
Lateral limit/range markers visible/serviceable		
Bays 1, 2, & 3 lateral limit markers visible		
Firing line stakes visible and in proper location		
Targets visible		
Bay 1 fighting position covers properly positioned		
Bay 1 Wall; obvious damage		
All trash/brass removed from all fighting holes/positions		
Bleachers; clean and obvious damage noted		
Bay 1 tower; clean and obvious damage noted		
Bay 3 tower; clean and obvious damage noted		
Bivouac area; clean and obvious damage noted		
LZ area; clean and obvious damage noted		
All trash, pallets, target materials, and brass removed		
Additional Notes:		



POST INSPECTION CHECKLIST



Range 3-A/ LZ Robin Post Inspection Checklist



The following checklist will be used to assist the OIC/RSO and RMB Patrolman when conducting post inspections. If any discrepancies are noted they will be addressed prior to the unit departing. If maintenance is required, patrolman will inform the Range Operations Control Center (ROCC) supervisor.

Required Task	SAT/ UNSAT	Discrepancy
Gate/gates properly marked with signs, no obvious damage, pins, locks and keys serviceable		
Flagpole: serviceable all items in place		
Road condition: obvious damage/down trees		
Porta-J's cleaned, upright, in proper location		
Porta-J's accounted for: Number Assigned: 3		
Ammo Break-out shed/roll-up; clean, swept, secured, obvious damage reported		
Lateral limit/range markers visible/serviceable		
Bays 1, 2 lateral limit markers visible		
Firing line stakes visible and in proper position		
Targets visible		
Bay 1 fighting position covered properly, positions		
Bay 1 Wall; obvious damage		
All trash/brass removed from all fighting holes/positions		
Bleachers; clean and obvious damage noted		
Bay 1 tower; clean and obvious damage noted		
Bay 3 tower; clean and obvious damage noted		
Bivouac area; clean and obvious damage noted		
LZ area; clean and obvious damage noted		
All trash, pallets, target materials, and brass removed		
Additional Notes:		

QUESTIONS?



KNOWLEDGE CHECK



- **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
- For Teleconference attendees: Email MCBQ_RNG_SCH@usmc.mil now and request the electronic version of the test



POINTS OF CONTACT



RANGE SAFETY	SCHEDULING
<p><u>Installation Range Safety Officer</u> Mr. Martin Dankanich Office: (703) 432-6552 Cell: (703)-419-0928 Email: Martin.w.Dankanich@usmc.mil</p>	<p><u>Scheduling Supervisor/Air Space Mgr</u> Mr. Matt Sanville Office: (703) 784-6412 Email: matthew.r.sanville.ctr@usmc.mil</p>
<p><u>Range Safety Specialists</u> Office: (703) 432-7466 Email: MCBQ_RNG_SCH@usmc.mil</p>	<p><u>RFMSS Functional Administrator</u> Mr. Jon Graham Office: (703) 432-6611 Email: jonathan.graham.ctr@usmc.mil</p>
<p><u>Range Control Officer</u> Mr. James Cook Office: (703) 784-5366 Email: james.h.cook@usmc.mil</p>	<p><u>Range Operations Officer</u> Mr. Bill Thompson Office: (703) 784-5328 Email: William.Thompson@usmc.mil</p>



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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 – Vic Szalankiewicz 703 784 4492

victor.m.szalankiewi@usmc.mil

Tactical Training Support Specialist – Frank Topley: 703 432 7026

frank.topley@usmc.mil

Tactical Training Support Specialist – Mike Aguirre: 703 432 7974

Michael.a.aguirre.ctr@usmc.mil

Tactical Training Support Specialist – Isaac Elias: 703 432 7031

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Tactical Training Support Specialist – Chris Andres: 703 432 7969

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Range Support SME – Meddie Knox: 703 432 7029

meddie.knox.ctr@usmc.mil



KEY REFERENCES



- MCO 3570.1C RANGE SAFETY (**UPDATING SOON**)
- DA-PAM 385/63 RANGE SAFETY (**UPDATING SOON**)
- MCBO 3570.1B QUANTICO RANGE REGULATIONS
- SOUM 15-23 STEEL REACTIVE TARGETS (**REPLACED SOUM 2-02**)
- SOUM 13-15 60MM FULL RANGE PRACTICE MORTARS
- SOUM 11-17 MEDICAL SUPPORT FOR RANGES
- SOUM 8-20 TRACKLESS MOBILE INFANTRY TARGETS
- SOUM 13-21 SESAMS Gen-2 Rifle kits and specific ammunition
- SOUM 7-23 SESAMS Gen-2 MK17/MK18 Pistol Kits and specific ammunition
- **ALL AVAILABLE FOR DOWNLOAD ON THE RANGE MANAGEMENT BRANCH WEBSITE AND THE RFMSS LIBRARY**



OIC QUALIFICATIONS



- OIC Qualifications:
- 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 #CI060120CA)
- 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



OIC DUTIES



- 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 8 of this Order have been met
- Additional OIC responsibilities prior to, during, and after firing can be found in Appendix F of MCBO 3570.1B
- 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 Range Control
- **Orders immediate "cease fire" and notifies Range Control 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 Range Control 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 Adequate Medical Coverage by Navy Corpsman (NEC L03A or NEC 0000) or Army or Air Force Medic (68W) and dedicated emergency vehicle with driver are present on the range
- **Fully familiar with MEDEVAC/CASEVAC procedures contained in paragraph 1009 of MCBO 3570.1B. In the event of an emergency situation/accident, the RSO will notify Range Control**



RSO DUTIES



- 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



RSO DUTIES



- 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



UNIT	OIC / RSO	CELL PHONE#
RTA	EVENT	
START DATE	Click or tap to enter a date.	END DATE
GEAR ISSUE / SCHEDULING		TURN-IN / POST-INSPECTION
RADIO (S/N)		← VERIFIED YES NO
EXTRA BATTERY	① ② ③	← VERIFIED YES NO
KEY(S)		← VERIFIED YES NO
RANGE FLAG	① NONE	← VERIFIED YES NO
CHARGER	① ② ③ NONE	← VERIFIED YES NO
SERVICABLE	YES NO	← VERIFIED YES NO
I certify I understand all conflicts, restrictions, have read and will comply with the Range Safety Order, Range Regs, Range SOP and items 1-10.		
OIC/RSO SIGN	X	UNIT KEPT GEAR YES NO
DATE OUT	X	INSPECTION DATE
	RMB INIT X	OIC/RSO SIGN X
		PATROLMAN PRINT X
		SCHEDULER IN PRINT X

KNOW YOUR EVENT

ALL ITEMS ABOVE MUST BE ACCOUNTED FOR AND VERIFIED AS SERVICEABLE DURING GEAR ISSUE AND TURN-IN
 POST INSPECTIONS ARE REQUIRED FOR ALL RTA FACILITIES, EXCEPT FOR ROADS

OCCUPY BRIEF INFO → **WHEN REQUESTING TO OCCUPY YOUR RANGE/RTA, HAVE THE BELOW INFORMATION PREPARED:**
 OIC/RSO NAME(S) • CELL PHONE # • DODIC(S) TO BE FIRED • NUMBER OF PERSONNEL

BELOW REQUIREMENTS WILL BE FOLLOWED AT ALL TIMES DURING OCCUPATION OF THE MCBQ RTA ("ITEMS 1-10")

- ① OIC/RSO will immediately contact Range Control and request a pre-inspection if the RTA is found in a poor state of police or will accept the condition/responsibility to police.
- ② OIC/RSO MUST maintain (in their possession) two forms of communication with Range Control **AT ALL TIMES**. Primary- Issued Radio / Secondary-Cell Phone or land line. The OIC/RSO will conduct radio checks every 30min when HOT and every 3hrs when COLD, on the hour/half-hour.
- ③ OIC/RSO will cease 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/issued separately, **NEVER** used at the same time, blanks fired before live rounds-never after, ensure every participant, weapon, magazine, etc are cleared/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.
- ⑥ MEDEVAC Regardless of severity, OIC/RSO will immediately contact Range Control to initiate MEDEVAC.
- ⑦ 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.
- ⑧ Marine Corps OIC/RSO **Range Safety Related AIN's** have been checked and read as part of detailed safety brief as required.
- ⑨ OIC/RSO will immediately cease fire and contact Range Control if any aircraft (to include UAS) enters the SDZ.
- ⑩ Completion of training OIC/RSO will contact Range Control to request Post Inspection, "COLD" time, and pass "End of Training" report (Blank/Pyro DODICs expended, number personnel trained/vehicles in support).

HOT BRIEF INFO → **READ THE BELOW WHEN REQUESTING HOT BRIEF OVER RADIO:**

- 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/understand the Range Safety Order, Range Regs, SOP for this range, items 1-10 of this brief, and will comply.

SCHEDULING 703-784-5502/5507
 FIRE DESK 703-784-5321/5322

TRAINING SUPPORT CENTER (TSC)
 703-432-7026/7029/7031/7969

SUPPORT WAREHOUSE
 703-630-0656



OCCUPY BRIEF INFO →

WHEN REQUESTING TO OCCUPY YOUR RANGE/RTA, HAVE THE BELOW INFORMATION PREPARED:

OIC/RSO NAME(S) • CELL PHONE # • DODIC(S) TO BE FIRED • NUMBER OF PERSONNEL

BELOW REQUIREMENTS WILL BE FOLLOWED AT ALL TIMES DURING OCCUPATION OF THE MCBQ RTA ("ITEMS 1-10")

- ❶ OIC/RSO will immediately contact Range Control and request a pre-inspection if the RTA is found in a poor state of police or will accept the condition/responsibility to police.
- ❷ OIC/RSO MUST maintain (*in their possession*) two forms of communication with Range Control **AT ALL TIMES**. Primary- Issued Radio / Secondary-Cell Phone or land line. The OIC/RSO will conduct radio checks every 30min when HOT and every 3hrs when COLD, on the hour/half-hour.
- ❸ OIC/RSO will cease 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.
- ❹ OIC/RSO must ensure all **Blank** and **Live** ammunition is Stored/issued separately, **NEVER** used at the same time, blanks fired before live rounds-never after, ensure every participant, weapon, magazine, etc are cleared/checked before issuing live rounds or departing.
- ❺ OIC/RSO will **IMMEDIATELY** contact Range Control and await further instructions as soon as a fire starts.
- ❻ MEDEVAC Regardless of severity, OIC/RSO will immediately contact Range Control to initiate MEDEVAC.
- ❼ 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.
- ❽ Marine Corps OIC/RSO **Range Safety Related AIN's** have been checked and read as part of detailed safety brief as required.
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- All Gates and Barriers are secured or manned and will not be bypassed.
- I have read/understand the Range Safety Order, Range Regs, SOP for this range, items 1-10 of this brief, and will comply.

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FIRE DESK 703-784-5321/5322

TRAINING SUPPORT CENTER (TSC)

703-432-7026/7029/7031/7969

SUPPORT WAREHOUSE

703-630-0656



RANGE 8A SOP EXCERPT



SPECIAL INSTRUCTIONS/COMMENTS:

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.



LASERS, SESAMS, & sUAS



- 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

[BACK TO SESAMS](#)

UNCLASSIFIED



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

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