

MEMORANDUM FOR: USERS OF DONNELLY TRAINING FACILITIES

SUBJECT: Standing Operation Procedures (SOP) for conducting Non-Standard Live Firing Ranges.

1. PURPOSE: The purpose of this SOP is to provide guidance for the proper and safe conduct of Non-Standard Live fire ranges in the Donnelly Training Area (DTA).
2. DESCRIPTION: Any area in the Donnelly Training Area (DTA) that is considered a Non-standard firing range.
3. REFERENCES: Any applicable FM or TM and this SOP.
4. WEAPONS AUTHORIZED: By arrangement with Range Control
5. AMMUNITION AUTHORIZED: By arrangement with Range Control
6. MEDICAL SUPPORT: Medical support is required for this range. As a minimum the unit will have a 91B medic with an aid bag and a dedicated driver.
7. EQUIPMENT REQUIREMENTS:

a. USARAK Reg. 350-2	Issued by Range Control
b. Range SOP	Issued by Range Control
c. Range Flag	Issued by Range Control
d. FM and TM's	Using Unit
e. FM Radio or Brick Radio	Using Unit
f. Hearing Protection	Using Unit
g. Bull Horn, if needed	Using Unit
h. Dedicated Evacuation Vehicle	Using Unit
i. Binoculars (2EA)CFA ONLY	Using Unit
j. Surface Danger Zone Overlay	Using Unit
k. Flax Vest (when using HE Ammunition)	Using Unit

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8. PERSONNEL REQUIREMENTS:

- a. OIC: SFC or above (MAJ or above when the exercise is a battalion or larger)
- b. RSO: SSG or above.
- c. Safety NCO's as Determined by OIC
- d. Road Guards (Number determined by approved overlay)
- e. Ammunition guards
- f. Radio Operator
- g. Air Guard Spotters

9. PERSONNEL RESPONSIBILITIES:

- a. Officers in Charge Duties are outlined in ANNEX A of this SOP.
- b. Range Safety Officer duties are outlined in ANNEX B of this SOP.
- c. Safety NCO's must control and move with the maneuvering teams, to ensure no unsafe acts occur. Safety NCO's will be briefed on the concepts of the operation. At least one dry rehearsal, (as many as deemed necessary by the OIC) will be conducted prior to any live-fire exercise. These individuals must have some form of signaling a cease-fire.
- d. The Medic will perform necessary first aid, pending the arrival of a MEDAVAC. The Medic will have no other duties.
- e. The Road Guards will halt all traffic attempting to enter the live-fire area and report their desires to the OIC. If the individual refuses to stop and continues into the live-fire area inform the OIC immediately and call for a cease-fire.
- f. The OIC and RSO must be physically present on the range while in a "Hot Status". If an administrative check-fire has been requested, the OIC and RSO may depart the range. Range control must be notified and a "Hot Status" will not be given until they return.
- g. The Ammunition NCO will monitor the issue and turn-in of all ammunition on the range. The OIC/RSO will ensure that there are no unauthorized personnel in or around the temporary ASP.
- h. The Radio Operator will monitor the radio at all times and will make 60-minute communication checks with range control while in a "Hot Status". Should there be a loss of communication between range control and the unit, a check-fire will be issued by the OIC until communication can be re-established.
- i. Air-guard Spotters will be equipped with Binoculars and situated in such a manner that those individuals can observe the airspace and call for a check-fire should an aircraft enter their airspace.

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10. GENERAL INSTRUCTIONS:

- a. The OIC must meet with the Range Operations Officer a minimum of six weeks in advance to discuss feasibility, location(s), environmental restrictions and other general requirements. During this session the necessary terrain and airspace may be reserved to support the exercise.
- b. Four (4) weeks prior to the exercise start date the OIC will provide to Range Control a detailed written plan of the live fire exercise or CALFEX with surface danger zone overlays. Submission of formal risk management is required prior to conduct of the LFX/CALFEX. All targetry that will be required during the exercise should be requested at this time.
- c. The OIC and RSO will conduct a range walk with representatives from Range Control to confirm limits, surface danger zones, and other constraints.
- d. In addition to the scenario and overlays, the OIC may be required to prepare and environmental assessment or record of environmental consideration. Assistance may be from DPW environmental branch. Be advised that these reports may take up to 5 weeks to process. Use of powered equipment in wet lands requires a wetland permit that may require 180 days to process.
- e. No later than 10 working days before the exercise start date, the OIC and RSO will make final coordination with Range Control to schedule a range walk to verify complete range set-up.
- f. Commanders must ensure that all OICs and RSOs to be used during the live fire exercise or CALFEX are identified and present throughout all phases of the exercise development cycle.
- g. Scheduling of the firing area must include time for setup and clean-up if special installations are required. These installations (trenches, bunkers, wire obstacles, targets, and so on) must be included in the initial proposal, scenario, terrain sketches and environmental considerations.
- h. Before the live-fire, the OIC must ensure that all required road guards and barriers are emplaced. Also, all special requirements (I.E. Overflight of hazard area) are completed and continued for the duration of the exercise.
- i. During the course set-up, the OIC must test road guard communications and the course safety and control systems. All road guards must have communications with the exercise command post, and the command post must have reliable radio communications with Range Control throughout the firing period.
- j. The firing unit commander will determine and enforce hearing protection requirements, the use of flax vest and eye protection.
- k. Positive clearance from a Range Inspector must be received before a unit may close out any training area. All material used in the construction of the course must be removed. As a minimum this must be completed NLT 3 working days after completion of the exercise.

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11. LIVE FIRE SAFETY REQUIREMENTS

- a. Commanders must ensure that all individuals who will take part in live fire training/exercises have fired/used and passed a qualification course for the weapon or system they will use in the training/exercise.
- b. Rehearsals (dry run) must be conducted prior to live fire. Rehearsals will be conducted under the same conditions with the same people as the live fire. (I.E. night rehearsal for night live fire).
- c. During CALFEX, all participants must be oriented on the capabilities of the weapons used by other components in the exercise.
- d. An overflight of the SDZ and surrounding area is required prior to requesting a hot status. Road guards must be emplaced prior to the overflight.
- e. The OIC must establish and brief an emergency check fire system.
- f. All personnel must wear military protective headgear during live fire maneuvers.
- g. All weapons must be safety checked prior to firing live ammunition.
- h. Weapons may only be fired from positions, which provide an unobstructed field of fire.
- i. All personnel throwing hand grenades must be knowledgeable and proficient in the safety precautions for handling, throwing, and disposing of live grenades. All personnel must have successfully completed a grenade qualification/proficiency course within the last 6 months.
- j. When using HE grenades all personnel will wear a flax vest.
- k. All firing must be within the limits established and approved by Range Control.
- l. Equipment receipted from Range Control must be returned following the completion of the exercise.

12. RESTRICTIONS:

- a. Seasonal fire hazards may restrict the use of ammunition to include ball, tracer and pyrotechnics.
- b. Overhead fire is prohibited unless the ASP has issued approved munitions.
- c. No DUD producing munitions may be used.
- d. When using H.E. Grenades coordination with EOD at FRA, 384-7602 prior to training is required. If in the event a unit throws a grenade that does not detonate, all training in that immediate area will cease until that grenade can be removed. Failure for a unit to coordinate with EOD will result in the unit guarding the range until EOD can respond.

APVR-DPTM-RC

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13. Point of contact for this memorandum is the undersigned, 873-4714.

Steven B. Thurmond
GS-12
Range Operation Manager

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ANNEX A

DUTIES OF THE OFFICER IN CHARGE (OIC)

1. Prior to firing the OIC will ensure that:
 - a. The range or firing position is scheduled for unit use.
 - b. An authorized Range Safety Officer (RSO) has been designated.
 - c. Designated RTO and two Aircraft Spotters have been identified.
 - d. The correct Training Facility is occupied.
 - e. A red flag is flying from the flagpole. For night firing a blinking red light will be used in place of a flag. In addition the left and right limits of the range will be marked with blinking red lights.
 - f. Communication has been established with range control.
 - g. All equipment that is required by this directive and the Range SOP are present on the range.
 - h. The danger/impact area is clear of all personnel, vehicles and wildlife.
 - i. All personnel have received a briefing on the safe handling of ammunition and explosives.
 - j. Road guards, signs, and/or barriers have been posted, if required.
 - k. An approved surface danger zone (SDZ) overlay has been approved and is present, if applicable.
 - l. All personnel are aware of the following:
 - (1) The identity and location of range cadre, including the OIC, RSO, Safety NCO's, RTO, Air Spotters, Medic, and Aid Vehicle.

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- (2) The requirements to wear authorized hearing protection while on or near the firing line.
 - (3) The firing limits of the facility being used.
 - (4) The correct procedures for marking and reporting duds, if required.
- m. Clearance to fire has been granted by Range Control. When requesting clearance to fire, the OIC will provide the necessary information contained on the opening and closing sheet to Range Control. The OIC will ensure that the Range Controls NCO's initials are noted on this form as a record of clearance to fire.
2. During the use of the range the OIC will ensure that:
- a. No firing is conducted when the visibility requirements are not met.
 - b. Down range weapons effects are observed to ensure projectiles land within the prescribed range limits.
 - c. Misfires are removed from the weapon only on command of the OIC.
 - d. Weapons are cleared and checked during temporary suspensions of firing.
 - e. Records are maintained on the type of ammunition fired, number of rounds fired and number of duds to include their approximate location.
 - f. A cease fire is ordered when:
 - (1) Directed by range control.
 - (2) Communications with range control or road guards is lost.
 - (3) A malfunction of a weapon or ammunition occurs. The OIC/RSO will initiate a check-fire, notify range control, and ensure nothing is disturbed until the investigation is completed and range control lifts the check-fire.
 - (4) A safety violation, accident or incident occurs.
 - (5) A fire is started

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- (6) Wildlife is discovered on the range.
 - (7) Rounds land or detonate outside the approved safety limits for the range.
 - (8) Either the OIC or RSO leaves the range.
3. After training is completed the OIC will ensure that:
- a. All weapons are cleared of ammunition before departing the firing line.
 - b. All ammunition and or explosives are removed from personnel before departing the range/ training area.
 - c. Ammunition, simulators, explosives and pyrotechnics are not abandoned, buried or otherwise disposed of in an unauthorized manner.
 - d. All expended brass is collected for turn-in to the ASP.
 - e. The range/training area is policed.
 - f. All items in section two of the opening and closing procedures are completed.

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ANNEX B

DUTIES OF THE RANGE SAFETY OFFICER (RSO)

1. The RSO is responsible to the OIC and the commander for the safe operation of the range and will have no other duties.
2. The RSO must be thoroughly familiar with applicable portions of AR 385-63, USARAK Reg. 350-2, this directive and the appropriate FM's and TM's pertinent to the firing and weapon systems being used.
3. The RSO and the Safety Cadre must be actively alert to:
 - a. Personnel movement on and around the firing line or gun line.
 - b. Vehicle and personnel movement on and around the range or firing points.
 - c. Alignment and handling of weapons on and around the firing point.
 - d. Handling of ammunition.
 - e. Clearance of weapons
 - f. Control of smoking areas.
 - g. Control batteries, filters and adapters for laser devices.
 - h. Placement and control of guards, barriers and signs as required.
 - i. Observation of downrange area for unauthorized personnel, vehicles and wildlife.
 - j. Prevention of cross lane firing or firing at other than authorized targets.
 - k. Aircraft entering the range airspace.

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ANNEX C

MEDAVAC SUPPORT

1. In the event of serious injury or illness where time may be a factor in saving a life, limb, sight, or to prevent unnecessary suffering areomedical evacuation can be used. The following procedures will be followed:
 - a. Request MEDAVAC from Range Control, FM 38.30 (primary), or by telephone 873-4714, or 873-4715.
 - b. If unable to contact Range Control, contact MEDAVAC directly on FM Freq. 40.50.
 - c. The requesting units will provide the following information:
 - Line 1 - Location of pickup site (grid if possible).
 - Line 2 - Radio Freq. Call Sign and suffix.
 - Line 3 - Number of patients, by precedence.
 - Line 4 – Special equipment required.
 - Line 5 – Number of patients by type, (litter or ambulance).
 - Line 6 – Number and type of wounds.
 - Line 7 – Methods of marking site.
 - Line 8 – Patients nationality and status, military or civilian.
 - Line 9 – Terrain description
2. NOTE: If the information for lines 6 thru 9 are not immediately available, lines 1 thru 5 should be transmitted first so the MEDAVAC unit is able to begin its mission. When the complete MEDAVAC request is transmitted and received, the requestor will monitor the frequency specified in line 2 and wait for additional instructions or contact the MEDAVAC helicopter.

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ANNEX D

TROOP BRIEFING

1. Troop Briefing: The OIC or RSO will brief all soldiers on the following items prior to requesting a hot status from Range Control. This is a general list and does not preclude the unit from emphasizing other areas of concern.
 - a. Movement on the range.
 - b. Weapons/ ammo malfunction.
 - c. Safe handling of weapons/ammo.
 - d. Duds (reporting and marking).
 - e. Conduct while on the firing line.
 - f. Hearing conservation.
 - g. Firing limits and rounds observed out of approved firing limits.
 - h. Personnel, vehicles, or air craft downrange.
 - i. Range fires.
 - j. Medical emergency procedures.

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ANNEX E

AIRCRAFT SPOTTER PROCEDURES

1. Whenever firing is conducted within a Controlled Firing Area (CFA) Department of the Army Regulations require that the unit conducting the training have dedicated personnel to look for aircraft entering the hazardous area. A minimum of two aircraft spotters is required.
2. Aircraft spotters cannot be assigned any other responsibilities other than observing for non-participating aircraft entering the immediate hazardous (impact) area for artillery or surface danger zone for small arms fire and for 5 mile in any direction from hazardous area.
3. Aircraft spotters will have in their possession binoculars and a means of communication between themselves and the OIC or RSO to place the unit at a check-fire should aircraft enter the hazardous area. If possible, obtain the tail number, description and relay this information to Range Control. Units cannot go back to a hot status until the aircraft spotters have confirmed to the OIC/RSO that the aircraft has exited the hazardous area.