

STANDING OPERATING PROCEDURE (SOP)
RANGE OPERATIONS
AUTOMATED FIRING RANGES:
AUTOMATED FIEL FIRE RANGE (AFF)
AUTOMATED RECORD FIRE RANGE (ARF)
MODIFIED RECORD FIRE RANGE (MRF)

IMSM-PLR

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1. References

- a. AR 385-63, 30 January 2016, Range Safety
- b. DA PAM 385-63, 16 April 2014, Range Safety
- c. TC 25-8, 22 July 2016, Training Ranges
- d. TC 3-22.9, 13 May 2006, Rifle and Carbine
- e. ASA Regulation 350-1, 1 October 2016

2. Purpose: To establish guidelines and procedures for operations of AFF, ARF and MRF firing ranges.

3. Organization: Camp Bullis Range Operations falls under the operational control of Army Support Activity (ASA) Joint Base San Antonio (JBSA). The Range Officer is responsible for overall Range Operations and safety. Range Operations consists of Operations, Safety, Range Maintenance, Integrated Training Area Maintenance (ITAM) and Supply.

4. Scope: This SOP applies to all Active, Reserve, National Guard and other agencies that utilize Camp Bullis Range Complex.

5. Certification: Battalion Commanders (or above) will appoint and certify, in writing, that the Officer-in-Charge (OIC) and Range Safety Officer (RSO) are competent in the weapons systems being used.

6. Descriptions

a. AFF Range

(1) Primary use: This range is used for engagement of personnel targets in a simulated combat environment for M16 familiarization firing. There are 20 firing points on this range. At distances of 175, 250 and 300 meters.

(2) Weapons authorized: M16A1/2/A4 and M4

(3) Ammunition authorized: 5.56 mm ammunition

(4) Night fire can be supported on this range

b. ARF Range

(1) Primary use: This range is used for engagement of personnel targets in a simulated combat environment for M16 record firing. There are 16 firing points on this range. At distances of 50, 75, 100, 150, 175, 200, 250 and 300 meters.

- (2) Weapons authorized: M16A1/2/A4 and M4
- (3) Ammunition authorized: 5.56 mm ammunition
- (4) Night fire can be supported on this range

c. MRF Range

(1) Primary use: This range is used for engagement of personnel targets in a simulated combat environment for M16 record firing and field firing. There are 16 firing points on this range. At distances of 25, 50, 75, 100, 150, 175, 200, 250 and 300 meters

- (2) Weapons authorized: M16A1/2/A4 and M4
- (3) Ammunition authorized: 5.56 mm ammunition
- (4) Nuclear Biological & Chemical (NBC) and night fire can be supported on this range

7. Direction of Fire: All target holders are fixed and not to be removed or adjusted from their locations on fixed positions.

8. Left and Right Limit: Left and right designated limit markers are indicated by Red and White markings during daylight hours and a red beam of light during hours of limited visibility.

9. Maximum Elevation: Loaded weapons will be pointed down range at the designated Berm/Impact area in such a manner as to ensure that rounds are trapped by the Berm/Impact area (below the designated fixed target position for each firing position).

10. Targets: Provided by Range Operations.

11. Medical Requirements: Follow guidance In Accordance With (IAW) ASA Regulation 350-1

12. Equipment Requirements:

Item Description	Issuing Facility
ASA Regulation 350-1	Range Operations
AFF, ARF & MRF Range SOP	Range Operations
Range Flag and/or Beam Light (night operations)	Range Operations
Hearing Protection	Using Unit
Brooms	Using Unit
Brass Deflectors for M16A1 Rifles	Using Unit
Emergency Signaling Devices	Using Unit
Radio Communications and Fire Extinguishers	Using Unit
Dedicated Evacuation Vehicle	Using Unit
Additional Equipment IAW unit's TACSOP	Using Unit

13. Personnel Requirements

a. Officer-in-Charge (OIC) must be an E-6 or above and certified in writing by the Battalion Commander in live fire training for weapon(s) used. The OIC must have attended the Range Safety briefing.

b. The RSO must be E-5 or above and certified by the Battalion Commander to be proficient in live fire training for weapon(s) used and must be weapons qualified. The RSO will not have other duties assigned. The RSO must have attended the Range Safety briefing.

c. Line Safeties as required by Range Operations (on average one Line Safety is required for every four firers).

d. Ammunition Supply Point (ASP) personnel as appropriate.

e. Required medical support must be a Combat Life Saver (CLS) or higher. An evacuation vehicle with an aid bag and litter is required.

14. Personnel Responsibilities: The responsibilities of the OIC and RSO can be found in Appendix A and B respectively.

15. Communications

a. Primary means of communications with Range Operation is Frequency 34-20. Hand held radios will be issued by Range Operations when available.

b. Secondary means of communications with Range Operation is via telephone located in the Range Towers. Range Operations' Fire Desk telephone number is (210) 295-7510.

c. The Range Tower is set-up with an electrical Public Announcement (PA) system to facilitate troop movement on the range.

d. Units must make hourly contact with Range Operations during training.

16. Safety

a. The OIC or RSO must give a troop briefing prior to conducting any training. The briefing will include, at a minimum, the items listed in Appendix D.

b. Users are required to utilize a signal clearly heard and understood by all to "Cease Fire/Training".

c. No targets or frames will be moved from designated target areas. Deviation from standard target type and location requires approval from Range Operations.

- d. Muzzle awareness must be emphasized.
- e. Before any weapons leave the firing line, they must be cleared.
- f. If an electrical storm occurs, the RSO will have all weapons locked and cleared and all personnel directed to a safe area.
- g. All personnel will be inspected for brass and ammo prior to leaving the range.

NOTE

Only the OIC, RSO, firers, coaches, and safeties are authorized on the firing line when live fire is in progress. All other personnel must remain in the administrative area(s) designated by the OIC until the live fire exercise has been completed and weapons have been cleared.

17. Conduct of Training

- a. No alterations to the firing range configuration are authorized unless coordinated with the Range Officer.
- b. All vehicles will use designated roads and parking areas. Vehicles are not permitted on the grass.
- c. Risk management must be integrated into the exercise plans and be part of the unit Operations Order (OPORD) for all live fire exercise.

18. Clearing Procedures: Units utilizing the firing range have the inherent responsibility for ensuring the facilities are policed and returned to their original sterile condition upon completion of training. Leaders will ensure that the range complex and any used areas have been inspected and cleared by Range Operations staff before leaving the premises.

19. Restricted Areas: All range and impact areas are restricted.

APPENDIX A
DUTIES OF THE RANGE OFFICER IN CHARGE (OIC)

1. Prior to training/firing the OIC will ensure that:
 - a. He/she is appointed and certified in writing by the Battalion Commander to perform the duties as OIC in a live fire training.
 - b. The firing range is scheduled for unit use.
 - c. An authorized RSO has been designated.
 - d. Both OIC and RSO have received a Range Safety Briefing from Range Operations.
 - e. Both OIC and RSO have read and understand the range SOP.
 - f. A Deliberate Risk Assessment Worksheet has been completed and approved by the appropriate residual risk authority.
 - g. The correct training facility occupied.
 - h. A red range flag is flown from the flag pole. For night training/firing, a beam light will be used in place of a flag.
 - i. Communications have been established with Range Operations. Land line number to Range Operations is (210) 295-7510.
 - j. All personnel are given a Safety Briefing by the ROIC or RSO.
 - k. All equipment required by this SOP and/or other regulations are present on the site.
 - l. All personnel have received a safe handling of ammunition and weapons briefing.
 - m. Road guards, barriers, and/or signs have been posted, if required.
 - n. An approved surface danger zone (SDZ) overlay is on hand, if applicable.
 - o. All personnel are aware of the following:
 - (1) The identity and location of OIC, RSO, Radio/Telephone Operator (RTO), medic, evacuation vehicle, ammo guards, and others as required.
 - (2) The requirement to wear authorized hearing protection.
 - (3) The firing limits of the facility being used.

p. Clearance to conduct training/firing has been granted by Range Operations. When requesting clearance to train/fire, the OIC/RSO will provide the information as required by Range Operations. The OIC/RSO must ensure that the Range Operations initials are recorded for authorization to commence training/firing.

q. Range Operations is provided with unit's call sign and receive a "hot time".

r. The evacuation vehicle driver knows the route to Medical Care Facility.

2. During use of the firing range, the OIC/RSO will ensure that:

a. Weapons effects are observed to ensure projectiles land within the prescribed limits.

b. Weapons are cleared and checked during temporary suspensions of firing.

c. Records are maintained on the type (DODIC) of ammunition fired and number of rounds fired.

d. A cease fire/training is ordered when:

(1) Directed by Range Operations.

(2) A safety violation, accident or incident occurs. If necessary, MEDEVAC will be requested. Range Operations must be notified.

(3) A fire is started. Range Operations will be notified and the unit will fight the fire as long as troops are not endangered.

e. While the range is in a hot status, both the OIC and RSO must be present on the site.

3. After use of the firing range, the OIC will ensure that:

a. All weapons are cleared of ammunition and all ammunition and brass are removed from personnel before departing the range.

b. Ammunition and brass are not abandoned, buried, or otherwise disposed of in an unauthorized manner.

c. All expended brass and residue is collected for turn-in to the ASP.

d. Range is policed and returned to its original condition.

e. Coordination for inspection and final clearance from Range Operation is completed.

APPENDIX B
DUTIES OF THE RANGE SAFETY OFFICER (RSO)

1. The RSO is responsible to the OIC for the safe operation of the range. Prior to training/firing the RSO will ensure that:

- a. He/she is appointed and certified in writing by the Battalion Commander to perform the duties as the RSO in live fire training for weapons used.
- b. The RSO will have no other duties.
- c. He/she has received a Range Safety Briefing from Range Operations.
- d. He/she is thoroughly familiar with the applicable portions of DA PAM 385-63, ASA Regulation 350-1.
- e. Additional safeties/controllers have been briefed on the conduct of training and are familiar with the specific requirements of this SOP.
- f. A red range flag is flown from the flag pole.
- g. Authorization has been granted by Range Operations for night firing. A blinking red light will be used in place of a flag.
- h. Communications have been established with Range Operations (CBOP 2). Land line number to Range Operations is (210) 295-7510.
- i. All equipment required by this directive and/or other regulations are present on the range.
- j. All personnel receive a safety briefing to include a safe handling of ammunition and weapons.
- k. Road guards, barriers, and/or signs have been posted, if required.
- l. An approved surface danger zone (SDZ) overlay is on hand, if applicable.
- m. All personnel are aware of the following:
 - (1) The identity and location of the OIC, RSO, controllers, RTO, medic, evacuation vehicle driver, ammo guards, and others as required.
 - (2) The requirement to wear authorized hearing protection.
 - (3) The firing limits of the facility being used.
- n. Clearance to train/fire has been granted by Range Operations.

o. Range Operations initials and "hot time" is noted as record of clearance to commence training/firing.

p. The evacuation vehicle driver knows the route to Medical Care Facility.

2. During use of Ranges, the RSO will ensure that:

a. Weapon effects are observed to ensure projectiles land within the prescribed limits.

b. Weapons are cleared and checked during temporary suspensions of firing.

c. A cease fire/training is ordered when:

(1) Directed by Range Operations.

(2) A safety violation, accident or incident occurs. If necessary, MEDEVAC will be requested. Range Operations must be notified.

(3) A fire is started. Range Operations will be notified and the unit will fight the fire as long as troops are not endangered.

d. While the site is in a hot status, both the RSO and OIC must be present on the site.

3. After use of the firing range, the RSO will ensure that:

a. All weapons are cleared of ammunition and all ammunition and brass are removed from personnel before departing the site.

b. Ammunition and brass are not abandoned, buried, or otherwise disposed of in an unauthorized manner.

c. All expended brass and residue is collected for turn-in to the ASP.

**APPENDIX C
MEDICAL EVACUATION SUPPORT TO FIRING RANGES SOP**

1. REQUEST FOR MEDEVAC SUPPORT. In the event of serious injury or illness where time may be a factor in saving life, limb, sight, or to prevent undue suffering, aero medical evacuation will be used. The following procedures will be followed:

a. Upon determination of MEDEVAC requirements by the Medic on site, immediately contact Range Operations.

b. Provide the following information to Range Operations in this format:

LINE ONE	Location of Pickup Site
LINE TWO	Call Sign
LINE THREE	Number of patients by precedence: #1 – URGENT: Emergency cases which must be evacuated immediate to save life or limb. #2 – PRIORITY: Patients requiring prompt medical care not locally available. This precedence will be used when it is anticipated that the patient must be evacuated within four hours or his/her medical condition will deteriorate to the degree that he/she will become an URGENT case. #3 – ROUTINE: Patients requiring evacuation but whose condition is not expected to deteriorate significantly during the first several hours or longer.
LINE FOUR	Special Equipment required: None, hoist, semi-rigid litter, forest/jungle penetrator
LINE FIVE	Number of patients by type of wound, injury or illness: Litter, ambulatory (sitting)
LINE SIX	Security of Pickup Site (N/A while in training)
LINE SEVEN	Method of marking Pickup Site: Panels, pyrotechnic/smoke signal, signal person, strips of fabric, tree branches, pieces of wood or stones placed together, signal lamp/flashlight, vehicle lights, open flame
LINE EIGHT	Patient Nationality and Status: US Military, US Civilian, Non-US Military, Non-US Civilian
LINE NINE	NBC Contamination (N/A while in training)
LINE TEN	Terrain Description

<p>NOTE At no time will the name or social security number of injured personnel be transmitted over the radio.</p>

c. After initial call to Range Operations, switch to frequency 34.20 ONLY WHEN INSTRUCTED TO DO SO BY RANGE OPERATIONS.

d. Stay on radio throughout medevac situation.

e. Be prepared to provide SMOKE for DAYLIGHT or LIGHTS for NIGHT at MEDEVAC's request. MEDEVAC will not land to white smoke.

2. After Range Operations has been notified of MEDEVAC departure, Range Operations will resume normal operations unless unusual circumstances exist.

APPENDIX D TROOP BRIEFING

M A N D A T O R Y

TROOP BRIEFING: The OIC or RSO will brief all soldiers on the following items prior to requesting occupation time from Range Operations. This is a general list and does not preclude the unit from emphasizing other areas of concern.

- Identification of OIC and RSO and their responsibilities.
- Location of range cadre, including range OIC, RSO, Safety/Controller personnel, RTO, medic, evacuation vehicle and driver, ammo personnel, and others as required.
- Prescribed uniform while at Firing Range.
- No pushing, shoving or horseplay at anytime while on the site.
- Ammunition holding area/issue point procedures.
- Procedures taken in the event of a fire.
- Medical emergency procedures.
- Vehicles larger than 2 1/2 ton and all tracked vehicles operating administratively within the range require ground guides front and rear.
- Anyone observing an unsafe situation will call **CEASE FIRE/TRAINING**. The exercise will not be resumed until the OIC or RSO has investigated the situation and declared it safe to resume training.
- Animals that have wandered on the site are to be left alone.
- Personal hygiene and use of facilities. Designated chow and break area.
- Soldiers must maintain "muzzle awareness" at all times.
- Firers must not engage targets that have not been designated as targets.
- In case of malfunction
 - The firer having the malfunction will attempt to correct the malfunction by applying immediate action.

- If the malfunction cannot be corrected by immediate action, cease fire, clear the weapon, and notify your Range Safety.

- The firer will maintain positive control of any weapon system while handling or employing it.

- Firers will not hand a weapon to another person until it has been properly unloaded/cleared and the bolt or slide locked to the rear, unless instructed to do otherwise by Range Safety.

- All weapons will be oriented downrange during loading, unloading, and clearing procedures.

- The use of hearing protection is mandatory

- The following extract is from FM 23-9:

- The RSO points out the left and right limits of the range. Firers never fire or point their weapons outside the limits of these poles.

- When not on the firing line, the selector lever is on SAFE and the bolt locked to the rear.

- Consider the weapon loaded at all times, even in the break areas. Never point the weapon at anyone.

- Firers will always enter and exit the firing line at the base of the tower.

- Before occupying the firing positions, inspect the positions for harmful animals and insects.

- Firers will always point the muzzle of the weapon downrange whenever on the firing line. The firing finger is not placed within the trigger housing area.

- When on the firing, the selector lever is on SAFE, the bolt locked to the rear, and the dust is open.

- Never touch your weapon while personnel are downrange or in front of the firing line.

- Load the magazine into the weapon only on the command from the tower.

- Before leaving the firing line, a Safety NCO must clear the weapon.

- Once cleared off the firing line, firers report immediately to the ammunition point and turn in all ammunition and expended brass.

- No one will leave the range until he/she has been inspected for ammunition and brass.