

DEPARTMENT OF THE ARMY
Headquarters, United States Army
Training Center and Fort Jackson
Fort Jackson, South Carolina 29207

Fort Jackson Regulation
350-14

15 March 2013

TRAINING
POST TRAINING LAND AND RANGE REGULATION

Summary. This regulation prescribes policies and procedures for Training Land and Range utilization at Fort Jackson.

Applicability. This regulation applies to all personnel Active Component (AC) and Reserve Component (RC), training brigades, tenant organizations, directorates, and other organizations located on Fort Jackson. Exemptions from the provisions of this regulation may be requested from Commander, Fort Jackson, ATTN: ATZJ-CG.

Suggested Improvements. The proponent of this regulation is DPTMS, Range Operations. Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Commander, HQ, Fort Jackson, ATTN: ATZJ-CG, Fort Jackson, SC 29207.

OFFICIAL:

////Original Signed////
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Chapter 1: General**1-1. Purpose.**

- a. To provide a “train as you fight” atmosphere through proper utilization of all available ranges, facilities, and training areas consistent with appropriate environmental regulations as well as procedures and safety measures to prevent injury to personnel or damage to property, and meet installation campaign objective 4.0 and major objective: 4.1.ICW 4.1.1.; 4.1.2. Range Complex Master Plan (RCMP); 4.1.3.Range Development Plan (RDP); 4.1.4. and 4.1.5.
- b. To establish standard terminology for ranges, training areas, and impact area operations (Appendix A).
- c. To provide a list of ranges facilities (Appendix B), bivouac sites (Chapters 6&7), training areas, and impact areas.
- d. To prescribe procedures for requesting use of ranges, training facilities/areas, impact areas, and deviations (waivers) from standards and procedures.
- e. To prescribe responsibilities and procedures for the safe conduct of training on ranges, in training areas, (Artillery/Mortar Safety see Appendix C), impact areas, and on training facilities.

1-2. Applicability/Enforcement Procedures.

- a. Unless directed otherwise, this regulation applies to all tenant and non-tenant units and personnel conducting training and weapons firing on the Fort Jackson Military Reservation, recreational ranges located at Andrew Jackson Range, Aachen Range, the Flyers Club off of Wildcat Road, as well as archery-only hunting areas (bow areas). Recreational areas are to follow requirements listed in this regulation and scheduling and safety still apply. Each installation proponent for the above recreational activities will have in effect standing operating procedures (SOPs) and risk assessments for range safety and use. The SOP and risk assessment documents will be coordinated through Range Operations and the Fort Jackson Safety Center Office for approval. Procedures for recreational ranges and areas will be covered in specific SOPs and may vary slightly from this regulation for training but not from AR 385-63, DA Pamphlet 385-63, AR 350-19, and FJ 385-10.
- b. This regulation’s enforcement procedures are to provide for the safe and proper utilization of ranges, facilities and training areas, and prohibit certain acts that are unsafe or adversely affect the sustainment of these facilities. To protect military personnel and civilians, the sustainment of training and these facilities at Fort Jackson, violation of this regulation may result in disciplinary and punitive sanctions. Additionally, military personnel in violation of the prohibited acts may be subject to administrative disciplinary action, and applicable state military codes or prosecution under the provisions of the UCMJ, as well as administrative action or criminal prosecution as authorized. Violations of federal or assimilated state law may result in

prosecution before the United States Magistrate's Court or the appropriate United States District Court of South Carolina (SC).

1-3. References. Required publications and forms are in Chapter 20.

1-4. Range Related Meetings.

a. Range Modernization. Interdisciplinary Planning Team (IPT) meeting is conducted monthly or as directed by the Director, Directorate of Plans, Training, Mobilization, and Security (DPTMS), Fort Jackson, to discuss and update range requirements and status for existing and emerging weapons systems to support active component (AC), National Guard (NG), and reserve component (USAR) pre and post mobilization training. Projects are forwarded to the Public Works Council (PWC). The PWC for range projects are required to review any temporary or permanent planned construction within the Fort Jackson Range and Training Complex prior to final approval. The IPT meeting is the core for the development of the annual Range Master Complex Plan (RCMP) and the Range Development Plan (RDP) IAW AR 350-19, The Army Sustainable Range Program.

b. The Range Improvement Council (RIC) meeting is held quarterly to coordinate an opportunity to share ideas, lessons learned, best business practices, and to determine the way ahead that maximizes the operations, maintenance, and sustainment of our training areas, training lands, and training ranges in support of the development of our Range Complex Master Plan (RCMP), Range Development Plan (RDP) and Senior Commander's Installation Needs and Issues (SCINI) will have on range facilities and training areas.

c. Bi-monthly Range Coordination Meeting. Provides a current update/status of major training ranges, training areas, and training lands. Additionally, provides a forum for open discussion with comments, data, and information that impacts training of our troops.

d. Monthly Range Spend Plan Briefings. Provided to the Garrison Commander as an update on the fiscal year range and training area expenditures and budget.

1-5. Range Assignments.

a. The Fort Jackson Range/Training Area Complex Area is that part of the Fort Jackson Military Reservation outside the confines of the Main Post boundaries and includes McCrady Training Center (MTC) 16,000 acres of licensed maneuver/training land areas. The Fort Jackson range area is further defined as:

(1) South of I-77 to Percival Road East Exit off of I-77, from Percival Road I-77 East Exit road / I-77 overpass, northeast to intersection of Highway 268, North Boundary Road (Screaming Eagle Road).

(2) West Southwest of Highway 268 from Highway 12 intersection southeast to intersection of Highway 601.

(3) West of Highway 601 from Highway 268 intersection, south to intersection at Highway 262 (Leesburg Road).

(4) North of Highway 262 (Leesburg Road) from Highway 601 intersection to intersection of Ewell Road.

(5) Northeast of Highway 262 (Leesburg Road) from Ewell Road intersection north to intersection at Hartsville Guard and Golden Arrow Road and Boyden Arbor Road at I-77 intersection.

b. All assignment of bivouac sites, live-fire and non live-fire ranges, landing zones (LZ), firing points (FP), and training areas will be made by DPTMS, except as otherwise indicated.

c. Integrated Training Area Management (ITAM). Maps of Fort Jackson Military Reservation (1:50,000) are available at DPTMS ITAM office, Bldg. F7904, Dixie Road. Use only the Fort Jackson map, 100,000 Meter Grid Identifier: NT (all other Fort Jackson maps NH are superseded).

1-6. Subdivision of Training Areas.

Training areas are subdivided into 122 specific training areas (TAs) with 13 bow areas (BAs) and are assigned alpha-numeric character(s) (See Appendix D-1). Each TA/BA is bound by known terrain features (natural and man-made) which can be easily defined both on the map and on the ground. The small arms impact area (West) and east impact area (EIA) will be named as such. However, the small arms impact area (West) has also been subdivided due to its low threat and maneuver capabilities. The east impact area (EIA) will remain as a high threat with controlled access IAW AR 385-63, DA Pamphlet 385-63, and AR 350-19.

Note: Both impact areas are restricted with controlled access. Access authorization must be approved by Range Operations and then scheduled for use by DPTMS Scheduling before any entry is attempted (See paragraph 1-14 and Appendix D-1).

1-7. Entry Onto Ranges.

Fort Jackson Military Reservation is comprised of a myriad of live-fire ranges and two relatively large impact areas. Users must not assume that this installation is open for training. Entry onto a range facility or training site without proper coordination is prohibited. Once training is approved by scheduling, coordination will be made through Fort Jackson's Range Operations, telephone (803) 751-7171/4732.

1-8. Medical Requirements and Medical Evacuation (MEDEVAC).

a. Commanders must ensure medic and field ambulance services are available prior to conducting training involving live ammunition, demolitions, or other hazardous activities. In addition, they will ensure appropriate medical supplies are present on the range or gun position prior to the start of training. Commanders using two or more ranges or gun positions will provide a properly updated (checked within a 24-hour period) Combat Life Saver (CLS) bag for each range or gun position (artillery, mortars, MLRS, etc.).

Facility	Medic	CLS	Ambulance/ CASEVAC Vehicle
All BRM Ranges		X	
All High Risk Ranges (see below c.)	X		X
All Medium Risk Ranges		X	
All Non-Live Fire Ranges		X	

Table 1 – 1. Medical Support

b. For the purpose of this regulation, “appropriate medical supplies” is interpreted to mean: immediate medical necessity items used to stop the bleeding, protect the wound, and clear the airway. Medical supply items can be obtained through normal supply channels.

Note: Advance Life is provided by the installation’s Emergency Medical Services (EMS) located at the Central Emergency Services Center on Fort Jackson Blvd. Wanat Forward Medical Aid Station provides medical support to units on a limited basis. Monday – Saturday 0700 – 1700, with the exception of holidays and training holidays.

c. Wanat Mounted/Dismounted Convoy Operations (if ball ammunition is authorized), Omaha Beach, Remagen, Abernathy Night Infiltration Course (NIC), Anzio Convoy Operations (if ball ammunition is authorized), and the Urban Assault Course (UAC) (if ball ammunition is authorized), and Fire Team and Movement (if ball ammunition is authorized), are **HIGH RISK** ranges. When the above ranges are operational in high risk status, medical personnel/vehicle will be present on the range and are supported by Fort Jackson Emergency Medical Service (EMS).

d. Evacuation Support.

(1) Medical evacuation by ground can be requested by dialing 911 from any landline or (803) 751-9111 from a cell phone and requesting Fort Jackson ambulance support. Range Operations can assist at (803) 751-7171 / 4732 or hand held radio.

Note: Units are authorized to call EMS for all medical emergencies. Units and cadre are required to notify Range Operations of all ammunition, weapons accidents and incidents, personnel injuries, and damage to the training facility.

(2) Air-medical evacuation (AIR MEDEVAC) support will be requested by dialing 911 from any landline or (803) 751-9111 from a cell phone, through Range Operations radio net, or by telephone (803) 751-7171 / 4732 requesting Fort Jackson ambulance support. Off-post civilian air-medical helicopters which are based at area hospitals will be the supporting force for AIR MEDEVAC.

(3) Ground evacuation support is provided at Ambulance Exchange Points (AXP) (Appendix D-7) and for the training complex outside of the cantonment area, as well as all areas within the cantonment area by EMS and/or Wanat Forward Aid Station (when operational and available).

(4) All training units will utilize the nearest check point for routine medical requirements and to expedite movement of casualties with moderate injuries towards advanced medical support.

(5) Units conducting training with organic medical support, vehicles, personnel, and equipment will provide their own medical support (certified CLS with an updated medical/aid bag) when training on Fort Jackson.

(6) All units training within the South Carolina Army National Guard Licensed Area McCrady Training Center (MTC), (Figure D-2) will coordinate for medical support through MTC Operations at (803) 806-2207 or through DPTMS Scheduling Branch at (803) 751-7586.

(7) Sister Services (US Navy, US Air Force, and USMC) units will coordinate for support 90 days prior to scheduled training date or bring organic medical personnel/vehicles.

Note: Personnel who request evacuation must understand the requirement for on-site stabilization of the casualty. In areas close to main post, the most rapid response, which includes on-site stabilization, is obtainable only via ground ambulance section, Moncrief Army Community Hospital (MACH).

(8) Requester will provide the following information:

- (a) Type of request – air or ground evacuation support.
- (b) Location of patient(s) by grid coordinate, prominent terrain feature, or site name.
- (c) Number of patient(s) (litter/ambulatory) and type of injury / injuries.
- (d) Weather and hazards to ambulance at pick-up.

(e) Type of incident (automobile, weapon explosion, etc).

(f) Name, rank, unit, and telephone number of requester.

(g) Frequency and call sign, if radio is present at pick-up site.

(h) Personnel reporting emergencies to Range Operations will not break communications with Range Operations until released by Range Operations.

1-9. Commercial Fireworks.

Commercially manufactured fireworks (civilian use) will not be handled, stored, or used for training in any way by military or civilian personnel on Fort Jackson.

1-10. Time Limitations for Demolition Explosives.

Demolition explosions are not permitted between 2400-0630 daily. Sunday demolition explosions are not permitted between the hours of 1000-1300.

1-11. Range Fires.

Anyone observing a fire in any training area will report it immediately to the Fort Jackson Fire Department via 911 (landline) or (803) 751-9111 (cell phone) and then Range Operations at 751-7171 / 4732 providing the location of the fire to the dispatcher. All Soldiers must be evacuated to a safe location upwind of the fire. OIC's of using units on ranges and training areas will utilize water and/or sand to extinguish any fires observed in their areas, *if Safe to do so*. No one is authorized to enter any impact area for the purpose of fighting fires, unless authorized by Range Operations.

1-12. Fire Prevention.

a. Units conducting training will maintain programs of fire prevention, reporting, and fighting fire IAW FJ 420-90.

b. The senior officer or NCO at any range, training area, or facility is designated as the fire marshall.

c. Range Operations will be notified by the OIC to gain clearance and to receive the fire class and any fire hazard warning(s), prior to firing any pyrotechnic ordnance to include: tracer, demolitions, smoke pots, smoke grenades, white phosphorus, or any other fire producing devices.

d. Areas of emphasis include:

(1) All flammable debris and material must be removed to a minimum safe distance of 50 feet from any demolition pit and/or open fires.

(2) Flammable material such as paint and paint thinner should be stored in an approved flammable storage cabinet. Flammable cylinders such as oxygen and acetylene should be chained and stored separately.

(3) No open flames, fire barrels, or intentional open burning is authorized without permission from DPW Forestry Branch and Range Operations.

(4) Tent heaters will be operated IAW TM 10-4500-200-13 and IAW FJ 385-10.

(5) Only Army approved heaters are authorized.

(6) Personnel using ranges or training areas where warming tents are available and in use will adhere to the SOPs provided for and risk assessments for safe operation of the heating and ventilation systems. Operators will be trained and have an operator license annotated on DA Form 348 for the heating system that is being used.

(7) The area surrounding the warming tent will be cleared of combustible material at a point no closer than five meters. Two 55 gallon water barrels will be on hand for fire prevention and four 5-gallon buckets.

(8) Smoking is prohibited on all ranges, training areas, training facilities, and impact areas (except in designated smoking areas).

1-13. Impact Areas.

a. Impact areas on Fort Jackson are strictly prohibited for entry without clearance from Range Operations. If any entry is required, the following coordination and actions must be completed through DPTMS, Scheduling Office:

(1) Each October, submit annual recurring Unexploded Ordnance (UXO) surface clearance requirements and locations for the East Impact Area (EIA), as well as West Impact Area (WIA) known UXO areas to DPTMS Scheduling Office. These requirements will be the basis for Explosive Ordnance Disposal (EOD) surface clearance priority of work within each impact area. EOD will surface clear requested areas, roads, and fire breaks within the EIA and known concentrated UXO areas within the WIA, NLT January annually.

(2) Non-DoD organizations will submit impact area request letter to the DPTMS for installation commander decision per AR 385-63. Upon approval, EOD escort is required IAW AR 385-63 and DA Pamphlet 385-63, Release of Liability forms, that will be signed and presented to Range Operations prior to impact area entry.

(3) DoD organizations will submit memorandum request NLT 14 days prior to impact area entry to DPTMS Scheduling.

(4) Impact area memorandums must include, as a minimum:

(a) Names of personnel and POC telephone number, purpose, and detailed justification for entry.

(b) Map outline of work areas and routes: roads, fire breaks for use.

(c) Date and time for entry and exit.

(d) Estimated time in impact area.

(e) Personnel entering impact areas must have received EOD UXO training within the last 12 months of request date.

(f) The two-man rule will be adhered to by impact area users, including Main Tank target pit areas. One person will have radio communication with Range Operations at all times.

(g) Civilian contractors (non-DoD organization) under contract terms for entry into UXO areas will provide a memorandum for request for impact area access and include a waiver and hold harmless provision from their employer.

(5) Requests for emergency (i.e. wildfires) and UXO entry into the EIA or WIA will be coordinated with Range Operations, prior to entry.

(6) Range Operations will request EOD UXO surface clearance of any area, road, or fire break within the safety fan for artillery and mortars NLT 48 hours after live-fire completion.

b. Requirements for entry into the EIA.

(1) Bastogne (Active) and Casablanca Range (Active) 40mm High Explosive (HE) and AT-4 Target Area controlled burn.

(a) Follow procedures in paragraph 1-13a (1) through (6).

(b) Prescribed burning is authorized for daylight only. Prescribed burns will be ignited from the cleared dirt road circling the inactive 40mm target area. Wildland fire personnel will depart area after the back burn is started. Personnel will observe fire from a 100 meter distance from Bastogne's and Casablanca's active UXO 40mm HE target area.

(c) Entry into the active and or inactive UXO 40mm HE target area is authorized for EOD qualified personnel only. All others will be escorted by EOD personnel when entering active or inactive 40mm HE target area(s).

(d) EOD will clear 40mm active and inactive impact target areas once a year detonating all UXO (DUDS) found.

(2) Prescribed Burning of other portions of EIA.

(a) Follow procedures in paragraph 1-13a (1) through (6).

(b) DPTMS and DPW Forestry Branch, aerial and ground burn Memorandum of Agreement (MOA) in effect.

(c) Vehicle and foot traffic is restricted to EOD cleared dirt roads or fire breaks.

(d) Foot traffic will not deviate from a 5 meter standard off of cleared roads or fire breaks.

(e) Off-post wildland fire suppression assistance is not authorized inside the EIA or other designated UXO areas.

(f) Wildland fire suppression on Red Diamond road location of NT 16606605 to NT 17606625 will follow the same procedures listed for prescribed burning Bastogne and Casablanca Ranges due to a heavy concentration of UXO ammunition.

(3) Wildland fire suppression in EIA.

(a) Daylight hours (sunrise to sunset).

(b) DPW Forestry Branch will coordinate suppression plan with Range Operations prior to entry into EIA.

(c) Vehicle and foot traffic are restricted to EOD cleared dirt roads or fire breaks.

(d) Foot traffic will not deviate from 5 meter standard off of cleared roads or fire breaks.

(e) Non-DoD and civilian off-post wildland fire suppression assistance is not authorized inside the EIA.

(f) Wildland fire suppression on Red Diamond road location of NT 16606605 to NT 17606625 will follow the same procedures listed for prescribe burning Bastogne and Casablanca Ranges due to a heavy concentration of UXO ammunition.

(g) Use of bulldozers is limited to roads and fire breaks on or outside EIA official boundaries.

(4) EIA night hours (sunset to sunrise).

(a) DPW Forestry Branch will coordinate suppression plan with Range Operations without exception.

(b) Range Operations and DPW Forestry Branch Incident Commander will ensure that vehicle and foot traffic are limited to the impact area boundary roads.

(c) Foot traffic will not deviate from the 5 impact area boundary roads/fire breaks.

(d) Non-DoD and civilian off post wildland fire suppression assistance is not authorized inside the EIA.

(e) Wildland fire suppression on Red Diamond road location of NT 16606605 to NT 17606625 will follow the same procedures listed for prescribed burning Bastogne and Casablanca Ranges because of a heavy concentration of UXO ammunition.

(f) Use of bulldozers inside the EIA during hours of darkness off of cleared dirt roads and fire breaks is prohibited. Bulldozers can be used on roads and fire breaks on or outside EIA official boundaries.

(5) Road grading in EIA (Must have Range Operations Officer's written permission).

(a) Follow procedures in paragraph 1-13a (1) through (6).

(b) No road grading from sunset to sunrise, except as needed in support of wildfire suppression actions. Approval from Range Operations will be obtained prior to EIA entry.

(c) Road grading from NT 16606605 to NT 17606625 will require EOD escort, prior submission of signed high risk assessment, and grade work plan.

(6) UXO detonation disposal in EIA.

(a) On-call coordination is authorized with Range Operations. UXO detonation site must rotate on a daily basis.

(b) UXO detonation will be conducted during daylight hours with no lightning within 50 nautical miles of Fort Jackson.

(c) EPA regulations apply. UXO detonation exceeding 200 lbs., outside of RST-4, requires Range Operations and command group approval as an exception to policy.

(7) Threatened and endangered (T&E) plant management in EIA.

(a) Follow procedures in paragraph 1-13a (1) through (6).

(b) Forestry Branch personnel may prescribed burn T & E plant areas annually. After each prescribed burn, EOD will surface clear the plant area within the EIA.

(c) No entry in the EIA after sunset.

(d) If artillery and or mortar ammunition is fired over the plant area in the EIA, Range Operations will request an EOD surface clearance within 48 hours of completed live-fire.

(8) Red-cockaded woodpecker (RCW) management in EIA.

(a) RCW approved work lanes will be re-cleared annually by EOD certified and qualified personnel.

(b) If artillery and or mortar ammunition is fired over the RCW lanes in the EIA, Range Operations will request an EOD surface clearance within 48 hours of completed live-fire.

(c) Entry to EOD- cleared RCW cluster sites and lanes are restricted to 1 hour before sunrise and exit 1/2 hour prior to sunset.

(d) ACH and body armor protection will be worn at all times when conducting RCW work in the EIA. The EIA is a heavily concentrated area for UXO, High Explosive (HE) fused ammunition, and IAW AR 385-63, the EIA is a HIGH RISK area for all personnel.

(e) RCW personnel may remove head gear and body armor within the UXO surfaced cleared lanes only to check a tree cavity, if the UXO trained and certified individual deems it is safe to do so.

(9) Training and Target/Equipment Maintenance in EIA.

(a) Entry or access into any designated impact area to include training and/or maintenance purpose requires DPTMS Installation Range Operations Officer's written permission prior to entry or access. Personnel authorized by the Range Operations Officer into an impact area will receive a briefing on the hazards of UXO's by DPTMS Range Operations Officer and EOD personnel prior to authorized entry into any designated impact area.

(b) Follow procedures in paragraph 1-13a (1) through (6).

(c) Wheeled or mechanized vehicle, personnel, and equipment movements will be on cleared roads, firebreaks, and access trails during daylight hours only.

(d) Areas requiring digging/soil disruption will be conducted during daylight hours only. All digging requirements will be included in the scheduling memorandum. Entry for digging will not be granted until an EOD organization provides sub-surface clearance document(s) to DPTMS Scheduling.

(10) Hunting in EIA. Maneuver training and hunting within the EIA is not authorized (Dog drives require the installation commander approval).

(11) Digging within the Training Range Complex.

(a) As required by Fort Jackson Regulation 200-8, units and activities must submit a completed record of environmental consideration (REC) form to DPW, ENV, for any proposed actions or activities that may result in environmental impacts, such as any new construction, operational or training changes, establishment of new bivouac sites, soil disturbance to include digging fighting positions, building construction, renovation and maintenance, and tree removal. The REC form should be submitted at least 30 days prior to the proposed start of the action or activity so that the environmental review can be completed. Once the review is completed a Memorandum of Environmental Consideration (MOEC) will be sent to the project proponent. The MOEC will include information on the restrictions and requirements specific to the proposed project. Record of Environmental Consideration forms is available at the DPW, ENV, Office at Building 2563, Essayons Way.

(b) ITAM ICA Range Operations will submit an annual blanket digging permit and REC for frequently used Training Areas areas, based on most commonly used training areas, in support of FTXs, Victory Forge Exercise, and etc. Any other Training Area units wish to dig must submit a request for a digging permit as indicated in (a) above.

(c) Units will not assume they can dig anywhere on the installation with our approval and proper permit

c. Requirements for entry into the WIA.

(1) Follow procedures in paragraph 1-13a (1) – (6).

(2) DPW Forestry Branch and DPTMS aerial and ground burn MOA in effect.

d. Impact Area Limits and Restrictions. There will not be any live-fire, hunting, or UXO/demolition explosions in either impact areas between the hours of 0600 to 0730, daily. The time period of 0600 to 0730 is for range and impact area maintenance, ITAM, DOL, and DPW activities within target areas. All impact area requirements must be approved by Range Operations and then scheduled by DPTMS Scheduling Office, exceptions after regular duty hours, weekends, and holidays will be considered by Range Operations.

e. Impact area descriptions:

(1) West Impact Area (WIA) is bounded by Dixie, Wildcat, Hartsville Guard, and Golden Arrow Roads. This impact area is primarily used for small arms fire.

(2) East Impact Area (EIA) is bounded by grid lines eastings: 13, 20, and northings: 63 and 68 on Fort Jackson Map, V746S, 1:50,000. The EIA is primarily used for large caliber weapons, demolitions, and high explosive fused ammunition.

1-14. Construction and Modification of Ranges/Training Facilities and Training Areas.

a. As part of the RIC meeting, units/organizations can submit requests to modify existing training facilities, ranges, and training areas for minor or major construction to DPTMS IAW AR 350-19, Chapter 3, section II. The request will be on a memorandum stating who, what, where, when, and why.

b. Each January for the next fiscal year, the commander of Bravo Company, 4-10 Infantry, Range Operations, and the SCARNG will develop and/or will update their 5-year maintenance plans for the repair of existing ranges, training facilities, training areas, and other areas that require update. These 5-year plans will be developed by requirements that need to be accomplished each fiscal year. Format will be as directed by DPTMS. Items that will be in each 5-year plan are:

(1) Minor modifications to facilities, such as painting, fencing, posting of signs, installation of barriers, minor erosion control efforts, range road improvements, and small construction projects required by the proponent agency.

(2) Major modifications to existing facilities and all new facility construction projects must be coordinated with the Installation Range Officer before submission to DPTMS. The provisions of AR 350-19, Chapter 3, section II, paragraphs 3-3 and 3-4 apply. DPW can provide assistance in the review and analysis of your requirements. Current engineering references include AR 420-1, Chapter 4 and DA PAM 420-1-2. It is highly suggested that the submitter address and provide the following:

(a) Requirement – Why is the project needed now? Give detailed statements as to why the project is needed. Include subject to be taught or table to be fired, and through put plan.

(b) Current Situation – How is the need currently being met? Describe how and under what conditions the need is being met, including facility number and use. Comments should support the need by describing the assets in use; give reasons why they are not suitable for continued use. Include all compelling reasons for project approval. Data should be specific; include data for each project if different.

(c) Impact – if not provided – what will be the result if the project is not approved? Describe the manner and extent to which mission accomplishment would be affected if the project was not approved.

(d) Consideration of Alternatives – Present evidence that all alternatives have been examined, evaluated, and rejected in favor of the project.

(e) Analysis of Deficiency – evaluate the quality of the facilities now being used. Determine physical deficiencies and how they hinder accomplishment of the mission.

(f) Communication Requirements - Consider what changes will need to be made in conjunction with each project: installing phone cable for new facilities, expand existing capabilities, re-route lines. When in doubt, consult Network Enterprise Center (NEC) personnel.

c. Each March, DPTMS will forward maintenance plans, ITAM support projects, and major construction projects to the IDP group for review, prioritization of projects, DPW cost estimates developed for projects, and projects which DPW can fund in the next fiscal year and for finalization of a 5-year Range Modernization/Maintenance Plan (RMMP). Network Enterprise Center (NEC) will review projects, estimate costs, and determine what NEC can fund in the 5-year Communication Plan. The RMMP will be briefed to the Commanding General each May. When the Commanding General modifies and approves the RCMP and the RDP then DRM, DPW, and NEC will adjust funding of projects as directed.

d. Range Improvement Council (RIC) identified requirements will be incorporated into range upgrades/modification plan once they have been validated by the range officer and upon DPTMS and Garrison Commander direction. Approved spend plan costs will be annotated on work order(s) and required National Environmental Policy Act (NEPA) documents submitted to DPW. NEPA procedures are outlined in chapters 2-6 and 7-7.

e. Unit commanders who desire to construct a range or training facility must obtain the approval from DPTMS. Prior to approval, all requirements will be coordinated with the Installation Range Officer to assure adequate space and compliance with this directive and other safety directives. Prior to the establishment of any non-permanent range or erection of any permanent structures, approval will be obtained from the Installation Range Officer, Master Planning and Fort Jackson Safety Center.

f. No major modification of a range will be made without prior approval from the Installation Range Officer and Fort Jackson Safety Center.

g. Deviations must be IAW TC 25-8 and AR/DA PAM 385-63.

1-15. Policing.

a. Commanders are responsible for policing of the Fort Jackson Reservation as prescribed by the installation commander.

b. Upon completion of training, the OIC or RSO will have the unit conduct a thorough police of the range, FTX site, bivouac site, or areas occupied during training, to ensure that no trash, ammunition of any type, boxes, or other debris have been left in the area. Prior to departure from a range or training area, the OIC will contact Range Operations and request a clearance inspection, unless instructed differently by Range Operations. If the occupying unit has not properly signed for that training range or training area from Range Operations, the OIC will sign for the range or training area "as is." If it is impossible for the inspection to be conducted prior to unit's departure or if inspection conducted is unsatisfactory, the OIC will designate a responsible individual (preferably an individual who participated in the field training exercise) to accompany Range Operations on a subsequent inspection within 24 hours. Failure to police or clear within 72 hours will result in an unsatisfactory report, which will be forwarded to DPTMS and representative user's brigade S3.

c. When an area is found by Range Operations to be in a poor state of police, the last known using or road march unit will be required to return to the area within 24 hours of notification and police it thoroughly or Range Operations will use detail support to police the location.

d. For further regulatory guidance concerning disposition of trash and residue on federal property refer to DPW Environmental Office at 751-5011.

1-16. Privately Owned Vehicles (POVs).

a. POVs are prohibited in any training or bivouac area, on any observation position (OP), impact area, and firebreaks. POVs are prohibited from parking on roads traversing or providing access to these areas, or ranges or roads adjacent to the ranges. POVs will not be used for transportation of BCT/AIT Soldiers in training, military equipment, weapons, ammunition, or pyrotechnics to or from ranges or training areas.

b. Only Range Cadre is authorized to operate POVs on Train Fire road to get to the cadre parking areas.

c. Off-road vehicles of any type are prohibited for recreational use on any tank trails, fire breaks, secondary dirt roads, or trails within the training area complex IAW FJ supplement 1 to AR 190-5.

d. POVs may be operated on secondary roads during hunting season provided an area control card (ACC) is provided by authorized personnel at Marion Street Station and is properly displayed in the windshield. POVs are not authorized in the EIA or any known or suspected UXO areas.

Note: Deer Season normally runs from 15 August to 1 January each year.

e. POV entry into either impact area is considered hazardous and is prohibited. Roads off limits to POV traffic are designated with signs indicating such. Range Operations will notify the Director of Emergency Services (DES) for POVs discovered inside a posted and known impact area or training area without an ACC.

f. All units and individuals within the Range and Training Area Complex will park their POVs in designated POV parking locations. Individuals and units are responsible for vehicle security. Requests for additional parking areas will be made through Range Operations at least six weeks in advance.

g. Violators of any of the above directives will be reported to DES.

1-17. Speed Limits and Vehicle Safety in Military Vehicles. (Also, see FJ 385-10, Chapter 13).

a. No tactical vehicle will travel faster than 40 miles per hour on hard surface roads or 25 miles per hour on unpaved roads.

b. Speed limits will be adhered to by all drivers, except when lesser speed limits are posted, or when weather or roads conditions dictate more prudent and reasonable speed.

c. The speed limit when approaching or passing a troop formation (marching or PT . . . etc) from either the front or rear is 10 mph.

d. Maximum speed limit when transporting troops in vehicles is 30 MPH, except when the posted speed limit is less than 30 mph.

e. Vehicles used to transport personnel will not exceed the following number of personnel (including operator) for the type vehicles listed below (for other type vehicles see FJ 385-10, Chapter 16):

Vehicle	Designated Seating	Cargo Space
Passenger vehicles	1 per seatbelt	0
Pick-up truck	1 per seatbelt	0
Van	1 per seatbelt	0
1-ton Truck	1 per seatbelt	0
1-ton Truck (extended bed)	1 per seatbelt	0
Bus	2 per bench	0
Powered Industrial Trucks	1 per seatbelt	0
Utility vehicles (Mule/Gator/similar vehicles)	1 per seatbelt	0
ATVs	1 per seat	0
2 ½ -ton Truck (includes LMTV family)	1 per seatbelt	12
5-ton Truck (includes LMTV family)	1 per seatbelt	14

Table 1-2. Vehicle Passengers.

f. All personnel will remain seated completely within the cargo bed of the approved vehicle in complete uniform with appropriate headgear. While transporting personnel, a troop strap will be utilized. Personnel will be instructed not to lean against the tailgate of the vehicle.

g. Parked tactical vehicles with the motor running will not have personnel sleeping in or around the vehicle.

h. Drivers will not back vehicles without first checking for clearance and giving warning. Ground guides must be used for vehicles that transport 12 or more passengers (including unit vans), trucks 1 ton and larger, troop areas, and when visibility is limited or obstructed.

i. When operating tactical vehicles, to include 2 ½-Ton trucks, 5-Ton trucks, and High Mobility Multipurpose Wheeled Vehicles, ensure all occupants are wearing ACH or CVCs.

j. Ground guides are required when going through or coming out of assembly areas.

k. Vehicle Operations In Training Areas.

(1) Field training areas pose unique hazards due to the operating conditions and the proximity of Soldiers to moving vehicles in a tactical environment. The following principles will be adhered to for Fort Jackson training activities:

(a) While operating in a troop area, vehicle operators will physically check to ensure appropriate clearance prior to moving any vehicle.

(b) The use of ground guides is mandatory in troop areas, regardless of vehicle size.

(c) Units will designate and enforce a dismount point at the perimeter entry.

(d) Vehicle operators driving with Night Vision Devices (NVDs), or in blackout drive, will have met the training and testing requirements of AR 600-55.

(e) Parking lights will not be substituted for blackout drive on non-tactical vehicles.

(f) Vehicles and trailers will be parked in such a way as to prevent their rolling into the bivouac area.

(g) Barrier material, such as concertina, barricades, abates, etc, will not be emplaced across any Fort Jackson roadway, paved or otherwise, without express prior approval by the Fort Jackson Range Operations Officer.

(2) Vehicles and equipment will be thoroughly inspected and safety deficiencies corrected before deployment.

(3) Vehicle and equipment operators will be trained and licensed before the exercise.

(4) At no time will untrained, unlicensed personnel operate vehicles or equipment.

I. Motor Vehicles Operations In The Vicinity Of Troops.

(1) While operating in a troop area, vehicle operators will physically check to ensure appropriate clearance prior to moving any vehicle.

(2) The use of ground guides is mandatory in troop areas, regardless of vehicle size.

(3) The speed limit when approaching or passing a troop formation from either the front or rear is 10 miles per hour (MPH). A troop formation is considered three or more Soldiers, regardless of formation type.

(4) Motorists will not jeopardize the safety of troop formations. If the potential exists where a vehicle operator is in doubt of safely passing a formation, the vehicle operator will stop and await directions from the person in charge of the formation.

1-18. Lost Soldier.

Report lost Soldier information immediately to Range Operations and include the following:

- a. Soldier's name, rank, unit, and social security number.
- b. Date, time, and location last seen.
- c. Soldier's physical status (injured, uninjured).

d. Was Soldier in possession of any weapon (if so, what type?), bayonet, and or NBC gear when last seen.

e. Type of training being conducted upon disappearance.

f. Request for additional assistance.

Note: The lost Soldier's unit is responsible for conducting a search and notifying Range Operations when the Soldier is found. Range Operations will notify IOC, DES, respective higher unit headquarters, and others, as appropriate after duty hours and on weekend and holidays.

1-19. Uniforms.

a. Uniforms, equipment, and hearing and eye protection for all Soldiers undergoing Initial Entry Training (IET) & Advanced Individual Training (AIT) is prescribed in the applicable POI and by the Commander. Drill Sergeant headgear and uniform will be as prescribed by the installation commander.

b. Uniforms for all other personnel training on any live-fire range is prescribed below:

(1) Appropriate service uniform with boots.

(2) Unit commander authorized head gear and hearing protection are mandatory on all ranges or firing points. Personnel on a rifle firing lane coaching or waiting to fire should be in the same type headgear as the firer. Military police (MP) can fire the 9mm pistol in soft caps or head gear prescribed by the installation commander. Unit cadre may fire wearing soft caps. Affiliated civilian organizations with a risk assessment approved by Fort Jackson Range Operations for pistol, shotgun, and rifle firing can wear headgear IAW their SOP.

(3) Additional uniform or equipment is at the commander's discretion and risk assumption. Drill Sergeant head gear on ranges, training facilities, and training areas will be as prescribed by the Installation Commander.

(4) Appropriate service uniform, soft cap, and boots is the duty uniform on all non live-fire facilities unless prescribed otherwise by using unit commander.

1-20. Missing Weapons.

a. Upon determination that a weapon is missing, the senior officer, NCO, or civilian RSO on site will accomplish the following:

(1) Initiate an immediate cessation of training. If on a live-fire range initiate an immediate cease fire.

(2) Notify Range Operations.

(3) Organize search parties using all available personnel on site to sweep the immediate area. No one will go down range without instructions and/or permission from Range Operations.

b. If the weapon is not recovered after a search, then initiate the following additional actions:

(1) Notify unit chain of command.

(2) Notify MPs: 751-3113/3114.

(3) Conduct a 100% muster of unit with weapons.

(4) Verify whereabouts of every assigned Soldier by name and SSN.

(5) Conduct serial number inventory of all assigned weapons.

(6) Continue search for weapon until it is found or released by unit chain of command.

c. Upon determination that all personnel and weapons are accounted for, notify Range Operations immediately!

1-21. Alcohol.

a. No alcoholic beverages of any type may be transported to or consumed in any training area, facility, or on any range on Fort Jackson.

b. Commanders will be held liable for any violations by members of their unit for violating alcohol policies.

c. All incidents involving alcohol use during training will be investigated by DES. A subsequent report will be forwarded through the chain of command for action.

1-22. Noise Complaints.

a. Personnel using ranges or training area on Fort Jackson should be aware that training and live-fire may cause noise complaints from the surrounding community.

b. Regardless of who receives a noise complaint from outside of the cantonment area, Range Operations and/or DES will investigate the complaint and report findings to DPTMS.

c. DPTMS: Scheduling, will notify Public Affairs Office (PAO) when the following training is scheduled: (training that may generate noise complaints from the surrounding community)

(1) Demolition training involving 100 lbs or more. In no case will detonations exceed 20 lbs, net explosive weight (NEW).

(2) Battery or larger planned artillery and MLRS firing.

(3) Three or more helicopters planning to conduct nap of the earth (200 feet above the ground).

(4) Three or more helicopters conducting night flight operations.

(5) Any training out of the ordinary that might induce the surrounding community to complain about the noise.

1-23. Range/Training Area SOPs and Risk Management.

a. An SOP will be present at all ranges, training areas, and training facilities. The responsible unit/agency/organization for each range, training area, or training facility will write an SOP and update as required and review annually with a new date. The SOP will outline the operations and safety procedures for each range, training area and training facility.

Note: All SOPs will be reviewed by the Fort Jackson Range Operations and the Safety Center prior to implementation.

b. Risk management work sheets are required for each range, training area, and training facility. Unit commanders will prepare a Composite Risk Assessment (CRA) IAW Fort Jackson 350-1 and FJ Regulation 385-10, using FJ Form 7566. CRAs will be presented to Range Operations prior to any training outside of the cantonment area. CRAs will be reviewed during range inspections by Range Operations.

1-24. Severe Weather Procedures.

a. ***SEVERE WEATHER WATCH OR WARNING AND TORNADO WATCH OR WARNING*** dissemination will be made IAW the Fort Jackson Severe Weather Evacuation Action Plan (SWEAP). Dissemination will be made to ensure all personnel and units have the maximum time available to prevent personnel injury. Range Operations will notify units using ranges, firing points, training areas, on road marches, and at bivouac sites. This is done via Range Operations communication network (radios, telephones, and patrol vehicles). Major subordinate commands (MSC) using cantonment facilities will receive severe weather warnings or watches from the Emergency Operations Center (EOC). MSCs will notify their elements via organic communication and comply with the instructions within the Fort Jackson SWEAP.

b. Electrical Storm Information.

(1) Range Operations will issue 50, 25, 10 and 5-mile in-bound and out-bound electrical storm warnings to all personnel/units on ranges, training areas, training facilities, G3/DPTMS, Ammunition Supply Point (ASP, 751-4017/6586), SCARNG McCrady Training Center (MTC) operations office (806-3785), Golf Course (787-4344), and Weston Lake (751-5253). Range Operations will issue an “all clear” status when an out-bound storm is 10 miles from post or no lightning activity occurs for 30 minutes. The EOC will disseminate this status via email notification to all of Fort Jackson. After hours, weekends and holidays, the EOC assumes all electrical storm warning procedures.

(2) Movement of ammunition will cease and all targetry will be turned off to protect range systems from lightning when Range Operations issues a 10-mile in-bound warning. Movement of ammunition will resume and all targetry turned on when an out-bound electrical storm reaches 10 miles and no lightning activity occurs for a period of 30 minutes. In the event of a rapidly approaching electrical storm, it is the ASP Supervisor’s discretion to stop ammunition movement outside the 10-mile limits of Fort Jackson.

(3) Units and personnel are required to respond to the electrical storm notifications with name and rank. Units that do not respond to a Range Operations electrical storm warning will be visited by a patrol vehicle and will receive the electrical storm information. The training unit commander is responsible for training IAW the unit risk assessment when an electrical storm is greater than 25 miles away. It is the battalion commander’s decision to continue training when electrical storms are within 25 miles of Fort Jackson.

1-25. Range/Training Area Safety Brief.

- a. All personnel designated to be OIC’s and RSO’s will report to Bldg 4600, Room 308, Education Center, for the Range Safety Briefing and will receive a range safety card (FJ 350-14-100) after successfully passing the Range Safety Course.
- b. All Soldiers must have a signed memorandum from the first O-5 in their chain of command. If Soldiers do not have a commander’s memorandum, they will be asked to leave the classroom. Soldiers will not attend the class and wait for a memorandum to be sent later.
- c. Range Operations conducts OIC/RSO Range Safety briefings on Monday and Friday at 1300, room 308, Education Center, Bldg 4600 (except for holidays).
- d. Range Operations will conduct Range Safety briefings at other times than listed above, on a case by case basis (>20 personnel required).
- e. All personnel attending the briefing will have a memorandum signed by an O-5 or greater stating the weapon systems authorized for each person prior to the Range Safety Brief.

- f. Range safety cards are valid for one year from date of issue.
- g. OICs will ensure that all personnel receive a safety brief prior to live-fire and non live-fire training.
- h. OIC/RSO cards will be issued for 2 years. Once a 2-year card has expired the individual must go through the Range Safety Briefing.
- i. Renewal of any Range Safety Card must be done in person and cannot be picked up by anyone else.
- j. Soldiers that are reassigned between Fort Jackson Battalions after they receive their Range Safety Card must submit a memorandum from their new commander (O-5). Range Operations at the time of update will provide all new and pertinent information.
- k. Soldiers that need to be reissued a Range Safety Cards due to their card being lost, stolen, or any other reason must obtain a request for reissue from their S-3. The S-3 is responsible for ensuring that the Soldier is on a valid memorandum.

1-26. Accident Reporting.

All accidents within the training area complex will be reported immediately to Range Operations or the EOC when Range Operations is not operational and a training accident/incident report (TAIR) will be initiated (see Appendix D-6).

- a. Range Operations will notify the appropriate agencies and EOC when an accident report is received immediately with follow up updates, as applicable.
- b. Range Operations will further notify Public Affairs Office when an accident is determined to be of interest to the local media.
- c. Range Operations will contact Fort Jackson Safety Center immediately after becoming aware of any accident.
- d. Range Operations will contact the weapons pool and Quality Assurance Specialist Ammunition Surveillance (QASAS) for all accidents involving weapons, ammunition, and explosives.

1-27. Obstacle Course and Certification Requirements.

This paragraph pertains to certification at Fit to Win (FTW) 1 and 2, Team Development Course (TDC) 1 and 2, and the Confidence Obstacle Course (COC).

- a. Units and individuals will schedule certification training for the operation, inspection, and negotiation of obstacles of the above named ranges with the Installation Scheduling Office by way of their brigade S3s and or training offices.
- b. Range Operations will conduct the certification training and testing as scheduled. Units should plan for certification training, testing, and card issue to take 2 hours maximum.
- c. Certification card is valid for one year from date of issue.
- d. Certification and testing will be conducted for renewal of cards. Expired certification cards require recertification.
- e. Units can prepare for certification by reviewing BT Training Support Packages (TSP) for each of the above named courses within Course Number 750-BT, dated 01 March 2010. For example, TDC TSP, BT 071001/Version 2.0. 01 March 2010 and for COC, TRADOC Obstacle/Confidence Course Inspection and Standardization Criteria, dated March 2004; TC 3-22.20. Appendix E, Obstacle Negotiation; TRADOC Pam 385-1, Appendix C, Conditioning / Obstacle Course Criteria.

Chapter 2: Responsibilities.**2-1. Installation Range Officer.**

The Installation Range Officer will:

- a. Execute all duties and responsibilities depicted in:

- (1) AR 385-63, 30 January 2012, pages 6-7, paragraph 1-9, c (1-21).

- (2) AR 350-19, August 2005, pages 31-32, paragraph 4-8.

- b. Direct and enforce safety management controls pertaining to training on the training range complex. Ensures all scheduled high risk ranges and all live fire ranges are inspected daily; scheduled moderate and low risk ranges weekly.

- c. Ensure range and training area activities are conducted IAW the Installation Range Sustainable Program and the references listed in chapter 20 of this document.

- d. Review this directive annually to ensure that all sections are up-to-date and publish changes, as required.

- e. Establish temporary danger areas when firing is to be conducted in other than permanent danger areas and announce these areas to the command.

- f. Ensure malfunction or accident involving ammunition, explosives, or weapons are reported to the following: QASAS (ammunition surveillance inspector) , EOD, TACOM Weapons Repair Branch, Range Operations, and the Fort Jackson Safety Center.

- g. Control live-fire activities, and non-firing activities within Fort Jackson airspace, restricted area R6001 (see Appendix A, Definitions), and the Fort Jackson range complex area.

- h. Authorize, when the restricted airspace is activated for weapons use, flights of aircraft scheduled for training and the entry of personnel into danger areas deemed safe.

- i. Provide maintenance for all range training facilities, including obstacle courses and Victory Tower; plan and supervise the construction of new ranges and training facilities in coordination with all proponents, FJ Safety Center, DPW, DOL, ISO, ITAM, DPW Environmental Division (ENV), and the Range Interdisciplinary Planning Team (IDP) IAW AR 350-19, Chapter 3, Section II.

- j. Establish range, targetry, and maneuver land schedules via coordination with the ITAM Coordinator and DOL (includes related targetry equipment repair and maintenance).

k. Ensures that all digging throughout the Training Range Complex, in support of FTXs, Victory Forge Exercises, and etc are processed through Range Operations, ITAM and the Environmental Offices.

2-2. Commanders.

a. Commanders of units firing live ammunition or detonating explosives will designate an Officer-in-Charge (OIC) and Range Safety Officer (RSO) as required. Ensure the OIC and RSO have received the Range Operations safety brief and have a FJ Form 385-63-100 OIC/RSO card on hand prior to performing assigned duties. There will be at least one RSO or assistant RSO (if desired) in addition to the OIC, for each battery (See Appendix C), company, or isolated platoon (section) firing point, firing high explosive ammunition. RSOs will be appointed as required to adequately control firing problems. Commanders will ensure that the RSO selected has been thoroughly trained and has demonstrated complete knowledge of the safety procedures pertaining to weapons being fired or utilized.

b. Commanders of units employing laser range finders or laser augmented systems (excluding Multiple Integrated Laser Engagement System (MILES) are required to have a trained Laser Safety Officer (LSO) appointed on orders, who will determine, train, and certify the necessary personnel to assist in complying with AR/DA Pam 385-63, laser requirements. Additionally, commanders will ensure personnel operating laser systems are aware of hazards for those special devices they are employing, and will ensure an SOP and RA is developed for laser operations which prescribes safety procedures and personal protective equipment to be used.

c. Commanders conducting training that involve the firing of small caliber ammunitions, explosives, or pyrotechnics will ensure that a shakedown inspection is conducted prior to departing the site. All unexpended ammunition and ammunition residue will be turned into the ammunition truck (if ammunition is procured from the Fort Jackson's Ammunition Supply Point ASP). If the occupying unit has brought their own ammunition, they will return unexpended ammunition and ammunition to the Fort Jackson AHA. Prior to departure from the range or training area, the OIC will inform Range Operations that all personnel have cleared the training area or range.

d. The commander is responsible for ensuring all personnel have hearing protection with them while on a range and are aware of the hazards for not using them. Each range OIC is responsible for ensuring properly fitted and authorized hearing protection is used at the designated distance from the firing lines, fighting positions, training areas, or ranges. The following constitutes noise hazards in which personnel must wear properly fitted and approved hearing protection devices.

WEAPON	DISTANCE TO THE REAR OR SIDE OF WEAPONS
Small Arms and Machine Guns	50 ft
Grenade Launchers	50 ft
MK 19	75 ft
Grenades	150 ft
Mortars	700 ft
Tank Guns	1,000 ft
Anti-Tank Weapons	1,300 ft
Howitzer/Guns	2,700 ft

Table 1-3. Weapon Standoff Distances.

e. Commanders will ensure that a formal request for training facilities is prepared and submitted IAW paragraph 3-1.

f. Commanders will ensure that requests for firing ranges, training areas, (helicopter) landing zones (LZs), and indirect firing positions are cancelled after determining the request will not be used. Cancellations must be made to DPTMS: Scheduling Office, by the commander or his designated representative NLT 48 hours prior to training.

2-3. Officer in Charge (OIC).

a. Contractors may not serve as an OIC.

b. The OIC will be certified in the weapon systems for which they are responsible. For weapon systems equipped or dependent on lasers, the OIC will be knowledgeable of laser hazards and proper employment. The OIC holds responsibility and accountability for the conduct of the activity and the adherence to governing regulations and guidance. He/she must be able to fully influence the conduct of the event. He/she must have satisfactorily completed a range safety certification program and must have in their possession a valid range safety card (FJ 385-63-100). Specific duties of the OIC for firing or training include, but are not limited to, the following:

(1) Familiarize himself/herself with and be responsible for compliance with this directive, field manuals, technical manuals, range SOPs, and the applicable portions of DA PAM 385-63 pertinent to the training being conducted. Ensures that one or more qualified RSO (IAW paragraph 2-4) is physically present at the training site and medical support is available (IAW paragraph 1-8). Ensure this pertinent information is present on the range or in position prior to commencement of training.

(2) The OIC must be on the range to ensure that a check (visually, PA announcement, etc) of the surface danger zone (SDZ) and impact area is clear of all personnel prior to firing. Ensure limit of fire markers (panel markers) both external (outer) and internal (inner) are in place and denote right and left limits of fire.

(3) As required, ensure road guards are posted to prohibit entry into the SDZ and impact areas.

(4) Ensure that high intensity noise signs are posted and that all personnel are briefed on the hazards of high intensity noise as a cause of permanent damage to the hearing mechanism and that hearing protective devices in the form of ear plugs are available for all personnel on the range and for any visitors. Hearing protection will be worn at all times during exercises where weapons and pyrotechnics are utilized.

(5) Ensure that laser devices are lased only at targets which are diffuse reflectors and not lased at specular reflective surfaces and that unprotected personnel are not exposed to either the direct laser beam or beam reflected from a flat mirror surface.

(6) Ensure two means of communications (telephone and radio) are established with Range Operations. Occupation and training will not commence until communication has been established and clearance granted by Range Operations. Communication checks with Range Operations will be made every hour when units are deployed tactically (FTX/CPX) to the field. When communications are totally lost during live-fire, the unit will initiate a cease fire on that range and remain until communications are re-established with Range Operations. Range Operations will immediately dispatch a patrol to any location in order to reestablish communications with unit personnel.

(7) Call an immediate cease fire when anyone is observed in the impact area or SDZ. Immediately contact Range Operations by telephone or handheld. If assistance is required, inform Range Operations.

(8) Ensure that a cease fire is called immediately when an aircraft approaches the trajectory of fire demolition area or enters known impact area down range of live-fire.

(9) Ensure that no pyrotechnics, flares, demolition, or any other incendiary type munitions are released or fired at any time without clearance from Range Operations.

(10) Make an immediate report to Range Operations of any malfunctions, incidents, or accidents involving ammunition, explosives, or weapons, i.e. ammunition discrepancies such as grenades or other “live” ammunition. It is of prime importance that the scene be preserved as close to “as is” pending investigation by weapon system and ammunition technicians. Treatment and evacuation of injured personnel will be first priority during accidents. Range Operations will contact the FJ Safety Center .

(11) Retain, at the position, all weapons with rounds or projectiles lodged in the barrel or tube, pending investigation and released by the TACOM Weapons Pool Branch, QASAS, DES, EOD team, Range Operations, and the Safety Center.

(12) Notify Range Operations immediately upon completion of firing.

(13) Ensure that vehicles are parked only in the designated parking areas. Vehicles will not be parked on access roads to ranges or training facilities, shoulders, or main thoroughfares in addition to grassed, seeded, or otherwise planted areas.

(14) Be responsible for the police and sanitation of all range facilities and training areas used by the unit, to include repairing and/or re-facing of targets used on the range. Prior to departure from a training area, the OIC will contact Range Operations and request a clearance inspection. Conduct a ammunition shakedown inspection to ensure that no personnel or vehicles depart the range with unauthorized ammunition, explosives, or pyrotechnics in their possession.

(15) Ensure that upon departure from range all unexpended, misfired, or otherwise unserviceable ammunition is removed from the range and disposed of in accordance with existing regulations or directives.

(16) Notify Range Operations of any organization that has been called to investigate any incident or accident on Fort Jackson ranges.

2-4. Range Safety Officer (RSO).

a. RSOs are responsible to the OIC of firing and will be thoroughly familiar with the applicable portions of AR 385-63, DA PAM 385-63, this directive, Range SOP, CRA, field, and technical manuals pertinent to the training and or firing being conducted.

b. RSOs must be certified and weapon system qualified for weapons/lasers under his/hers authority during training on ranges and training areas IAW AR 385-63/DA Pam 385-63.

c. RSOs and assistant range safeties will be located on the firing line or best location to influence safety while supervising weapons safety and will not conduct coaching or individual training. RSO's sole responsibility is safety duties and safety responsibilities.

d. RSOs must have satisfactorily completed a range safety certification program and must have in their possession a valid range safety card (FJ 385-63-100) when performing RSO duties on a range or training areas. The range safety card will be surrendered to Range Operations personnel upon request.

e. Assistant safeties will be trained by the OIC. FJ Form 385-63-100 is not required for assistant safeties.

f. Contractors may only act as RSOs if specifically provided for in the DoD contract statement of work (SOW). The RSO duties that sufficiently limit his/her discretion and authority so that the proponent of DA PAM 385-63 might authorize performance by the contract. Installation Commander will be the approving authority for RSO contractors on Fort Jackson, SC.

WEAPON SYSTEM	#1 OFFICER IN CHARGE			#1 RANGE SAFETY OFFICER		
	OFF	WO	NCO	OFF	WO	NCO
Practice hand grenade Sub caliber training devices; laser devices; firing devices; simulators and trip flares; small arms machine guns	X	X	E6	X	X	E5
Chemical agents and Smokes (see notes #2 and #6)	X	X	E6	X	X	E5
Aerial gunnery and air defense weapons; flame-throwers; live grenades, grenades launchers/ grenade machine guns live mines and demolitions; recoilless weapons; tank and Bradley main guns.	X	X	E7	X	X	E6
Mortars	X	X	E6	X	X	E6
Artillery (see note #3)	X	X	E7	X	X	E6
Live-fire exercises using organic weapons, squad through company, battery, troop	X	X	E7	X	X	E6
Combined arms live-fire exercises using outside fire support; troop, battery, squad, platoon, company; or battalion and larger (see note #5)	X	X	E7	X	X	E6
ADA Rockets & Guided Missiles (see note #4-OIC)	X	X	E7	X	X	E6

Table 2-1. OIC/RSO Appointment Requirements.

Notes:

- 1. Civilians in the grade of GS 07 or above may act as OIC and GS 05 or above for Range Safety Officer (RSO).**
- 2. OIC and RSO must be Nuclear, Biological, Chemical (NBC) qualified or NBC Defense qualified when conducting NBC or smoke training.**
- 3. Use of E7s or E6 promotable as OICs is authorized when approved by the Installation Commander. Duties of the RSO are normally performed by either the battery executive officer or platoon leader.**

- 4. The Senior Range Safety Officer (SRSO) will be a field grade officer, CW4, or CW5, (Army) or civilian in grade of GS-12 or above.***
- 5. OIC will be an O-5 or higher for battalion or larger CALFEX.***
- 6. RSOs for United States Marine Corps (USMC) will be E6 or above for practice hand grenade, mortars, chemical agents, and smoke(s).***
- 7. Students in the rank of SFC (E7) and above can serve as small arms live-fire safeties. Students will not serve as range/training area OIC or RSO. The OIC and or RSO supervising the student line safety must be cadre in the rank of SFC (E7), ex., (SSG) promotable or above. Students will assist the RSO by using their red/white pads for fire or cease fire portions on the line.***
- 8. Basic training and AIT Soldiers WILL NOT be live-fire safeties.***
- 9. NCOICs can be E7 or a promotable E-6. Battalions Commanders must sign OIC/NCOIC/RSO certification memorandum identifying individuals as a promotable E-6/SSG and approved to conduct duties as an E-7/SFC.***

g. Artillery and mortar OICs and RSOs will be unit command certified IAW Appendix C this regulation, FM 6-50, FM 23-90, & FM 23-91. In addition to other duties, they will maintain a continuous watch for aircraft approaching the trajectory of the weapon system and be prepared to order an immediate cease fire.

h. RSO will ensure that the maximum ordnances do not exceed those stipulated for the SDZ limits for any particular weapon or ammunition.

i. RSO will ensure that the sand in the bottom of the demolition pits has been sifted for the squad defensive live-fire exercise and will ensure that the pits contain no stones, metal objects, or other foreign materials and that the barricades that surround the pits do not contain loose materials that may be blown onto the Soldiers by the charge. Demolition pits will be inspected by the OIC prior to completion of training.

j. An initial oral report of all deaths and or injuries that requires evacuation from the training areas will be made to Range Operations for relay to EOC and the Safety Center.

2-5. Range Operations.

Range Operations actively controls all units conducting training, firing, and maneuvers operations within the Fort Jackson Military Training Complex. The Range Operations organization consists of the following.

a. Range Operations is a part of DPTMS Range Division and performs functions IAW AR 5-3, AR 350-19, DA PAM 385-63, and AR 385-63.

b. Controls all training on the installation where units are physically deployed outside the cantonment area. In addition, Range Operations will ensure that all units adhere to regulations, policies, and guidance as it pertains to the safe conduct of training.

c. Range Operations has overall authority to initiate, close, or whether to make a recommendation, to the DPTMS, to cease training within the confines of the FJ Training Range Complex.

Note: The Director, DPTMS, will be notified immediately of any training recommended for termination. The Director, DPTMS, will make the final decision whether or not to terminate training.

d. Range Operations will conduct safety briefings for all personnel who are assigned to perform OIC and or RSO duties on Fort Jackson ranges, training facilities, or training areas.

2-6. Environmental Compliance Officers (ECO).

a. Commanders, down to company, battery, and detachment level, are responsible for appointing (in writing) a unit ECO and an alternate. The ECO and alternate will be in the grade of E5 or above and will ensure that the unit complies with all environmental regulations. ECOs and alternates must attend an ECO course which is provided by Directorate of Public Works (DPW) Environmental. Unit ECO will assist unit OIC in compliance with FJ 200-8 at all times as well as AR 200-1. Failure to comply with regulations stated above can lead to administrative and criminal investigations, in addition to fines and or punitive measures by agencies with the authority to do so. ECO or unit OIC or representative must immediately report all environmental violations to Range Operations. Range Operations will immediately report environmental violation(s) found or reported to DPW, Environmental.

b. Unit ECOs must submit a completed Record of Environmental Consideration (REC) to DPW, Environmental Division, for any proposed actions in accordance with FJ regulation 200-8. Actions include changes in training, procedures, operations, maintenance, construction, or any proposed action not already adequately covered in an existing environmental assessment. The National Environmental Policy Act (NEPA) requires environmental review of all proposed

federal actions. Actions include everything a federal agency might do, including development of policy, rules and regulations, and conducting the activities of its mission. DPTMS must sign the REC form for all proposed actions or projects. Completed REC's must be signed off by DPTMS and then received by DPW Environmental at a minimum of 30 days prior to the proposed start of the activity so that an environmental review may be conducted. REC forms are available on the DPW Environmental webpage at www.jackson.army.mil/enrd/emb/nepa.htm.

c. Any question(s) relating to environmental protection matters should be directed to the DPW Environmental office at telephone (803) 751-4231/5011 or DSN 734-4231/5011.

Chapter 3 – Range/Training Area Requests and Assignments.**3-1. Requests.**

a. Requests for ranges, training areas, and training facilities to be used on Fort Jackson Military Reservation will be submitted by memorandum or thru the Range Facility Management Support System (RFMSS) to DPTMS, ATTN: Scheduling, Fort Jackson, SC 29207. Telephonic requests will not be accepted by DPTMS: Scheduling Office. The RFMSS SOP is available in the library on the RFMSS site and in FJ 350-1.

b. Scheduling training areas, facilities, and ranges by Basic Combat Training (BCT), Advanced Individual Training (AIT), MATC Missions, HUD, VUD, and DSS Missions will adhere to the directives in Fort Jackson Regulation 350-1.

c. USAR, National Guard, and ROTC units to include Navy, Air Force, and Marine Corps elements, must submit requests for training support through their chain of command and then thru the web base RFMSS or memo to the DPTMS, ATTN: Scheduling, Fort Jackson, SC 29207. Specific training support other than ranges, training facilities, and training areas will be specified in detail and forwarded to Plans and Operations of DPTMS and or the supporting agency on Fort Jackson by the requestor. Minimum requirements necessary for final DPTMS approval include:

(1) Requests must be received by DPTMS Scheduling NLT 14 working days prior to the quarterly meeting. Unit representative attending the quarterly meeting will need to reconfirm request. Units scheduled for training will have a representative attend the upcoming weekend meeting: Friday, 1100, at DPTMS Scheduling Office. Non-attendance to Friday meeting will result in cancellation of training areas or ranges.

(2) Specific training areas required IAW the designated alpha-numeric characters, i.e. 18A or specific live-fire ranges or any one of a kind training facilities.

(3) Command Post (CP) locations eight digit grid coordinates, if applicable.

(4) Dates/times for which the area/range is required.

(5) Purpose of training to be conducted to include aircraft involvement, if applicable.

(6) Type of training, type of unit, unit designations, and number of personnel involved.

(7) Overlays of road marches which will require movement of vehicles through training areas. Overlays must show as a minimum:

(a) Start Point (SP) time.

- (b) Six (6) digit grid coordinates for start and finish points.
 - (c) Map references.
 - (d) Type of vehicles and the number of vehicles.
 - (e) POC, name, rank, telephone number, email address (if available.)
 - (f) An accurate route of march that depicts the entire requested route with SP, Check Points (CP), Release Points (RP), and final destinations.
 - (8) Type of weapons, ammunition, and pyrotechnics to be utilized.
- d. Active duty units to include assigned Forces Command (FORSCOM) and Training and Doctrine Command (TRADOC) units at Fort Jackson, sister service units, other installation units, and any others not covered in this paragraph will submit memorandum or letterhead requests to CDR, USATC & FJ ATTN: DPTMS, Scheduling, Fort Jackson, SC 29207 NLT 30 days prior to training start date. Request will include all requirements stipulated in paragraph 3-1, a through c above.
- e. Non-receipt of requests will be deemed the requestor's fault and will not be acted upon until a new request is submitted with adjusted dates that conform to the minimum requirement NLT 12 days prior to training start date.
- f. Late requests will be reviewed by G3 Training and approved or disapproved on a case by case basis.
- g. Changes to scheduled training are not acceptable if it is not received and approved by DPTMS Scheduling Office 72 hours prior to scheduled date/time change.
- h. Cancellations to training must be received by DPTMS, Scheduling Office NLT 48 hours prior to scheduled start date and must be approved by a LTC (O-5) or above with a signed memorandum from the unit Chain of Command.
- i. When a request is received (per paragraph f. above) that cannot be approved, the unit will be notified by DPTMS Scheduling Office and given an opportunity to select alternate dates or facilities, or to coordinate with the scheduled unit(s) for co-use of the training area or range.

Note: IET units will conform strictly to the directives posted in FJ Regulation 350-1.

3-2. Assignment of Ranges, Training Facilities, and Training Areas.

a. The assignment or scheduling of ranges, training areas and training facilities to include airspace is the responsibility of the Director, DPTMS and staff. Assignments will be based on the following priorities:

- (1) Mobilizing Units.
- (2) Drill Sergeant School.
- (3) Basic Combat Training units in order of fill.
- (4) Advanced Individual Training.
- (5) Permanent Party Training on Fort Jackson, SSI, and Chaplain School.
- (6) USAR/NG units that support Fort Jackson.
- (7) All other units.

b. The scheduling of a range, training facility, or training area to a commander does not include authority to pass the assignment to another commander without the approval of the G3/DPTMS, except FOB/COE sites under the commander's control.

c. The scheduling of a training area does not mean exclusive unit ownership within the area, or the airspace above the area.

3-3. Request for Range Support and Maintenance.

All requests for Range support and or range maintenance must be submitted in writing to the Installation Range Office or the Range Operations Specialist.

3-4. Coordination of Ranges.

a. Coordination through Post Scheduling is not the final phase of coordinating a range.

b. Units that schedule ranges through RFMSS must coordinate operational readiness of the range, start times, number of detail needed, and special equipment, etc., NLT 24 hours prior to occupation of the range in order to ensure proper information and instructions were received from the range cadre. If unable to contact range cadre, call Bravo Company, 4-10 Infantry, 171 Infantry Brigade, for coordinating instructions. Range Operations coordination is required for ranges 1-9, 11&12; FTW, COC, Map Reading, TDC, Corregidor, St. Lo, Cowpens, Chipyeong Ni, Omaha Beach, Urban Assault Course (UAC), and MOUT Site.

3-5. Training Area Conflicts.

Training area conflicts will be brought to the attention of DPTMS, Scheduling. Scheduling will initiate the necessary actions to settle the conflict(s). If a settlement cannot be reached, Scheduling will make the final decision. During non-duty hours, weekends, or holidays, Range Operations will make the final decision.

3-6. Notice of Firing.

Prior to conduct of firing involving potential hazards to the public, a warning will be issued by the DPTMS Scheduling Office to the Fort Jackson Public Affairs Office (PAO). The warning notice will be issued to the local news media through the PAO. Procedures for issuing a notice will be IAW DA PAM 385-63, Range Safety.

Chapter 4 – Range Communication System.

4-1. Range Operations. Range Operations is the primary control facility. The primary duties of Range Operations personnel are to coordinate and control the firing of live ammunition on all the ranges and advise aircraft of the safety precautions while training within Fort Jackson's training areas. These duties require conversations with callers. Delays in answering calls can be expected. Long distance collect calls and personal calls are not authorized unless approved by the OIC.

4-2. Range Operations Communication System.

a. Range communication on Fort Jackson requires all units to have two modes of communication; radio and telephone when drop lines are available.

b. Network Enterprise Center (NEC) controlled Motorola Trunk Radio Communications is the secondary mode of communications on Fort Jackson. Telephone is the primary means of communication single channel ground airborne radio system (SINCGARS) is available for units during field training exercise (FTX) Training.

c. Regardless of the system used, if one mode is lost, communication will still need to be maintained with Range Operations. If communication on both systems is lost, Range Operations will initiate actions to re-establish communications. However, if it cannot be re-established within 15 minutes, a cease fire will be initiated by live-fire/demolition unit.

4-3. Range Operations Radio System. The Range Operations radio system consists of three channels/nets on the NEC Motorola Trunk NET CONTROL System.

a. The actual channel of these three nets may vary based on radio programming for a given organization. All channels are assigned strictly for the use by Range Operations. Permission must be granted by Range Operations in order to enter the above nets for transmission purposes.

(1) Range Network. (RANGE) The purpose of the range network is strictly for transmitting, receiving, and monitoring all ranges, training areas/sites, facilities, ammunition team (T9D), and water/weapons trucks. Range Operations will also broadcast all weather warnings and emergencies over this net.

(2) Cease Fire Network. (CEASE) The cease fire network is strictly for transmitting, receiving, and monitoring all live-fire ranges and firing points, and for emergency cease fire broadcast information. This net will not be used without permission from Range Operations. Violations will be reported to the NEC Frequency Manager, Fort Jackson. This net is not monitored and should only be used if instructed to do so by Range Operations.

(3) Administrative Network. (RANGECO) The purpose of the admin network is strictly for transmitting and receiving administrative information and is the primary net used by Range Operations for internal communications. This net will not be used without Range Operations permission.

b. SINCGARS. FM 32.900 MHz (Primary), 41.650 MHz (Alternate). This FM frequency is assigned to Range Operations for use in monitoring units who have FM capability organic to the unit, i.e. VRC-46, VRC-49, SINCGARS type radio transmission equipment.

c. VHF 130.00 This frequency is used exclusively by Range Operations and aircraft (both fixed wing and rotary wing) communication

d. Call signs. Units training on Fort Jackson will not make up call signs. Call signs are assigned by NEC or may be accessed through the use of assigned call signs from the Fort Jackson Signal Operation Instructions.

e. Assigned call sign for Range Operations is "Range Operations."

4-4. Telephone System.

a. Telephone communication is the primary mode of communication. When units are training where telephone drops are available (see Para 4-5, Telephone Listings), they will initiate both a radio check and telephone call to ensure communication is established with Range Operations.

b. Training sites that have established mag drops will ensure telephone usage is minimized at all times.

c. Federal Aviation Administration (FAA) direct line. Range Operations has a direct 92 line with the following agencies involved in Fort Jackson's Restricted Airspace R6001.

(1) Jacksonville, FL (ARTCC-FAA) (48)

(2) Shaw AFB (Approach) {82} / (RAPCON {78} Sumter, SC.

(3) Columbia Metro Tower (86) and Radar (87), Columbia, SC

d. Ring down line to 53 ranges/offices/units for HEAT/WGBT and lightning storm warnings and all clear notices.

e. Telephone capabilities (751-7171/4732) (FAX 751-4501) (Training Area Incident Report (TAIR) 751-8898) at Range Operations enables immediate access to the following agencies in the event of an aircraft mishap, crash or other emergencies (911): Moncrief Army Community Hospital and the Emergency Services Center.

f. Ring down line from IOC for HEAT/WGBT/SWEAP/ and other emergency notices.

4-5. Telephone Listings.

Range/Facility	Ph # (803) 751-xxxx	Range/Facility	Ph # (803) 751-xxxx
Range Operations	7171/4732	BRM/HQ	5806
SCARNG McCrady Ops	806-2207		
1	5191	Combatives Assault	N/A
2	4079	Victory Tower	6355
3	9577	Conf Obs Crse	803-543-3182
4	7291	FTW 1 - Cond End Crse	NA
5	5587	FTW 2 - Cond End Crse	6483
6	7382	CBRN Chamber	803-319-9518
7	5797	Team Develop Crses	6483
8	6780	Ammo Supply Point	4017/ 5692
9	5090	QASAS Office	5472
10	1759	WANAT Range	7593
11	5990	DPW Emerg Work	7850
12	6470	Fire/Medical Amb	9111
13	3817	Roads/Grounds	7684
14	7227	Forestry	4622
15	1138/1233	Outdoor Rec Ctr	4948
17	4568	Kasserine Pass	4579
18	4203	MAIN TANK	3901
19	7087 / 6327	MANILA BIV SITE	7188
20	7134 / 7144	FJ Safety Center	6004/ 2542
Aachen	(pending)	Provost Marshal	3114/ 3113
Anzio (Sqd Def/CLFC)	4666	RVTT	NA
Argentan	NA	MSTF	7349
Bastogne	6661	EOD Demo RG (RST-4)	4188
Casablanca (MK19/FO)	5470	Ammo Supply Point	4017/ 5692
Chipyong-Ni	6968	St. Lo Land Nav	7178
Remagen (Hg Rg)	5570	Weir Tower	5225

Night Infiltration Crse	3258	Wild Life	7153 / 4103
Portalets/Dumpster	4731	Wpns Pool	4614/7405
Solar Data	6732/1069	EOD HQ	5126
Wanat Forward Medical Aid Station	5641	8 th Tank Co. (USMCR)	806-299-2330
NBC Chamber	5077	Tow Truck	3191 / 3192
UAC	(pending)	193 rd FOB	6343
Convoy Operations Lane (HSTL- C-IED)	(pending)	165 th FOB	5089
On Post Dialing	751-XXXX	187 th FOB	7436/6594
SCARNG, CPQC	4579	Chaplain School FOB	TBD
		SSI FOB	6912
Long Distance	97	AG School FTX Site	6912 / 6726
Local Call Prefix	99	369 th AG BN TSS/FTX	6912
DSN Prefix	94	FOB, 187th Ord Bn	6594
Solar Data	DSN 695-2362		

Table 4-1. Telephone Listings.

Chapter 5 – Restricted Air Space and Air Activities.**5-1. Fort Jackson Restricted Special Use Airspace (SUA) Area R6001.**

a. Federal Aviation Administration (FAA) SUA definition. The special use airspace consists of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature or wherein limitations are imposed upon aircraft operations that are not part of those activities or both.

b. The SUA at Fort Jackson is authorized by FAA order (FAAO) 7400. Fort Jackson's SUA covers the installations land (Training Areas 11-35) east of Wildcat Road from Percival Road, Screaming Eagle Road, to Leesburg Road.

c. Fort Jackson's R6001 is only for large caliber weapons (above Cal .50), seven days per week: 0630 to 2400 EST per FAAO 7400. Desk personnel can extend R6001 past 2400, only with FAA Jacksonville ARTCC, with two hours notice.

d. DPTMS Range Operations controls the activation (and deactivation with all required agencies and or control towers) of the R6001 airspace at Fort Jackson based on weapons for use. Levels authorized for use are:

(1) Level A: surface to 3200 Mean Sea Level (MSL) feet.

(2) Level B: from 3200 feet MSL to 23,000 MSL.

e. Range Operations will activate the proper R6001 level(s), each day NLT 0630, daily, when required, IAW written SOP instructions.

f. Aircraft and small arms that are scheduled and approved for live-fire while R6001 is in effect can use the airspace as authorized participants. The FAA automatically inactivates R6001 at 2400. All live-fire and demolition ranges/areas/firing points/firing positions (east of Wildcat Road) approved for live-fire after 2400 will double range air spotter requirements. (NOTAM automated coordination will be conducted).

g. Request(s) to live-fire any and only small arms ranges (Cal. 50 and below) past 2400 hours can be made directly to Range Operations after 1700 (weekdays) and anytime on weekends and holidays. Range Operations must be informed by Range Cadre for coordination and approval NLT two hours prior to need.

h. Ranges 1 to 14 and 17 to 20 are not within restricted airspace per FAAO 7400. The above ranges will have two air spotters designated and deployed by the officer in charge (OIC) for any type of live-fire training. The two air spotters are to prevent shooting down any aircraft over the range. In addition, any live-fire/demolition training unit within the restricted airspace will have air spotters posted to prevent shooting down inadvertent aircraft entries into the

restricted airspace. Units will cease-fire if any aircraft enters the safety fan: and then notify Range Operations. Range Cadre will request a new live-fire time from Range Operations when the aircraft is clear of the safety fan.

i. All assigned air spotters will be placed in the best area for viewing aircraft. Air spotters will not have any other duties assigned while in this position.

5-2. Flights Within the Restricted Airspace (R6001).

a. Range Operations has overall advisory responsibility for all (fixed and rotor wing) scheduled and approved by Range Operations to enter and use the restricted airspace for aviation training as an authorized participant. Non-participants are not authorized entry into R6001 airspace.

b. Units with air assets will comply with unit standard operating procedure (SOP) for flight operations on or through Fort Jackson, less than National Airspace over flights. Additionally, units with specific mission requirements will refer to their proponent aviation regulation, i.e. US Army Aviation, USMC, US Navy, and US Air Force regulations.

c. Aviation units who have not trained at Fort Jackson in a 12 month period prior to date of training request are considered non-habitual participants at Fort Jackson. Accordingly, non-habitual aviation unit requests to train or conduct aerial/ground missions within Fort Jackson R6001, less National Airspace transit flights, will be coordinated and scheduled through DPTMS Scheduling Branch. DPTMS Scheduling manager will coordinate the request with the Chief, Range Operations, DPTMS, and the airspace manager for final approval/disapproval of request within 24 hours of receipt from an aviation unit. Initial telephone coordination will be accepted but hard copy request will follow within 72 hours. Training will be scheduled NLT 14 days prior to training start date. An exception to the above is that the South Carolina Army National Guard, 151st AVN Support BN, Army Aviation support facility air mission to include instructor pilot training/evaluation flights, will be authorized telephonic coordination with Range Operations for on-call training missions within R6001 when in use by weapon systems for routes on file at DPTMS Range Operations office, Bldg F7905, IAW this regulation.

d. Aviation units approved for training within R6001 and non-R6001 areas of Fort Jackson are responsible to establish their own flight following requirements prior to conduct of training at Fort Jackson.

Chapter 6 – Nonfiring Training Facilities.**6-1. Use of Nonfiring Training Facilities.**

Units desiring to schedule one or more of the facilities will comply with paragraph 3-1, of this regulation.

6-2. Facilities. The facilities listed below are available for use.

Training Facilities	Scheduling Source	Operational Control
Combative Assault Course/Pugil Tng Site	DPTMS	Range Operations
Confidence Obstacle course (COC)	DPTMS	Range Operations
Fit To Win (Conditioning Endurance Course) 1 & 2	DPTMS	Range Operations
Teamwork Development Course 1 & 2	DPTMS	Range Operations
Administrative Bivouac Sites 1-14	DPTMS	Range Operations
MOUT Site (East/West)	DPTMS	Range Operations
Corregidor Land Navigation Course 1 & 2	DPTMS	Range Operations
Land Navigation Course (ST LO)	DPTMS	Range Operations
First Aid Site	DPTMS	171st INF BDE
Victory Tower Site	DPTMS	171st INF BDE
63B FTX Site	171st	171st INF BDE
63B TSS/CSTT/Driver Crse	171st	171st INF BDE
63S TNG SUPPORT SITE (TSS)	171st	171st INF BDE
Tactical Training Base (TTB)	DPTMS	165 th IN BN S3
Tactical Training Base (TTB)	165 th BN S-3	165TH INF Bn S-3
Normandy Shower Point (TBB)	165th BDE S-3	165TH INF Bn S-3
CS Chamber Site	DPTMS	Bde S3s
EST SITES ALL	DPTMS	TSC
Garrison EST Buildings	DPTMS	TSC
Tactical Training Site	DPTMS	SSI
AG School FTX Site	DPTMS	SSI
369TH AG BN TSS/ FTX	DPTMS	SSI
FOB, 187th Ord Bn	DPTMS	SSI, DOT
NCOA Training Site	DPTMS	SSI
Chaplain FTX Site	DPTMS	Chaplain School
FOB 193 rd Bde	Bde S-3	Bn S-3
FOB 165th Bde	Bde S-3	Bn S-3

Chapter 7 – Tactical Training Areas.**7-1. Control of Tactical Training Areas.**

a. To facilitate allocations of training space, the Fort Jackson Training Reservation has been subdivided into 122 alpha-numeric training areas. All training areas are allocated and scheduled for training by DPTMS Scheduling Office.

Note: Training areas not specifically scheduled for training will be allocated for timber harvest, pine straw harvest, and hunting.

b. The South Carolina Army National Guard Licensed Area (figure D-2) located in the southeast quadrant of the reservation will be scheduled for training primarily for use by National Guard and USAR units; however, DPTMS will approve and schedule that training through the DPTMS Scheduling Branch. SCARNG and USAR units desiring to use any portion of the licensed area must coordinate and receive approval from the SCARNG, McCrady Training Center (MTC) operations, telephone 806-2207/3785. All other units will coordinate use of the SCARNG Licensed Area through DPTMS Scheduling who in turn will finalize the request with MTC operations/Scheduling Office.

7-2. Use of Training Areas.

a. DPTMS, Scheduling Office, has overall responsibility for scheduling training areas on Fort Jackson. Units are not to occupy by force any TA, Range or facility without scheduling and contacting Range Operations. Units will be asked to submit a same day request for their use of any training resource on the Training Range Complex. If your request was not approved you do not have the right to utilize the resource.

b. Units should not assume that any area is automatically locked-in based on a request. Assignment must be confirmed by the requesting unit. Confirmation for IET and AIT units should be made by their respective Brigade S-3s. It is a unit S-3's responsibility to verify request approvals for their respective elements, not Range Operations. Units will be directed to contact their S3 to verify and to make any changes through Range Scheduling.

c. Units other than IET or AIT who are planning Field Training Exercises (FTX), Command Post Exercises (CPX), or other tactical training, will provide a copy of complete Operation Order and annexes to Range Operations NLT 14 working days prior to training start date.

d. Units planning occupation of any training area will conduct a leader's recon prior to occupation. Leader's recon will be coordinated through Range Operations NLT 24 hours prior to occupation. NLT 24 hours prior to occupying any FTX or bivouac site unit personnel will report to Range Operations with a FJ 385-63-100 (Range Safety Card) and risk assessment to make final coordination and sign for the site.

e. Commanders will ensure that a Range Operations Inspector is present during the pre-occupation inspection. Failure to do so will result in commanders assuming full responsibility for the site regardless of state of police “as is” and will further be responsible for final clearance upon departure.

f. When a unit occupies its scheduled FTX/Bivouac/Firing Point (FP) location/MOUT Site, a unit cadre member will:

(1) Notify Range Operations.

(2) Establish communication with Range Operations and conduct hourly communication checks with Range Operations.

(3) Coordinate and obtain an FTX/bivouac/FP/MOUT Site clearance time during the initial day of signing for the training area prior to the Range Inspector departing the site.

g. Training or occupation will not occur in the following locations without prior approval from the following organizations that are responsible for the facilities.

(1) Weston Lake Recreation Area, coordinate through the Family Morale, Welfare and Recreation (FMWR), Community Recreation Activities (CRA), Community Recreation Division, at 751-4114/751-4829.

(2) 108th Division, Training Support Brigade Area, Boyden Arbor Rd, telephone 751-2693.

(3) SCARNG Mc Crady Training Center, Leesburg, Eastover SC, coordinate through Plans and Operations, telephone 806-2207.

(4) Fort Jackson Flyers Club Airfield on Wildcat Road (adjacent to St. Lo Range) will coordinate through Range Operations, 751-7171/4732.

(5) Training Area 12G VF Storage Site. POC is at phone number 751-4641

h. Units with maneuver rights through training areas based upon approved routes of march overlays will adhere strictly to their route of march and will not deviate unless approved by Range Operations.

i. Units conducting road marches will notify Range Operations when it departs the start point (SP), arrives a check point(s) (CP's), and upon reaching the designated release point (RP).

j. Indirect fire positions will be assigned in alpha-numeric training areas without regard for tactical or admin training being conducted in the area. Exceptions will be made when the commander desiring exclusive use of the area presents sufficient justification, i.e., area “E” of

the artillery Surface Danger Zone (SDZ) may not be occupied. It is the responsibility of the OIC of the firing unit to ensure that area “E” is not occupied except for weapons crews firing from an approved tactical contiguous (circular, box, star, etc.) (See Appendix C).

k. Tactical training will be conducted in the training areas. There will be no tactical training inside the cantonment area of main post unless approved by Garrison Commander.

l. Training or occupation will not occur within a 200 meter radius of the Ammunition Supply Point (ASP), located at grid coordinate NT 125635.

m. Training or occupation will not occur within a 200 meter radius of the Fort Jackson Flyers Club, site located at grid coordinate NT 135701

n. Units establishing shower points or water points on or near any part of Fort Jackson’s many lakes and ponds, will locate the site(s) so that no soapy or chlorinated water is allowed to drain back into the lakes or ponds. Discharges of ferrous chloride will be put into a pit at least two feet deep and 30 feet from the water’s edge. The above requires DPW Environmental written approval.

o. Trees on Fort Jackson’s Military Reservation with two bands of paint around the lower portion of the trunk are cavity trees of the Red Cockaded Woodpecker (RCW), which is an endangered species and protected by Federal Law. See paragraph 7-8.

p. Fuel farms in excess of 500 gallons above ground will be site approved by the Environmental Division, DPW, at 751-7153, and will not be located within 200 meters from bodies of water, potable water sources, or streams.

q. Commanders will ensure that no contaminates of any type to include transmission fluid, crankcase oil, anti-freeze, solvents, or any other contaminated items are dumped on Fort Jackson. Proper disposal of hazardous materials and wastes is outlined in FJ Regulation 420-47, “Hazardous Materials/Hazardous Waste Management.”

r. Tree cutting is not authorized on Fort Jackson, except with written permission from Forestry Branch, DPW. Range Operations will report any suspected unauthorized cutting to DPW Forestry.

s. Upon completion of training, commanders will conduct a thorough police of the entire area, removing all ammunition containers and all other debris. Ammunition debris to include cans, boxes, crating, or other material will be turned into the ASP as residue. MRE boxes, packets, and associated debris will be disposed of in dumpsters or taken to landfills located on Fort Jackson. No trash or debris will be buried or burned on Fort Jackson. Positions, weapon emplacements, and pits will be filled in with dirt/sand to within six inches above ground level and no more than that. Range Operations will provide sand to training areas upon unit request or as scheduled for maintenance.

t. Prior to departure from any training area to include the MOUT site previously occupied by a unit, the OIC will contact Range Operations on hand held radio or telephone and request a representative from Range Operations for proper clearance. Units who depart without notifying Range Operations will be reported to their Brigade S3 or commander. The unit will be required to return within 24 hours in order to be cleared within 72 hours and obtain a final clearance from Range Operations. Training areas deemed as “not cleared” will be closed for training until clearance is complete.

u. Landing Zones (LZ’s) will not be used for any ground training unless approved by Range Operations. Commanders training near LZ’s will be held responsible for policing known LZ’s within their training area. Units will police the entire area for brass, commo wire, metal stakes, razor wire, ration boxes, packets, and any other material that might be blown up into helicopter rotors.

v. All units in training areas will ensure that a calibrated Wet Bulb Global Temperature (WBGT) is on site and used from 1 April to 30 September or if the ambient temperature is above 75 degrees fahrenheit.

w. Cultural Resources.

(1) Federal Law mandates that all cultural resources eligible for listing on the National Register of Historic Places must be protected. Cultural resources include, but are not limited to, historic buildings and structures, cemeteries, historic, and prehistoric archeological sites. Areas on Fort Jackson containing National Register eligible cultural resources are marked with Restricted Area signs and/or Seibert Stakes. Ground disturbance, excavation, demolition, or tracked/wheeled traffic within the site area as well as a surrounding 50 meter buffer is prohibited.

(2) Federal Law prohibits artifact/relic collecting anywhere on Fort Jackson.

(3) Willful damage to an archeological site on Fort Jackson is a violation of the Archeological Resources Protection Act (ARPA) and can result in a Notice of Violation (NOV) and civil penalties typically involving tens of thousands of dollars worth of reparations, criminal investigations, and penalties of up to a \$100,000.00 fine and 5-year imprisonment. 32 CFR Part 229: Department of Defense, Protection of Archeological Resources: Uniform Regulations, applies to Fort Jackson and implements ARPA.

(4) The use of metal detectors for other than official purposes is prohibited on Fort Jackson.

(5) If accidental discovery of items that appear to be cultural remains (historic foundations, graves, historic or prehistoric artifacts, etc.) occurs during emplacement excavation or construction projects requires that all work shall cease within 100 feet (30 meters) vicinity of the find and contact must be made with the installation cultural resources manager at 751-4793.

7-3. Training Area Conflicts.

Reference Chapter 3, this regulation, paragraph 3-5

7-4. Range Roads and Firebreaks.

Reference FJ 385-10 & FJ Supplement to AR 190-5.

a. Allocation of an area does not include exclusive use of the roads located therein. Commanders desiring exclusive use of any portion of a road will specifically request the desired portion and include justification. Request will be submitted with initial request through the Scheduling Office.

b. All tracked vehicles are prohibited from operating on hard surfaced roads and the maintained shoulders adjacent to hard surfaced roads. Tracked vehicles will limit their movement to known and established tank trails and firebreak roads.

c. All tracked vehicles will adhere to 15 MPH in training areas on the reservation and will strictly adhere to weight limits when crossing bridges. Damage occurring will be the responsibility of the unit.

d. There will be NO permanent blocking of any firebreaks. All temporary barriers require approval from Range Operations and will be manned the entire time it is in place. Barriers will be configured to ensure access for emergency vehicles which are 40 feet long and 10 feet wide.

e. Emergency vehicles have priority on all firebreaks. There will be no checking of any emergency or Range Operations vehicles.

f. There will be no civilian running, walking, or bicycling in any training area or on any firebreak within the Fort Jackson reservation boundaries.

g. All running, walking, or bicycling will only be conducted on Dixie, Wildcat, Johnson Rifle, and Hartsville Guard Roads. No running is authorized on dirt trails or firebreaks.

7-5. Troop Movements and Foot Marches.

Reference: FJ Regulation 350-1 and FJ Regulation 385-10

7-6. Vehicle Marches/Movements.

a. Units other than basic training desiring to conduct vehicle marches or convoys on Fort Jackson will forward their requests (DD Form 1265) for endorsement through the Directorate of Logistics, Directorate of Public Works, Transportation/Maintenance Division, and Provost Marshal, Operations and Traffic. Request with endorsements must be received by DPTMS,

Scheduling Office NLT 14 days prior to training start date. Five or more vehicles constitute a convoy.

b. Minimum information required for approval by any of the above offices will include:

- (1) Unit designation and station.
- (2) Date of training.
- (3) Time of training (start and finish).
- (4) Complete acetate overlay of route.
- (5) Number of vehicles and type.
- (6) Type of cargo (if any).
- (7) Number of personnel to be trained to include any passengers.
- (8) Order of March.
- (9) Convoy Chain of Command.
- (10) POC name, rank and telephone number.

c. If blackout drive training is anticipated or requested, the following directives will be adhered to by all:

- (1) Blackout Drive is prohibited on all hard surfaced roads throughout Fort Jackson.
- (2) Blackout Drive is authorized on non-hard surfaced secondary (gravel or dirt) roads within Fort Jackson's training areas.
- (3) Blackout drive training may be utilized by units for training; however, night convoy operations using blackout drive must be requested through DPTMS, Scheduling Office.
- (4) Parking lights will not be substituted for blackout drive on non-tactical vehicles
- (5) When convoys under blackout drive conditions cross primary roads, road guards with lights, i.e., flashlights, lanterns, chemical lights, etc, will be positioned to warn traffic on both sides of the crossing point.

(6) Ground guides will be used when traveling cross country during blackout drive conditions when not precluded by the immediate training situation. Two (2) ground guides will be used when backing all tracked or wheeled vehicles.

(7) Blackout convoy speeds will be consistent with weather, terrain, and the night vision ability of the individual driver. Speeds will not exceed 10 mph while on secondary roads.

(8) Blackout interval will be consistent with weather, terrain, and the night vision ability of the individual driver.

(9) Caution will be exercised by all concerned when using secondary roads for blackout training. Commanders will ensure all personnel are thoroughly briefed prior to execution of training.

d. Convoy Commanders will maintain contact with Range Operations thru Motorola handheld radio, or SINCGAR radio on FM frequency 32.90 MHz throughout training beginning with initial call 10 minutes prior to SP, at SP, at each check point (CP) and at the final destination. Final call will be made to Range Operations to terminate training prior to unit departure from training area.

7-7. Environment Protection.

a. Purpose. To establish policies and procedures for preserving and protecting the environment on Fort Jackson

b. Applicability.

(1) The requirements in FJ 200-8 and paragraph 7-7 of this document apply to ranges, training facilities, training areas, recreational areas and the SCARNG licensed area located outside of Fort Jackson's cantonment area.

(2) In general, the environmental information listed in FJ 200-8 and paragraph 7-7 of this document also applies to Fort Jackson as a whole.

c. Procedure. FJ Regulation 200-8 and 32 CFR Part 651, Environmental Protection and Enhancement, require a Record of Environmental Consideration (REC) to be prepared by each proponent for all proposed air/land projects/actions. The proponent will forward their REC to DPTMS for review/approval prior to forwarding to DPW Environmental Division (ENV). ENV will determine if the proposed action/project will only require a REC and or an Environmental Assessment (EA) or Environmental Impact Statement. FJ 200-8 requires a written EA for field training exercises or other actions which:

(1) Are of a nature or magnitude not within the annual installation training cycle.

(2) Could potentially erode soil into wetlands or affect wetlands or flood plains in such a manner that could cause a violation of the Clean Water Act. An up-to-date map of the wetlands of Fort Jackson can be obtained from DPW's Environmental Division at 751-7232.

(3) May affect any federally listed endangered or threatened species of plant, animal, or one that is proposed for listing or any species on South Carolina's list of threatened or endangered species. Rough-leaved Loosestrife is reported only in the EIA and is training or maneuver restrictive. Smooth Cone flower exists near the tank trail, adjacent to Statue of Liberty Road, and all training activities are restricted in the population area (approximately one acre). To obtain a map of endangered species and locations, contact DPW at 751-3836.

7-8. Protection of Red Cockaded Woodpecker (RCW) Sites.

The RCW is an endangered bird that inhabits Fort Jackson's Training Area Complex. RCW's are sensitive to disturbances and may be adversely impacted by certain activities when conducted within close proximity of the RCW's cavity trees. RCW cavity trees are identified with two white bands at chest height. For management and training purposes, the RCW cluster (an aggregate of cavity trees) is protected with a 200-foot buffer extending outward from each RCW cavity tree. The buffer zones are marked with white diamond shaped signs indicating that the area within is an endangered species site. Tampering with these markings or signs is prohibited. Violations of the Endangered Species Act (ESA) can result in administrative sanctions and/or criminal prosecution. The following table of training activities and associated restrictions apply to RCW cluster buffer zones on Fort Jackson.

Note: The Endangered Species Act and HQDA Management Guidelines for the RCW on Army Installations mandate the protection and conservation of endangered species on Army property. The following guidance will be adhered to as it pertains to RCW's and use of any training area on Fort Jackson.

Training Activity Within Buffer Zones (1)	Allowed
Maneuver And Bivouac:	
Hasty Defense, Light Infantry, Hands and Hand Tool Digging Only, No Deeper Than 2 Feet, 2 Hours Max	YES
Hasty Defense, Mechanized Infantry/Armor	NO
Deliberate Defense, Light Infantry	NO
Deliberate Defense, Mechanized Infantry/Armor	NO
Established Command Post, Light Infantry	NO
Established Command Post, Mechanized Infantry/Armor	NO
Assembly Area Operations, Light Infantry/Mechanized Infantry/Armor	NO
Establish CS/CSS Sites	NO
Establish Signal Sites	NO
Foot Transit thru the Cluster	YES
Wheeled Vehicle Transit thru the Cluster (2)	YES

Armored Vehicle Transit thru the Cluster (2)	YES
Cutting Natural Camouflage, Hard Wood Only	YES
Establish Camouflage Netting	NO
Vehicle Maintenance For No More Than 2 Hours	YES
Weapons Firing:	
7.62mm and Below Blank Firing	YES
.50 Cal Blank Firing	YES
Artillery Firing Point/Position	NO
MLRS Firing Position	NO
All Others	NO
Noise:	
Generators	NO
Artillery/Hand Grenade Simulators	YES
Hoffmen Type Devices	YES
Pyrotechnics/Smoke:	
Cs/Riot Agents	NO
Smoke, Haze Ops Only, Generators Or Pots, Fog Oil and/or Graphite Flakes	YES
Smoke Grenades	YES
Incendiary Devices to Include Trip Flares	YES
Star Clusters/Parachute Flares	YES
Hc Smoke of Any Type	NO
Digging:	
Tank Ditches	NO
Deliberate Individual Fighting Positions	NO
Crew-Served Weapons Fighting Positions	NO
Vehicle Fighting Positions	NO
Other Survivability/Force Protection Positions	NO
Vehicle Survivability Positions	NO

Table 7-1. RCW Buffer Zone Training Limitations.

Notes:

- 1. YES - means that activity may be conducted within 200 feet of a marked cavity tree and NO - means that the activity may not be conducted within 200 feet of a marked cavity tree.**
- 2. These training restrictions apply to RCW cavity trees in Training Areas but not to cavity tree located in dedicated impact areas.**
- 3. Vehicles will not get any closer than 50 feet of a marked cavity tree unless on existing roads, trails or firebreaks.**

4. Smoke generators and smoke pots will not be setup within 200 feet of a marked cavity tree, but the smoke may drift through the 200 circle around a cavity tree.

5. The only exception to the above restrictions is: BRM Range 19, Heise Pond Recreation Area, inactive machine gun range: Combat II, Boy/Girl Scout camp, and Confidence Obstacle Course. The above locations can conduct normal operations, but no pine trees are to be damaged. DPW Environmental must be contacted with any proposal to deviate from the existing normal activities at the above locations.

7-9. Bivouac Sites/Lightning Protection/Lightning Assembly Areas.

a. Tactical bivouac sites can be emplaced in any location desired by the commander provided it is not physically on any live-fire range, inside either impact area, within the confines of a restricted training area, the confines of Weston Lake Recreation area, a Red-Cockaded Woodpecker (RCW) Cluster and buffer zone, or within 50 meters of or within the confines of the signed boundary of an archaeological site, within the boundaries of the Smooth Cone Flower population site, or being physically utilized by another training unit on date of request.

b. Commanders will submit requests for bivouac sites to DPTMS, Scheduling Office NLT 14 days prior to training start date. Request will include the following information:

- (1) Unit Designation and Station.
- (2) Date and time of training (start to finish).
- (3) Training area required (alpha-numeric).
- (4) CP location (8 digit coordinates).
- (5) POC, name, rank, and telephone number.

c. No later than 24 hours prior to occupation of the bivouac site, commanders will notify Range Operations and request a pre-inspection prior to occupation.

d. Units will maintain hourly communications with Range Operations throughout occupation. A range operations inspector will be dispatched to unit location to re-establish communication when hourly communication checks are not established by the unit.

e. Prior to departing, bivouac site commander will conduct thorough police of site IAW Para 1-15 of this regulation.

f. Upon completion of police, a range operations inspector will be dispatched at the scheduled time which was obtained during the occupation of the training site to inspect and clear the training area.

7-10. Semi-Permanent Field Training Areas/Sites.

a. General.

- (1) There are 13 training areas open for IET field training requirements.
- (2) Units will schedule all TA/FTX site needs with DPTMS Scheduling.

b. Responsibilities.

(1) DPTMS.

- (a) Schedules use of field training and STX sites.
- (b) Monitors and rotates sites in conjunction with installation staff support and brigade recommendations.
- (c) Coordinate with DPW to move porta-lets to rotated or special need requests within or to the next scheduled site for use.
- (d) Approves all new field sites and STX sites.

(e) Inspect sites with units prior to occupation and clear units from sites IAW established standards of this regulation and directives. In addition, inform units of LPA/Lightning Assembly Areas (LAA) locations within each FTX site.

(2) DPW.

- (a) Survey certifies LPA's/LAA's and environmentally approve rotation sites and new sites in a timely manner.
- (b) Assist DPTMS in preparation and maintenance of sites. For example, drop sand in area for use in dig sites; backfill; clear cut/thin tree areas; and other requirements, as required.

(3) Units.

- (a) Schedule and use of sites with DPTMS Scheduling IAW FJ 350-1 and this regulation.
- (b) Inform DPTMS of training site problems and who will coordinate with DPW to correct problems in a timely manner.
- (c) Provide input to DPTMS for revision and or establishment of new sites based on existing and or new training requirements in a timely manner.

7-11. Protection/Assembly Areas.

a. Training Area (TA) Lightning Protection Areas (LPA's).

b. TA 5A (300 Soldier capacity); 15A (150 Soldier capacity) has a shed that is grounded as lightning protection areas (LPA). LPA signs are posted on these sheds; grid coordinates are: TA 5A: NT 128693.

c. Training Areas (TA's): 4C, 5A, 9B, 11D, 12C, 12E, 16A, 16C, 17B, 18A, 18B and 18D. Lightning Protection Area (LPA) sheds are identified and marked with an LPA sign. LPA locations within each training area:

Training Area	LPA Locations(s)
TA 4C	*NT 1263 7087
TA 5A	*NT 1263 6916
	*NT 1244 6904
	*NT 1287 6933
TA 9B	*NT 1149 6235
TA 11D	*NT 1682 7228
TA 12B	NT 1532 7179
TA 12C	*NT 1651 7084
TA 12E	NT 1562 6966
TA 16A	*NT 1762 7311
TA 16C	*NT 1950 7209
TA 17B	*NT 1956 7114
TA 18A	*NT 1725 7140
TA 18B	*NT 1808 7043
TA 18D	*NT 1745 6916
MOUT Site	*NT 1825 6864
	*NT 1823 6868
Super Bowl	*NT 0784 6457

Table 7-2. TA Designated LPA Sites.

Note: * are designated LPA sites.

d. Range Lightning Protection /Lightning Assembly Areas: (see Appendix D-15)

(1) Lightning Protection Area (LPA) – an area that has full lightning protection to include lightning rods, grounding rods and centenary systems.

(2) Lightning Assembly Area (LAA) – an area that has minimal grounding systems in place but does not meet the full lightning protection requirement and its use is limited to a rain shelter.

Chapter 8 – Ammunition References: FJ 385-10 and Ammunition Supply Point (ASP) Standard Operating Procedures (SOP).

8-1. Purpose. To explain and reemphasize safety criteria when handling, firing, identifying, and disposing of ammunition/explosives and unexploded ordnance. Range Operations is the link in the chain through which the responsible personnel or units submit malfunction reports IAW AR 75-1. OIC will submit reports pertaining to UXO and UXO location.

8-2. Ammunition Storage. Training ammunition is authorized for storage at the Post Ammunition Supply Point (ASP) and Ammunition Holding Area (AHA) off of Wildcat Road. Additionally, ammunition may be held at field locations, under guard during training. Other storage sites at Fort Jackson authorized for storage of training ammunition include FOBs, MP, CID, and AMWD (military dog).

8-3. Ammunition/Explosives Care, Handling, Safety, and Unexploded Ordnance (UXO).

a. The OIC IAW DA Pamphlet 385-63, paragraph 1-6 g (2)(J), for training will comply with the duty requirement pertaining to ammunition and explosive proper handling, to include transport, storage, and accountability from time of receipt to the time of expenditure or turn-in. Procedures for correct ammunition and explosive handling to be followed by all personnel is outlined in AR 385-63 and DA Pamphlet 385-63, DA Pamphlet 385-64, DA Pamphlet 710-2-1 and applicable TMs. In addition, adhere to safety precautions contained in AR 385-62, DoD 4500-9R part 205, FM 5-250 and the appropriate weapons operator's manual when handling, transporting, and firing ammunition and explosives.

b. Remove ammunition to be fired from sealed containers and protect from adverse weather elements, to include direct rays of the sun. Do not remove ammunition from sealed containers any earlier than is necessary to prepare it for firing, which includes inspection and maintenance. Precutting of powder charges is PROHIBITED except for controlled demonstrations where a registration has been conducted, or for training in suppressive fire situations. Commanders will ensure that rounds with charges precut are fired safely.

c. Use only authorized fuse wrenches to assemble the fuse to the projectile, do not use excess pressure.

d. When affixing artillery and mortar fuses to projectiles, select modes and time settings IAW TM 43-0001-28. Use minimum range authorized on safety card as it applies to the fuse used.

e. Do not leave ammunition and/or residue powder increments unattended.

f. Secure ammunition being transported in such a manner as to prevent any movement.

g. Vehicles transporting or loaded with explosives will carry “EXPLOSIVES” placards on the front, rear, and each side of the vehicle. Cover or remove signs when vehicle(s) are not carrying explosives. Appropriate fire extinguisher are (GOV/Mil Vehicle=2 each, 10lbs, BC rated; Civilian/Commercial=1 each, 10lbs BC rated fire extinguisher) IAW DA PAM 385-64, chapter 7-8d, DoD 4500.9R part 205, and DoD Form 626.

h. Unit commanders will draw ammunition from the ASP and transport to a field staging area(s). Locate field staging areas outside the cantonment area at least 400 meters from cantonment area boundaries and public traffic routes. You may also set up field staging areas on established firing positions.

i. BCT ammunition for marksmanship is normally issued from ASP by 171st Infantry Brigade’s ammunition vehicle/personnel to BCT ranges. A unit ammunition NCO will be present at the range at all times to prevent pilferage, monitor Soldiers, and keep segregation of lots and accountability of ammunition.

j. Ammunition may be transported in tactical vehicles inspected IAW DD Form 626, AMC 1948 series tie down drawings, or blocked/braced properly or secured to prevent movement, and the TMs for that vehicle approved by the Post Ammunition Officer. Propellant and projectiles may be carried on firing vehicles designated for that purpose and when compatibility is not compromised. DO NOT transport projectiles while fused, except when issued as a fused round.

k. Vehicles will not park within 10 meters of the fire control equipment of any type.

l. Do not use portable lights, other than approved electric lanterns or flashlights, near explosives and ammunition.

m. Ensure that serviceable and correct rating fire extinguishers by correct pounds, number, and type, are available near areas where ammunition or explosives are being handled. Coordinate with Post Ammunition Officer and Fire Chief for latest information pertaining to fire extinguisher requirements for your explosives and or ammunition for use. For example, small arms ranges require one charged and serviceable ABC fire extinguisher per ammunition storage point structure.

n. Separate explosives and components of explosives located in shelters IAW DA PAM 385-64 in such a manner that a fire cannot spread from one shelter to another.

o. Clear boxes, containers, dunnage, and packing materials from areas where explosives are handled as soon as the contents are removed. Stack in a neat and orderly fashion.

p. Smoking is PROHIBITED in any building, vehicle, or location within 50 feet of buildings or vehicles containing explosives or ammunition.

q. The OIC of any exercise involving the use of ammunition will conduct an ammunition safety briefing prior to issue. The briefing will cover, as a minimum:

- (1) Dangers of ammunition tampering.
- (2) Handling and firing ammunition.
- (3) Proper storage.
- (4) Steps to be taken in the event of an ammunition mishap.

r. Commanders are responsible for instructing their personnel not to touch live or suspected live ammunition larger than caliber .50 if found anywhere. A safety briefing by the OIC/RSO including UXO procedure will be conducted before starting range operations/training.

s. Unexploded Ordnance (“UXO” previously called “DUD”). UXO is any explosive munitions such as fuse, projectile, grenade, or mine which has been fired from a weapon system or activated and has failed to detonate.

(1) Commanders/OICs/NCOICs/Directors (for contractors) are responsible to instruct all personnel of the dangers of UXO and frequently remind personnel that UXO will not be touched or disturbed under any circumstances. UXO ammunition found or observed inside/outside of an impact area will not be touched, location reported, and that UXO will be handled and disposed of only by EOD personnel. Personnel are not to disturb artillery, mortar, rockets, pyrotechnic devices, aircraft flares, grenades, simulators, or any other ammunition or device that has been fired but failed to detonate and to treat all objects identifiable or not, as UXO. That the use of metal detectors is PROHIBITED on ranges, in training areas or impact areas unless approved by Installation Range Officer, DPTMS, for official military business.

(2) When firing explosive projectiles, the OIC will ensure records are established and maintained of all suspected UXO fired ammunition and provide a report to Range Operations immediately after completion of live-fire or range/firing area departure.

(3) Removal of any ammunition, component part, or unidentifiable object associated with explosives from a range, impact area, training area or facility is STRICTLY PROHIBITED.

(4) UXO found or observed will be clearly marked by stringing or laying durable material or white engineer tape. Any other distinct marking expedient may be used when the above is not available. Do not drive stakes or objects into the ground near the UXO or disturb the UXO in any manner. The range OIC will report to Range Operations immediately with the following information: UXO grid coordinates: how UXO area is marked: number and type UXO if known: person who knows UXO location and will be available to assist EOD on site. REMEMBER: only qualified EOD personnel will handle and destroy/dispose of UXO.

(5) In the case of grenades or other munitions that may be immediately hazardous to personnel (that is burst radius) firing will be halted until qualified EOD personnel clear the UXO. In other cases, firing need not be halted.

8-4. Ammunition Firing Restrictions.

a. Due to a high dud rate of 40mm grenades, high explosive (HE) grenades fired from a hand-held weapon will only be fired on Bastogne Range or Casablanca Range HE designated points. The MK-19 will only be fired from Bastogne and Casablanca Range designated surveyed firing point(s) with Range Operations approved and DA Pamphlet 385-63 authorized SDZ.

b. Only EOD qualified personnel or authorized EOD military/civilian organizations will clear ranges, impact areas, and training areas of UXO.

c. OICs/RSOs and or NCOICs will ensure that NO 40mm HE ammunition is fired at targets closer than 130 meters.

d. Only flat trajectory (HQDA overhead live-fire approved) 7.62mm ammunition (A151) will be fired during the Night Infiltration Course live-fire at Abernathy Range.

e. Per DA Pamphlet 385-63 paragraph 3-3k "Ammunition determined to be defective will not be fired." Examples of ammunition defects are listed in DA Pamphlet 385-63 paragraph 3-3.k. (1) (2) (3) (4) (5) and paragraph 3.3.l.

f. AR 385-63, paragraph 2-3a., PROHIBITS use of nonstandard ammunition and explosives unless approved as stated in paragraph 2-3a.

8-5. Handling and Disposal of Misfires, Hangfires, and Ammunition Malfunctions.

a. Misfires, hang fires, and ammunition malfunctions will be treated IAW the provisions of AR 75-1, AR 385-62, DA PAM 385-63, DA PAM 385-64, and the technical manuals (TMs) for the weapon and or ammunition involved.

b. Misfire procedures in training manuals for the appropriate designated weapon system will be followed. In the event that a misfire(s) presents an immediate hazard to personnel a cease-fire is necessary, it will be reported to Range Operations by the OIC or his/her representative. Personnel must be trained by the commander/OIC in proper weapons and ammunition handling procedures to include misfire procedures, prior to the start of actual live-fire training events.

c. A misfire is not a hazardous malfunction. After determining the malfunction is not a hang fire, place the misfired ammunition in its original container, mark it "misfire," and return it to the Ammunition Supply Point (ASP). The RSO will ensure all applicable safety pins and or wires have been replaced and will inform the OIC of such. The same procedure applies to defective ammunition.

Note: Misfired/defective ammunition will not be mixed with other ammunition being returned to the ASP.

8-6. Malfunction Reporting.

a. A malfunction is the failure of an ammunition item to function as expected when fired, launched, or when explosive items function under conditions that should not cause functioning. Malfunctions include, hang fires, misfires, UXO, abnormal functioning and premature functioning of explosive items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions do not include accidents or incidents that arise solely from negligent, malpractice, or situations such as vehicle accidents or fires.

b. AR 75-1, Malfunctions Involving Ammunition and Explosives; AR 385-40, Accident Reporting and Records; AR 385-63 and DA PAM 385-63, are references required for reporting malfunctions (any round or item of ammunition, explosives, or their components malfunction). The OIC, IAW with paragraph 1-6 g. (2)(n) of DA PAM 385-63, will immediately ensure that a report of all and any malfunction(s) or accident(s) involving ammunition to Range Operations, who will notify the Quality Assurance Specialist (Ammunition) and/or Chief, Ammunition Section; DOL Operations Supply Service Division; FJ Safety Center; TACOM Weapon Repair Branch; and AMMCOM (AMC/JMC). Evidence (materials, weapons fragments, etc.) will not be moved nor will the area be policed (all items of ammunition, explosives or their components relevant to malfunction, including expended rounds and unfired ammunition, will be retained pending investigation) except by authority of the DOL or his representative.

c. Malfunctions will be reported using the following format: DA Form 4379 (ADD)

- (1) Type of report (misfire or dud/malfunction).
- (2) Name, rank, unit of OIC.
- (3) Location (of misfire).
- (4) Type/caliber of weapons.
- (5) Lot number.
- (6) NSN/DODIC number.

- (7) Total rounds fired.
- (8) Total misfires or duds.
- (9) Comments.

d. Small arms ammunition, blanks in particular, will be inspected immediately prior to the use by qualified personnel of the using unit to ensure that there has not been any tampering with such ammunition. Ammunition bearing evidence of tampering (i.e., lacquer seal in the mouth of cartridge missing or marred, scratches or burrs on mouth of cartridge) will be set aside and reported to Range Operations personnel who will notify the Quality Assurance Specialist (Ammunition), Ammunition Supply Point.

8-7. Police of the Training Location/Complex.

a. Removal of spent brass, unfired rounds, or components of fired rounds from UXO contaminated impact areas without the written approval of the Range Operations Officer is not authorized.

b. Dropping off ammunition or explosives into impact areas or other unauthorized disposal or disposition areas is **PROHIBITED**.

c. Unauthorized removal of ammunition, pyrotechnics, explosives, or residue from munitions or from the range(s), training location(s), training complex, or installation is **PROHIBITED**.

d. The collection of spent brass is not required when ammunition expended from mounted or dismounted weapons over extended terrain (10km+) and or impact areas.

e. All packaging material will be retained by the unit and returned to the ASP during scheduled turn-in.

Chapter 9 - Basic Rifle Marksmanship Ranges and Live-Fire Courses.

9-1. Basic Rifle Marksmanship Ranges.

a. All Basic Rifle Marksmanship (BRM) ranges on Fort Jackson are located around the outside perimeters of the small arms; West Impact Area (WIA). All BRM Ranges are assigned range numbers to facilitate the ease of locating starting with Range 1, located at coordinates NT 072665, and numbered progressively in a clockwise direction around the impact area ending with Range 20 at coordinates NT 092641. Additional information or technical assistance about any BRM Range is available at BRM Headquarters on Dixie Road or telephone 751- 5806/7382 (see paragraph 9-2 and Appendix B for further range description/capability).

b. All live-fire courses except Remagen Hand Grenade Range are located around the outside perimeters of the East Impact Area (See paragraph 9-3 and 9-13).

c. All non-live-fire ranges/training facilities are located in various locations throughout Fort Jackson (See paragraph 6-1, this regulation).

9-2. BRM Range Inventory.

Rng #	Type of Range	Capability	Status
1	5.56 25 Meter Zero	80 Points	Active
2	5.56 25 Meter Zero	80 Points	Active
3	5.56 25 Meter Zero	50 Points	Active
4	5.56 25 Meter Zero	80 Points	Active
5	5.56 25 Meter Zero	80 Points	Active
6	Pistol/Shotgun 25/50 Meter/Zero	34 Points	Active
7	5.56 25/50 Meter/ Zero/Protective Mask/Night Fire	32 Points	Active
8	5.56 25/50 Meter /Protective Mask	32 Points	Active
9	5.56 Single/Multiple Targets	32 Points	Active
10	5.56 Field Fire/Qualification Target Detection/Zero Auto	16 Points	Active
11	5.56 300 Meter LOMAH-KD	28 Points	Active
12	5.56 300 Meter LOMAH-KD	28 Points	Active
13	5.56 25 Meter Zero Course (Alt C Qual)	60 Points	Active
14	5.56 BRM (ERETS) Qualification	16 Points	Active
15	5.56 BRM MRF Qualification	16 Points	Active
16	5.56 MRF Qual –FY12 construction-	16 Points	Construction
17	5.56 BRM (ERETS) Qualification	16 Points	Active
18	5.56 BRM (MRF) Qualification	16 Points	Active
19	5.56 BRM (ERETS) Qualification	16 Points	Active
20	5.56 BRM (ERETS) Qualification	16 Points	Active

Table 9-1. BRM Range Inventory.

Note: Aachen (200 Meter Civilian Weapons Range). Contact DCA-CRD, Marion Station 751-3484 to schedule the use of Aachen Range.

Note: Local lot ammunition (Ammunition assigned a local number i.e. FJ-001-U-97) will not be used for qualification training. This ammunition may only be used for familiarization training. Lost lot ammunition consists of serviceable mixed lots that were not kept segregated after issue.

Note: Units risk assessment must state how the unit will clear their weapons on and off the range and also must state what uniform they will be in during training.

9-3. Live-Fire Course Inventory.

Range Name	Type Course	Capacity	Status
Aachen I	5.56 25/50 Single/Multiple Targets	28 Points	Active
Aachen II	DFMWR Skeet Range	5 Points	Active
Anzio I	Battle March & Shoot	Co. Size	Active
Anzio II	Convoy Operations	Co. Size	Active
Andrew Jackson	POW/Squad Maneuver (MWR Range)	4 Lanes	Active
Argentan	25/300m KD	17 Points	Active
Bastogne	Weapons Familiar: M240B, M249 MGs, M18A1, AT-4 TP/HE, M203-TP/HE, cal .50 MG/MK-19	Co. Size	Active
Casablanca	3 MK-19 TP Only; OP	Sqd Size	Active
Cowpens	Mortar 60/81/107/120mm; OP	Plt Size	Active
*Combat II	Tank/Fighting Vehicle Scaled Gunnery Range/ Armor Laser Range/ Machine Gun Transition Range (CPQC) 9mm/ Pistol Qual (ERETS)	5 Points 15 Points	Active
Demolition Pit	Demolition Training (Engineer)	Plt Size	Active
*Kasserine Pass	M203-TP, AT4-TP/ SAW (Qual/Familiarization) Pistol 7.62/5/56 600m (Dormant)		
NIC	Night Infiltration Course (NIC)	Co. Size	Active
*Main Tank	Stationary Live Fire M1A1/ Bradley	4 Points	Active
Omaha Beach 1 & 2	Fire & Movement- Live Fire	8 Lanes	Active
Remagen II	Live Hand Grenade Qualification	4 Bays	Active
RST 4	Demolitions Training (EOD Company)	ALT	Active
McCrary Demo	Demolitions Training		
	Other Live Fire Facilities		
	*Denotes: Ranges located within the SCARNG Licensed Area		

Table 9-2. Live Fire Range Listing.

9-4. Non-Live Fire Course Inventory.

Range Name	Type Course	Capacity	Status
Combative Assault Course	Combatives	Co. Size	Active
Jett Range	CS Chamber	Co. Size	Active
Fit to Win I & II	Conditioning Obstacle Course	Co. Size	Active
Confidence Obstacle Course	Confidence Obstacle Course	Co. Size	Active
Corregidor Land Nav	Land Navigation	Co. Size	Active
Chip Yong-Ni	Individual Tactics & Techniques	8 Lanes	Active
MOU Site East/West	Combat in Cities	Co. Size	Active
Victory Tower	Obstacles/Confidence Course	Co. Size	Active
Teamwork Development Course (TDC) I & II	TDC I & II	Squad Size	Active
RVTT	Reconfigurable Vehicle Tactical Trainer	Squad Size	Active
Convoy Operations Land (COL)	Home Station Training Lane; Counter/Defeat IED	Co. Size	Active
Wanat	Convoy Operations	Platoon Size	Active
Corregidor East & West	Land Navigation Course	Co. Size	Active
St Lo	Land Navigation Course	Co. Size	Active
TTB (193 rd)	Tactical Training Base	Battalion	Active
TTB (165 th)	Tactical Training Base	Battalion	Active
TTB (187 th)	Tactical Training Base	Battalion	Active
TTB (SSI)	Tactical Training Base	Battalion	Active
Event Trail	Part of NIC Range	2 Lanes	Active
Inchon	INACTIVE	NA	Inactive
Teague	INACTIVE	NA	Inactive
Remagen I	Practice Hand Grenade	4 Bays	Active
MSTF	General Medical Instruction Building First Aid	Co. Size	Active
Hilton Field	Family Day (Pyrotechnics)	Battalion	Active

Table 9-3. Non-Live Fire Course Inventory.

9-5. Use of Ranges and Courses.

a. All range equipment required for training is available at the range, less supplies and specific training aids. SCARNG, USAR, and ROTC will coordinate with SCARNG MTC, (803) 299-2207, for range flags, equipment to include telephones and target/supply requirements when using Main Tank Range, Combat Pistol, 13, 14, and Kasserine Pass Ranges. Units using ranges MOU Site, St. Lo (Land Navigation), Cowpens Mortar Range, artillery, mortar and MLRS firing points will coordinate for flags and equipment requirements, less targets/supplies, with Range Operations. All other rifle range requirements for BRM Ranges 10 and 17-20 will be

coordinated with 171st Infantry Brigade, BRM Headquarters. All range equipment (less supplies) for Combat Indoctrination and General Subject ranges/facilities will be coordinated with General Subjects (GS) headquarters and Combat Indoctrination (CI) headquarters co-located with Basic Rifle Marksmanship (BRM) headquarters. If PA sets are desired but are not available on the range, they can be drawn from BRM Headquarters, SCARNG MTC, or DPTMS Training Support Center (TSC) located at building B-12-650, Jackson Blvd.

b. An approved request to use any range does not constitute authority to open fire. Clearance to start firing must be obtained from Range Operations immediately prior to actual start.

c. Ranges other than BRM Ranges, i.e., tank targets, thermal targets, infantry combat targets, and combat pistol targets require using unit's chain of command to coordinate with Range Operations or McCrady Training Center Operations Office.

d. SOP's for all ranges/training facilities are maintained on the range and will be provided upon request of using unit commander, OIC, or RSO. Individual copies may be requested from Commander, 171st Infantry Brigade Attn: S-3 or DPTMS, ATTN: Range Operations or Commander, SCARNG, MTC, ATTN: Operations, Fort Jackson, SC 29207 for that specific range or facility. For example, Range 6 to Range Operations; Remagen Hand Grenade Range to 171st Infantry Brigade, and Combat Pistol to SCARNG, MTC.

e. Vehicles will be parked only in designated parking areas on the range. Access, service roads, fire breaks, and tank trails will be kept clear of vehicles at all times. No privately owned vehicles (POVS) are allowed on any live-fire range except in authorized POV designated parking areas (see paragraph 1-16 for specific details for POV parking). POV's are not allowed on Train Fire Road, ranges 1 through 13.

f. Upon completion of firing or training on any range, the range OIC, RSO, or range cadre will contact Range Operations and request a closing time. Range personnel are responsible for the clearing operations and police of the range prior to departure. Range personnel have the authority to retain any unit until the range clean up and police meets the range standards IAW the Range SOP. Range Operations will clear all non-171st Infantry Brigade ranges within the training areas outside of the Fort Jackson cantonment area and the SCARNG licensed Area. SCARNG MTC will clear Kasserine Pass, Main Tank Range, and Combat Pistol Ranges.

g. Two means of communication, radio, telephone or cell phone, will be in place at all ranges prior to start of training. Range Operations will notify BRM Headquarters for assistance in establishing the second means of communications. BRM Headquarters will take all necessary actions to ensure communication requirements are met.

h. All latrine supplies required by personnel using semi-permanent latrines will be provided by the unit. Supplies for port-a-let facilities are the responsibility of the contractor,

telephone 751-4731. Units should contact the cadre member for the range to assist in getting port-a-lets serviced. If you cannot contact the cadre member contact Range Operations at 751-7171/4732 for assistance.

i. Ammunition and/or range details will be provided by the occupying unit when requested.

j. M16A2/M4 automatic burst fire for training is only authorized on Range 10 or as authorized by the Range Operations Officer.

k. All units on ranges will ensure that a calibrated WGBT is on site and used from 1 April to 30 September or if the ambient temperature is above 75 degrees.

9-6. Range Barriers and Road Guards. The OIC is responsible for placement and removal of temporary road blocks and barriers as required by the range and or indirect fire SOP. Road guards are required at each temporary road blocks and barriers in training areas and on ranges.

9-7. Violations of Surface Danger Zones (SDZ).

The following procedures will be followed if a unit fires outside the designated limits or panel markers of any range.

a. OIC or RSO will immediately initiate a “cease fire.” All Soldiers will be required to place weapon selector level on safe and have all weapons cleared, rodded, and place them in a down range position and move to the rear of the firing line. Line safety personnel will inspect all weapons. Range personnel will initiate a re-brief of all personnel of the dangers associated with firing outside safety limits. Once range personnel are satisfied and all personnel thoroughly understand the safety limits of the range, training may continue. A report of the incident will be made to Range Operations upon activation of the “cease fire” and prior to commencement of training. Any further violations by the unit will result in a “cease fire” and notification to the Installation Range Officer. Any additional actions required will be stipulated by the Installation Range Officer.

b. For weapons larger than caliber .50, to include artillery, mortars, MLRS, coax machine guns, tank main guns, and laser devices exceeding SDZ's, safety limits or panel markers, an immediate “Cease Fire” will be initiated and reported to Range Operations. Range Operations will notify the G3/DPTMS and the Fort Jackson Safety Center. An investigation will be conducted and appropriate action will be taken to either discontinue or to continue training.

9-8. Incendiary and Tracer Ammunition.

a. Prior to firing any type incendiary, pyrotechnic, or tracer ammunition on any range, Range Operations will be notified and the requestor will be advised of the installation fire hazards (Refer to the Fort Jackson MFR: Fire Danger Class Notification).

Note: During periods of extreme temperatures and dry weather, fire hazards are very likely to be in effect.

b. Fire hazard assessments will be made by Forestry Office of DPW. When restrictions are necessary for whatever period, Forestry will notify Range Operations daily prior to commencing any live-fire training. Range Operations will implement fire hazard restrictions daily in the absence of DPW hazard assessments or instructions, as required.

9-9. Safety on All BRM Ranges and Live-Fire Courses.

a. The provisions of AR 350-19, AR 385-63/DA PAM 385-63, FJ Reg 385-10, this regulation, Range SOP's and appropriate field manuals, technical manuals, and pertinent material will govern the general safety aspects of all live-fire and fire and maneuver course live-fire training.

b. The only weapons firing on Fort Jackson military ranges and courses will be official military training conducted for military personnel, using military weapons, scheduled and approved by the Installation Range Officer. The only exceptions to the above are as follows:

(1) Non-military personnel can fire small arms weapons on Fort Jackson military firing ranges when they are engaged in an approved course of military marksmanship training or when they are participating in approved activities involving familiarization firing of small arms. **Non-military personnel are not authorized to fire crew served weapons.**

(2) The only time that a military family member or a civilian minor (17 years or less) will be permitted on a firing line is when under competent adult supervision and when engaged in an approved course of marksmanship training (i.e. junior ROTC). The minor rule (above) is non-waivable.

(3) Aachen Range on Golden Arrow Road is the only civilian operated range on Fort Jackson and is used strictly for live-fire recreation purposes. Use of this range must be coordinated through FMWR, Community Recreation Division, Outdoor Recreation at Marion Station at 751-3484.

(4) Civilian live-fire on ranges will be IAW AR 350-19.

c. All spectators to small arms demonstrations, training courses, competitions, and other types of firing, will stay behind the firing line of firing activity designed areas. Spectators (as part of an inspection team of official observers), even though required to be on the firing line as an exception to the foregoing policy, will remain behind or to the side of the muzzle but away from the recoil and the back-blast area or all weapons on the firing line. The OIC and RSO are responsible for range safety and the control of all spectators. Any spectator who compromises safety or distracts shooters or range personnel will be removed from the range.

d. Ranges will not be used for training other than what it is specifically designed for without Range Operations approval.

e. Zero, Pistol, and KD Range OIC's may allow personnel down range only after the entire firing line is cleared, all weapons secured, all weapons inspected, and all other SOP control measures are taken to ensure safe conditions down range are in effect. Units conducting small group firing on zero ranges (Ranges 1-6) must do so as detailed in appendix D-14. All other ranges must request permission from Range Operations.

f. Unit commanders and or individuals will "cease fire" on observations of any person (s) and or vehicle (s) down range in any SDZ or impact area. The "cease fire" and SDZ violation will be reported to Range Operations immediately. The "cease fire" will remain in effect until the vehicle and or person (s) are removed.

g. Unit commanders and individuals will immediately "cease fire" if an aircraft is observed in the surface danger zone (SDZ) of any live-fire, demolition range, firing point, or within either impact area while training is in progress. The "cease fire" will be immediately reported to Range Operations. OIC or personnel observing aircraft in their SDZ must be prepared to provide the following minimum information:

- (1) Time and date of sighting.
- (2) Type of aircraft observed, if known.
- (3) Color of aircraft.
- (4) Direction of flight/estimated altitude.
- (5) Any distinguishable markings.
- (6) Tail number, if observed.

h. Prior to opening fire of any BRM Range or direct live-fire course, the OIC will ensure that:

(1) The current Range SOP is on hand, applicable risk assessment is present, and in possession of valid and non-expired FJ 385-63-100 (Range Safety Card) issued by Range Operations.

(2) RSO has a valid FJ 385-63-100 and is trained for his/her safety duties.

Note: Assistant safeties are not required to have FJ 385-63-100 if thoroughly trained for duties by the OIC.

(3) Medical support is onsite or support is to be provided IAW Chapter 1, this regulation.

(4) Communication has been established (maintained) and opening data has been exchanged with Range Operations.

(5) The left and right limits of fire on the ground have been verified.

(6) The daylight left and right limits of fire, as indicated in the SOP are marked with safety stakes or panel markers.

(7) A scarlet red flag is properly flown (displayed) from a prominent point for a range/course and at all times while firing is in progress during daylight hours. In addition, a blinking red safety light will be on the prominent point and red lights visible on the range limit panels during range night live-fire IAW DA PAM 385-63.

(8) Ammunition point has a fire extinguisher, correct type (ABC), and is within proper charge limits.

(9) Ammunition at the weapon positions is stored IAW applicable FM's, TMs, publication, and SOPs. Ammunition is serviceable and for applicable training requirement. For example, Night Infiltration Courses will only use flat trajectory A151 (7.62).

(10) All personnel have authorized and properly fitted hearing protection and eye protection (IAW Commander's policy).

(11) All personnel receive a range safety briefing. The brief will emphasize use of eye and or hearing protection when personnel are engaged in live-fire and or within the noise hazard distance of each specific weapons system. Anywhere forward of a firing line is "off limits" to everyone during live-fire. All will know that an immediate "cease fire" will be initiated by anyone observing anyone forward of the firing line and the OIC will report the "cease fire" immediately to Range Operations.

(12) Inform and ensure that the RSO on small arms ranges is located on the firing line or best position to influence safety when live-fire training starts and until the training ends. The OIC will inform and ensure that the RSO performs only safety duties during live-fire (Not coaching on firing line, etc).

(13) Live-fire permission has been obtained from Range Operations prior to any live-fire.

(14) Weapons are free of bore, barrel, cannon obstructions, and have been physically inspected by a designated and well trained assistant range safety officer (ASO) or safety officer for such, prior to immediate live-fire training. This will be completed anytime a Soldier or

civilian enters or re-enters a firing line, point or area. The RSO or designated ASO (by the RSO and/or OIC), will ensure by physical inspection that the weapon/weapon system bore, barrel, and cannon is free of any type of obstruction. Obstruction found will be cleared and bore, barrel, and cannon cleaned, lubricated, and re-inspected prior to any live-fire use.

(15) No one is down range as verified by unit RSO to OIC IAW SOP Procedures (Sight and Sound).

i. During live-fire, OIC/RSO will ensure that:

(1) All weapons/weapons systems are fired IAW safety precautions stated in applicable FM and training publication, unit risk assessment, and Range SOP.

(2) All firing is within the right and left safety limits as stated and prescribed by the Range SOP.

(3) No rounds are fired short of the minimum or beyond the maximum range, as prescribed by the range safety fan, within the SOP.

(4) Misfires and hang-fires are handled IAW applicable FM and TM publications and safety procedures handled in applicable publication.

(5) An immediate “cease fire” will be called when any unsafe condition or act is observed, when directed by Range Operations, or if communication with Range Operations is lost.

j. Weapons or weapon systems on the firing line, point, and or area are pointing up and down range or at the extreme low ready position at all times, as applicable and IAW with brigade commanders’ policy. On BRM ranges, all weapons will be placed in the “V” notch stakes, selector switch on safe, and magazine removed when not in use for live-fire.

k. After live-fire, OIC/RSO will ensure that:

(1) No weapons/weapons system will be removed from the firing line until each weapon has been properly cleared IAW with regulation, appropriate TM/FM. For example, rifle clearing procedures include:

(a) Magazine removed for rifles/ammunition removed.

(b) Bolt to the rear and locked.

(c) Weapon selector switch placed on safe.

(d) Physically check or rod each weapon prior to removal from firing line, or use clearing barrels, and/or shotgun the weapon.

(2) If a rod is being utilized: rodding of small arms weapons/weapons systems prior to removal from firing line, point, and/or area requires a solid brass rod being inserted into the muzzle end of the weapon (weapon should be pointed up and down range during rodding procedures) through the entire bore until the rod tip can be observed protruding out the chamber in the eject window. All other weapon systems will be inspected and swabbed out clear IAW appropriate TM/FM.

(3) If used, weapon clearing rods must be in compliance with the Army Safety Centers Safety Alert, Dated: 17 January 2003. Utilizing a one piece soft brass/aluminum 27" in length. Reference is TM 9-1005-319-10.

Note: Caution should be exercised to ensure bolt face is not struck by rod tip causing bolt to fly forward against rod. Such action may cause damage to bolt face and locking lugs.

(4) No one will be permitted forward of the firing line, point, and or area until all weapons have been cleared and inspected by the designated ASO and or RSO. M16A2/M4's will have chamber block inserted before Soldiers move down range, if available.

(5) All weapons not in use on the firing line will be stored in racks provided on the range with all bolts forward and dust covers closed with weapons on safe, or as prescribed by Unit Commander to include weapon on safe.

(6) Upon completion of firing on any range or course, all weapons will be cleared and inspected, as applicable and ammunition "shakedown" will physically departing the range/facility/area, or moving to the firing line.

(7) The unit firing will notify Range Operations as soon as the training is complete. Unit will provide number of rounds fired by DODIC/lot number and then obtain a closing time from Range Operations.

(8) All ammunition will be accounted for at all times and will be returned by ASP authorized personnel with a military vehicle IAW existing regulations/directives.

1. Ammunition will not be stored on any range or course overnight unless prior approval from Range Operations has been authorized.

9-10. Grenade Launchers.

a. All marksmanship firing of the 40mm grenade launchers (M203) using high explosive (HE) ammunition will be conducted ONLY on Bastogne. Target Practice (TP) ammunition for

40mm will be used ONLY on Bastogne, Casablanca, and Urban Assault Course (UAC) (M203 Lane).

b. All firing of 40mm grenades will be into cleared or fenced designated areas only IAW AR385-63/DA PAM 385-63. 40mm grenades will not be fired during assault phase training nor will they be fired over the heads of troops. Safety procedures will be IAW AR385-63/DA Pam 385-63, applicable FM, TM, and Bastogne/Casablanca using unit risk assessment sheet and SOP. No overnight storage of munitions is permitted.

c. MK-19 IAW AR385-63/DA PAM 385-63, FM/TM only on Casablanca and Bastogne Range.

9-11. Hand Grenades.

a. Remagen range is available for use with fragmentation hand grenades in a four bay live-fire throwing area and four practice grenade courts (vertical target court, foxhole court, and assault court).

b. Permission to establish temporary grenade ranges must be justified and requested in writing to the Installation Range Officer.

c. Safety procedures will be IAW AR 385-63; DA PAM 385-63, applicable FM, TM, and Remagen range SOP. No overnight storage of munitions is permitted.

d. When a grenade has been thrown and does not explode, all throwing will stop immediately in the bay until Explosive Ordnance Disposal (EOD) personnel destroys the UXO. A 60-minute waiting period will be observed prior to approaching the UXO for purpose of destruction (See TM 9-1330-200-12).

e. The proper handling and throwing of hand grenades will be IAW FM 23-30 and the Remagen Range SOP.

f. A detailed SOP will be developed covering safety consideration program and reacting to emergency situations that could possibly occur during live bay throwing of hand grenades. The SOP will address, at a minimum the following; dropped hand grenade inside of a bay, cook-off, freezing, attempting to run, and refusing to squat.

9-12. Fifty Caliber, Saw, and 240B Machine Gun Firing.

a. The caliber .50 machine gun is fired on Main Tank and Bastogne Ranges (positions as marked). Any other caliber .50 MG positions must be approved by Installation Range Officer and requires a 14-day request.

b. The M240B/M249 MG is fired only on Bastogne (Positions 1-15) and Main Tank Range. The SAW is approved for live-fire on Kasserine Pass Range.

c. Caliber .50 and M249MG/240B MG safety procedures will be IAW AR385-63 /DA PAM 385-63, applicable FM, TM, and respective Main Tank and Bastogne SOPs.

d. The M240B MG, using A151 authorized and approved for overhead live-fire, will only be fired at Abernathy Night Infiltration Course IAW AR385-63/DA PAM 385-63, strict adherence to TSP, TRADOC approved safety waiver in effect.

9- 13. Live-Fire Courses.

a. The OIC will have in his possession: AR385-63/DA PAM 385-63, current FJ 385-63-100, Range SOP, applicable FM's and TM's, risk assessment, and this regulation for the live-fire course.

b. Read and enforce applicable portions of paragraph 9-9 of this regulation, as well as specifically ensuring that:

(1) Command and control elements establish and maintain communication with Range Operations at all times.

(2) A request for live-fire opening time from Range Operations is obtained prior to live-fire and after all training is complete, the OIC will provide data and receive their closing time.

(3) Personnel are informed that they are required to call a "cease fire" if an unsafe act or condition is observed.

Chapter 10 – Live-Fire Exercises.**10-1. Combined Arms Live-Fire Exercises (CALFEX).**

a. Exercises of this type are not conducted on Fort Jackson primarily due to the very limited maneuver area, size and extent of impact areas, and the joint use of training areas by Soldiers undergoing initial entry training (IET). However, case by case exceptions will be considered by DPTMS for approval or disapproval.

b. Units desiring to use Fort Jackson for any CALFEX with limited live-fire will submit their request in the form of a memorandum to DPTMS 120 days in advance of planned training date. Minimum information will include:

- (1) Complete unit designation and station that will be included in OP-PLAN.
- (2) Total number of personnel involved.
- (3) Complete scenario of entire operation IAW AR385-63/DA PAM 385-63 requirements.
- (4) Type of training to be conducted.
- (5) Air asset involvement.
- (6) Extent of live-fire and types of weapons.
- (7) Support assistance requirements to be provided by installation assets.
- (8) Alphanumeric listing of training areas required to conduct operation, initially coordinate this with DPTMS Range Operations.
- (9) POC's: name, rank and Digital Switch Network (DSN) or commercial telephone numbers.

10-2. Feedback.

If the DPTMS approves initial request, requestor will be notified and planning conference date between requestor and Fort Jackson agencies that may be involved will be provided. Conference will be held at location, time, and date determined by DPTMS. Requestor will also be notified if initial request is disapproved.

Chapter 11- Firing of High Explosives Ammunition and Use of Impact Areas.

11-1. Impact Areas. All artillery, tanks, mortars, MLRS (RRPR) rockets, helicopters, and demolition training will detonate in the EIA only.

11-2. Impact Area Control.

a. The control and management of the WIA and EIA is Range Operations responsibility IAW AR385-63/DA PAM 385-63.

b. Entry into either impact area is prohibited without prior approval from Range Operations. See Impact Area entry guidance in paragraph 1-13 of this regulation.

c. No material of any kind will be removed from impact areas to include archeological artifacts, copper, brass, lead, spent ammunition casings, or any other material that may be sold for commercial use.

d. No targets or target material of any kind will be placed within either impact area without specific approval of the Installation Range Officer. No glass, reflective metals, or other laser deflecting materials will be deposited or used as a target.

11-3. Ground to Air Live-Fire Training. No ground to air live-fire of any type is authorized on any range on Fort Jackson and requests will not be considered.

11-4. Antitank Guided Missiles.

a. Firing of the Dragon Missile, using only training warhead ammunition, will be conducted at Main Tank Range. Training ammunition firing will be at fixed (stationary) pre-positioned hard targets only and within limits designated for Dragon Fire Range Fan IAW DA PAM 385-63.

b. Firing of the TOW Missile is restricted to the practice and inert missile only. Main Tank Range is the only location where this weapon will be fired. Missiles will not be fired outside the limits prescribed for either missile IAW DA PAM 385-63 TOW Missile Range Fan.

(1) Range OIC for either the Dragon or TOW firing will verify the range fan with Range Operations NLT 72 hours prior to a scheduled training date. Failure to do so will result in cancellation of training.

(2) Moving targets do not exist on Main Tank Range. Tracking training of any kind is limited to this installation therefore, tracking training will not be conducted. Dry fire at stationary targets is authorized.

11-5. Recovery of Wire from Guided Missiles.

- a. In the initial request by units desiring to fire wire guided missiles, the unit will also request wire recovery support if explosive ordnance support is not organic to their unit.
- b. The EOD team attached to Fort Jackson will conduct wire recovery operations. However, they may not be available for support on the day of training. Units should be prepared to return to support EOD team.
- c. Units are not authorized to conduct wire recovery operations in EIA without trained EOD personnel present.

11-6. Laser Operations.

- a. Laser training operations for the AN/TVQ-2 Ground/Vehicle Laser Locator Designator (G/VLLD) is authorized on Main Tank and Casablanca Ranges. Laser training operations for the AH-64 and OH 58D aircraft is authorized on Main Tank Range. Unit laser training will comply with the provisions of DA PAM 385-63.
- b. Units will develop SOP's and provide a copy to Range Operations and Post Safety prior to scheduling approval. SOP's will incorporate all aspects of Laser training and in addition, will include an approved range fan depicting all limits IAW DA PAM 385-63.
- c. Lasing unit commanders will:
 - (1) Select, train, and safety certify all personnel necessary to assist him/her in complying with the provisions of DA PAM 385-63.
 - (2) Provide adequate control of target area to prohibit unauthorized entry by vehicles or personnel.
 - (3) Designate a Laser Range Safety Officer/NCO (LRSO/LRSNCO) for each lasing system.
 - (4) LRSO will ensure that "LASER IN OPERATION" or "LASER HOT" signs are in position prior to beginning of training. Laser signs, if not present, may be obtained from Range Operations.
- d. LRSO/LRSNCO duties will include all prescribed duties assigned IAW using unit SOP and the following in this directive:
 - (1) Know the azimuths, elevation, and left and right limits for the system he/she has been assigned as LRSO/LRSNCO while in position to fire.

(2) Initiate a “cease fire” of lasing operation if positive control of laser beam is lost.

(3) Physically ensure operator maintains laser system below the horizon while firing.

11-7. Small Arms Air Defense. Will not be conducted using live ammunition on Fort Jackson.

11-8. Overhead Fire.

a. Overhead fire is authorized provided:

(1) Ammunition has been cleared for overhead fire with “NO RESTRICTION” by the ASP. Quality Assurance Officer prior to issue and Range Operations is informed by the OIC of live-fire.

(2) Units comply with Chapter 6 of DA PAM 385-63 for Overhead Fire.

(3) Night Infiltration Course (NIC) is designed IAW TC 25-8 or has an approved safety waiver from TRADOC headquarters signed by a general officer.

(4) NIC operations and conduct of overhead fire (only A151 ammunition) will be in strict adherence to IET Training Support Package (TSP); risk management work sheet signed by an 0-6 (171st Infantry Brigade (Cdr), and NIC range SOP signed by the Bravo Company 4-10 Infantry Company Commander or Battalion Commander.

(5) NIC will be authorized for live-fire operations IAW Range Operations Officer approval. This regulation, AR385-63/DA PAM 385-63, and one TRADOC APPROVED BY GENERAL OFFICER safety waiver in effect.

b. The following weapons will **NOT** be used under any circumstances for overhead fire:

(1) All handheld or shoulder fired weapons/missiles

(2) 60mm, 81mm, 107mm, and 120 mm mortars.

(3) 3.5 inch rocket launcher, 66mm Rockets (LAW), or AT-4 (84mm) Rockets.

(4) All 20mm, 30mm, and 40mm weapons systems.

(5) All recoilless rifles.

(6) All rockets, missiles, and rocket assisted projectiles.

(7) 152mm ARAV guns.

(8) Any weapon firing multiple systems.

(9) Any other new weapon system introduced into the weapon inventory under AR385-63/DA PAM 385-63 specific no overhead live-fire instructions.

Chapter 12 – Artillery and Multiple Launcher Rocket System (MLRS) Reduced Range Practice Rocket (RRPR) Live-Fire.

12-1. Artillery.

a. Artillery firing points (FP) will be requested for the period of intended use only to include the time the unit plans to start firing and the anticipated time of closing out the position. Blanket requests that do not specify a time for each FP will not be accepted.

b. Firing Points will be requested by artillery firing point numbers and FP grid coordinates. Indirect fire will be fired from DPTMS established and approved artillery FPs.

c. Requests for establishing any additional new artillery FPs will not be honored by this installation.

d. Unless otherwise authorized by the Installation Range Officer, battery center of units firing artillery will be within 200 meters of the gun position.

e. There will be no more than two miles variance between the lay circle and the safety circle regardless of the method of lay used for artillery.

f. Police of firing point areas will be a 300 meter radius of gun/flank locations, to include all areas occupied, i.e., bivouac, CP locations, mess/feeding areas, etc.

g. Scarlet flags will be flown on all fixed ops or training sites occupied as firing points while firing is in progress. When this is not possible due to loss of daylight, a red flashing light will be positioned adjacent to flag location (DA PAM 385-63).

12-2. Conduct of Fire.

a. Indirect fire will only be fired from established and approved firing points for artillery. All indirect fire weapons systems base plates must be within 100 meters of the firing point marker.

b. For safety reasons, the first round fired by MLRS-RRPR and artillery down range in the impact area will be a smoke round and will be observed by Range Operations personnel.

c. All indirect fire will be conducted IAW provisions of AR385-63/DA PAM 385-63, unit SOPs, field and specific technical manuals for the weapon being fired, and Appendix C, of this regulation.

d. At least one OIC and one RSO will be present at each battery, platoon, section or separate gun position during all live-fire training. All artillery OIC's and RSO's will be unit command certified IAW unit program and Appendix C, of this regulation.

e. Prior to firing shell illumination rounds, commanders will call Range Operations for clearance. The use of shell illumination rounds must be coordinated in order to ensure safe artillery firing or training when aircraft night flight training is authorized.

f. To minimize noise blast effects in the surrounding civilian communities, the following restrictions on firing are imposed.

(1) Mass fires will be limited to the minimum deemed "absolutely essential" to ensure successful attainment of the field training exercise objective.

(2) There will be no mass fire by units larger than a single battery between the hours of 2200–2400 daily.

(3) Artillery firing will not be permitted between 2400-0630 daily and from 1000 - 1300 Sunday (exceptions may be considered).

(4) Units planning to conduct mass training of more than one battalion of artillery (all calibers) must coordinate 90 days in advance of the exercise with the Installation Range Officer and DPTMS, so that appropriate advance publicity of the firing can be made by the Installation Public Affairs Office.

(5) During extreme weather conditions such as heavy overcast, Range Operations may impose additional restrictions to reduce noise levels.

12-3. Rounds Fired Outside of Impact Area.

a. Any projectile that bursts on lands outside impact area limits will require immediate action and investigation, as outlined below, to determine and correct the cause.

b. Anyone detecting rounds landing outside the firing units authorized limits or outside of the established impact area will:

(1) Attempt to notify the responsible unit and to place into a "cease fire" if the unit can be immediately identified.

- (2) Report incident to Range Operations immediately. The report will include:
 - (a) Date and time erratic round was observed.
 - (b) Injury to personnel.
 - (c) Equipment damaged.
 - (d) Number of rounds.
 - (e) Location of rounds.
 - (f) Airburst estimated height.
 - (g) Ground burst, crater available. Ensure that the crater and any fragments are not disturbed prior to the arrival of the Installation Range Officer and Post Safety.
 - (h) Location of observer.
 - (i) Knowledge of source of erratic round.
 - (j) Name and unit of person reporting.
- c. Range Operations will:
 - (1) Order “cease fire” for appropriate unit of training area.
 - (2) Notify the DPTMS, Installation Range Officer, Post Safety, ASP, EOD, and medical or emergency elements as required.
- d. The commander of the suspect or known unit will:
 - (1) Suspend firing, notify Range Operations.
 - (2) Have crew members immediately fall to the rear of their weapons and ensure that all weapons remain on the ground and not touched. No ammunition will be disturbed until clearance has been given by the Installation Range Officer or by his appointed investigating officer.
 - (3) Determine the facts surrounding the incident and report them to both the Installation Range Officer and the investigating officer.
- e. Upon completion of any investigation, the Installation Range Officer will notify the unit that the firing point has been cleared. Range Operations will notify the units concerned

when “cease fire” has been lifted. No one but the Installation Range Officer or his Range Operations personnel has authority to lift a “cease fire.”

f. Investigating responsibility will always be next higher level above suspect unit.

g. Upon notification by Range Operations of a firing incident, the suspect unit’s Major Support Command (MSC) HQ will:

(1) Appoint an AR 15-6 investigating officer.

(2) Investigating officer will immediately initiate an informal investigation to determine the facts surrounding the incident and advise the Installation Range Officer.

(3) A full written report of the investigation, including investigation summary, statements, eye witness accounts, enclosures, and a copy of appointment orders will be forwarded, under investigating headquarters cover letter to, Commander, USATC & FJ, ATTN: ATZJ-CG, Fort Jackson, SC 29207. Resident units of Fort Jackson will submit their report NLT five (5) working days after the incident. Non-resident units (including elements of the SCARNG stationed at the SCARNG, Leesburg Training Center) will submit their report NLT ten (10) working days after the incident. Additionally, a copy will be forwarded to the Installation Safety Management Office, Attn: IMFJ-SO, Fort Jackson, SC 29207.

h. The Commanding General, Fort Jackson will act as final reviewing authority prior to incident close out.

12-4. Direct Fire by Artillery. Direct fire by artillery will not be conducted on Fort Jackson.

12-5. Firing Position Safety Control.

a. Malfunctions.

(1) Notify Range Operations of any malfunctions.

(2) Malfunctions occurring while firing will be investigated and reported IAW AR75-1

b. Misfire, hang-fire, and cook-off.

(1) Procedure to be followed when a misfire or hang-fire occurs, or when the potential of a cook off exists:

(2) Use appropriate weapon TM/FM.

12-6. Restriction on Overhead Fire. Overhead fire will only be permitted IAW DA PAM 385-63 and paragraph 11-8, of this regulation.

12-7. Powder Turn-In. The following procedures for the burning of unused propellants are established and will be adhered to without deviation. Unused propellants will not be burned in the field. Propellants will be turned in through supply channels IAW unit SOP.

12-8. Safety Training and Certification.

Artillery Commanders will establish/maintain a safety certification program IAW AR/DA PAM 385-63 and FM 6-50. Annually, commanders will provide Range Operations with a list of all personnel certified on the weapon system by name, rank, SSN, and position. The certification document must have the commander's signature.

12-9. Multiple Launch Rocket System (MLRS) RRPR Live Firing.

- a. The M28A1 RRPR is the only authorized rocket for live firing on Fort Jackson.
- b. MLRS, RRPR Firing Points (FP) will be requested for the period of intended use only to include the time the unit plans to start firing and the anticipated time of closing out the position. Blanket requests that do not specify a time for each FP will not be accepted.
- c. The M28A1 RRPR surveyed launcher firing points will be restricted to the AR/DA PAM 385-63 requirements and RRPR target box.

12-10. MLRS Firing Point Numbers and Grid Coordinate Data.

- a. Firing Points will be requested by MLRS RRPR firing launch point numbers and grid coordinate only. Indirect fire will be fired from DPTMS approved MLRS RRPR launch points.
- b. MLRS, RRPR DPTMS approved data:

Firing Point Number	Grid / Distance	Direction
18	NT 26127 65297 / 70.4m	4821.3 mils
19	NT 26296 65737 / 86.0m	4794.6 mils
19A	NT 26239 65530 / 75.8m	4795.6 mils
20	NT 26352 65984 / 90.2m	4753.5 mils

Table 12-1. MLRS RRPR Approved Data.

12-11. MLRS, RRPR Firing Conditions.

- a. All non-essential personnel cleared from SDZ and especially, Area F. Authorized headgear and hearing protection will be worn during live-fire.
- b. Metrological (MET) data supplied to the fire control system will be no more than four (4) hours old.

c. Position Determining System (PADS) data must be verified as correct. MLRS will not exceed 150 meters from battery center.

d. Fire control system internal tests must be successfully completed.

e. Firing will not be conducted if:

- (1) Questions pertaining to improper operation of the launcher.
- (2) Dramatic wind changes since MET data was taken.
- (3) Fire control panel shows that internal tests are not completely successful.
- (4) Signs of abnormal launcher operations.

f. PADS data checked by comparing current PADS launch position with surveyed launch point data. Verifications required are IAW tolerances published in MLRS's TM's and FM's.

g. Safe separation distance between MLRS launchers firing simultaneously from a single point is 55 meters.

h. All minimum safe distance requirements for personnel and equipment must be met IAW appropriate TM's and FM's.

12-12. MLRS Conduct of Fire.

a. Unit will conduct initial coordination with Range Operations at least 30 days prior to live-fire.

b. OIC and RSO requirements will be IAW chapter two of this regulation. At least one OIC and one RSO will be present at each MLRS RRPR section during all live firing training.

c. All OIC's and RSO's will be command certified by the unit commander with certification document also signed by the commander and provided to Range Operations on an annual basis. Appendix C, this regulation can be used to facilitate safety while firing the M28A1 on Fort Jackson.

d. All indirect fire will be conducted IAW provisions of DA PAM 385-63, unit SOPs, and field and technical manuals pertinent to the MLRS RRPR and Appendix C, of this regulation.

e. MLRS RRPR (M28A1) SDZ criteria for live-fire on Fort Jackson is restricted to: a range between 8,000 and 9,000 meters; Distance X: 2450 meters; Distance Y: 1930 meters;

Area W: 560 meters. The above data is IAW DA PAM 385-63 requirements. Changes to the above data must be coordinated with Range Operations based on changes to Army SDZ regulations. SDZ Areas A and B are not required for the RRPR.

f. The following restrictions are imposed in order to minimize noise effects for the surrounding civilian communities:

(1) M28A1's will be limited to minimum deemed essential for successful attainment of training objectives and safety compliance.

(2) MLRS RRPR firing is not authorized for live-fire from 2400 to 0630 daily and Sunday from 1000 to 1300. Exceptions may be considered.

g. During MLRS RRPR live-fire, all roads and tank trails along the SDZ flight path will be closed using road guards equipped with communications and barriers.

h. Observers/radar will be used to identify rocket impacts.

i. For any rocket fired outside of the impact area follow the procedures listed in paragraph 12-3, of this regulation.

j. Medical requirements during live-fire will be IAW paragraph 1-8, of this regulation. Medical support will be on site.

k. Firefighting equipment will be on hand during live-fire.

12-13. Firing Position Safety Control.

a. Malfunctions.

(1) Notify Range Operations of any malfunctions.

(2) Malfunctions occurring while firing will be investigated and reported IAW AR 75-1.

b. Misfire or hang-fire, procedures to be followed when a misfire or hang-fire occurs: use the appropriate weapon TM/FM.

12-14. MLRS RRPR Restrictions on Overhead Fire.

a. The RRPR is not certified for overhead fire.

b. Overhead fire may be conducted under deviation, if approved by the Installation Senior Commander IAW DA PAM 385-63, instructions for deviation.

12-15. MLRS RRPR Safety Training and Certification.

Commanders will establish and maintain a safety certification program IAW FM 6-60, appropriate TMs, safety alerts, and unit SOP. Annually, commander's will provide Range Operations with a list of all personnel certified on the weapons system by name, rank, SSN and position. This certification document must have the commander's signature. Weapon certification documents signed for the commander's will not be accepted.

12-16. Continuous Firing of the MLRS RRPR at Fort Jackson.

- a. The above information will be used for MLRS-RRPR platoon certification and firing gunnery.
- b. All regulatory guidance will apply for continuous firing of the RRPR at Fort Jackson.

Chapter 13 – Mortar.**13-1. General.**

a. Commanders of mortar units will establish and maintain a mortar verification and safety program for assigned personnel who are scheduled to train at Fort Jackson. Annually, commanders will provide their mortar certification memorandum to Commander, USATC & FJ, DPTMS, ATTN: IMFJ-PLR (Range Operations), Fort Jackson, S.C. 29207. The memorandum will list name, rank, SSN, and unit position of mortar personnel who will perform OIC and Range Safety Officer (RSO) duty when at Fort Jackson. The OIC/RSO certification/qualification memorandum must be signed by the battalion commander (O-5 or above). The certification memorandum may be facsimiled (803-751-4501), mailed, or hand carried, but must be submitted to Range Operations prior to scheduled training time/day.

b. All mortar training will be scheduled through DPTMS Scheduling branch after initial coordination with Range Operations. Coordination with Range Operations will be 30 days prior to mortar live-fire training event. Range Operations coordination will consist of a review of the training, firing point/range requirements, OP/FO locations, movement/ route overlay (S), ammunition to be fired, certification list review, risk assessment review, and Fort Jackson specific requirements, as well as safety card inspection or safety brief. Scheduling of live-fire firing points and/or Cowpen's Range will then be conducted with DPTMS Scheduling Branch NLT 30 days prior to live-fire event. Mortar unit representatives will attend Friday Scheduling meeting at 1100, Bldg 7533, at DPTMS Scheduling to confirm weekend or weekday mortar live-fire data for the upcoming Saturday through Friday training. If this happens, DPTMS Scheduling will inform the unit concerned NLT than five hours after the 1100, Friday meeting.

c. All mortar firing on Fort Jackson is restricted to indirect fire from established and surveyed mortar ranges and/or surveyed mortar firing points, which have been approved for use by DPTMS Range Operations Officer.

d. Firing mortar of any type over the heads of troops or civilians is prohibited on Fort Jackson. Exceptions like over tank units will require Commanding General of Fort Jackson approval and be IAW AR385-63/DA Pamphlet 385-63.

e. All personnel involved in mortar live-fire will wear kevlar helmet and properly fitted hearing protection for the weapon system and ammunition to be fired, at a minimum.

f. Prior to live-fire on Fort Jackson, aiming circle (s) will be declinated IAW FM 23-90, C1/TO11W2-5-13-21 (Dated 1990) requirements and Fort Jackson Military Installation Map, 1:50,000, Series V746S, Edition: Special, data for Grid Zone designation 17s, 100,000 meter square identification: NT. Also, all mortar tubes will be bore sighted at Fort Jackson IAW FM 23-90, C1 prior to live-fire.

g. Firing unit is responsible to ensure that the firing point is the correct one and that all safety firing data received from Range Operations is plotted or entered by FDC personnel into the mortar ballistic computer correctly IAW FM 23-91 computer Fort Jackson map data (As above) is correct; that the correct firing data is placed on each mortar tubes point in the correct azimuth of fire, as provided by Range Operations.

h. First round fired by the base piece will be smoke or white phosphorous and will be observed safe by a Range Operations inspector. The Range Operations inspector will be in position at the FO/OP to observe the first round; unit must coordinate this in advance of first round live-fire.

i. The FDC and or vehicles/carriers will be within 200 meters of the firing mortar guns/tubes.

j. No smoking, fires, open flames, flammable, or other fire hazards will be within 100 meters of ammunition storage areas during mortar training/live-fire.

k. Only fuses authorized for the mortar round to be fired will be used when conducting mortar live-fire at Fort Jackson. All mortar rounds fired will have a fuse in place, non- fused mortar rounds will not be fired from any type mortar tube, less certain mortar sub-caliber systems.

l. Increments removed from rounds before firing will be placed in a metal or wooden covered container located outside the firing vehicle/ position at a safe fire separation distance of at least 25 meters, per AR 385-63. Unused increments will be handheld and destroyed IAW FM 23-90, C1.

13-2. 60MM, M224 and 81MM, M252 and 81MM, M29A1 Mortars.

a. 60MM. The ammunition designed for the M2 and M19 Mortars may be fired from the M224 Mortar. When fired from the M224 Mortar, greater ranges are achieved than those shown in the M2 and M19 Firing Tables. Standard A is the ammunition for the M2 and M19 is Standard B for the M224 Mortar. No more than two charges are used when firing the M720 or M888 in any of the 60MM Mortars. The 60MM Mortar is not authorized for fire at Cowpen's Range.

b. 81MM, M252. Standard A ammunition for the M29A1 Mortar is Standard B for the M252 Mortar.

c. 81MM, M291A. Standard B ammunition for the M29A2 Mortar is Standard C for the M252 Mortar.

13-3. 4.2 INCH, M30 and 120MM, XM120/ 121MM Mortars.

- a. 4.2 INCH (107mm). When using propellants M36A1 or M36a2, UXO may occur when firing below Charge Seven.
- b. 120mm, M120/M121. Only 300 Series ammunition is authorized when firing the 120mm with the 81mm, M303 insert, and M29 cannon.

13-4. Mortar Ammunition Care and Handling.

- a. After preparing mortar rounds for firing, the fuse end of the round will be placed back into the packing tube for protection until actual firing of the round.
- b. Only authorized fuse wrenches will be used to assemble the fuse to the round.
- c. Remove the pull wire and safety wire from the fuse just before firing. When prepared rounds are not fired, replace all powder increments and safety wires which had been removed.
- d. Mortar misfire and ammunition malfunction procedures are outlined in the technical manual for the 120mm with 81mm M303 insert. All other mortar systems misfire and ammunition malfunction procedures will be IAW FM 23-90, C1.

13-5. Charge/Increment/Powder Burning.

- a. Unused (excess propellant) increments will not be burned in the field. The unit burn safety officer (SO) must have Range Operations FJ 385-63-100 Safety Card. SO must be trained on proper conduct on excess propellant burn procedures IAW FM 23-90. Units are required to take unused powder/charges to authorized burn pit location or repack and turn back into ASP.
- b. Only one unit will burn powder at a time in Range Operations designated area. Additionally, except for the two-man burn detail class, all personnel and equipment will be at least 50 meters from the burn site.
- c. Mark burn pits with a red flag in daytime and a red light for night time burning. No digging is permitted. ABC fire extinguishers will be present. Space increments two to three inches deep, 18 inches wide, and as long as needed. Ignite powder on downwind side by lighting a starting train of inert material at least 12 inches long or approved igniter/time cord.

Note: The RSO will coordinate with his OIC and ensure that unused charges/increments and ammunition is safely/properly packed, transported in a metal container on a cargo vehicle with a metal bed. Do not transport other material, equipment, or passengers in cargo beds with excess propellants. Transport and turn in all unused charges/propellants through the servicing ASP or burn at an installation approved centralized/controlled powder burn location.

13-6. Safety.

- a. See Appendix C, Safety Procedures for Artillery and Mortar Firing.
- b. Units will use applicable complete round charts for proper fuse/ mortar combinations.
- c. Mortar ammunition will not be re-dropped if a misfire occurs.

13.7 Mortar Range/Mortar Firing Position (MFP) Grid/Weapon Data.

Range/MFP	Surveyed Location/Alt	Authorized Weapon System
COWPENS/MFP10	NT13216648 ALT: 152.3M	81, 107, & 120mm
MFP 12	NT14606367 ALT: 105.1M	81, 107, & 120mm
MFP 22*	NT20436756 ALT: 90M	* 81, 107 & 120mm; 120mm W/81mm Insert
MFP 23*	NT20406749	CLOSED:
MFP 37	NT16446751 ALT: 85 M60,	81, 107, 120mm, 120mm W/81mm Insert
MFP 37A	NT16706734 (CLOSED)	60, 81, 107, 120mm, 120mm W/81mm Insert and SRPR: M880
MFP 38	NT16126758 ALT: 95M	60, 81, 107, 120mm, 120mm W/81mm Insert
MFP 39	NT14776745	PERMANENTLY CLOSED

Table 13-1. Mortar Range/Mortar Firing Positions (MFP).

Note: *MFP23 is now the left portion of MFP22.

Note: *81mm illumination will not reach target area but 81mm H.E. will reach target area.

13-8. Live-Fire Time Limitations.

- a. Mortar firing will not be permitted between 2400-0630, Monday through Sunday. Exceptions must be provided with justification to the Range Operations Officer.
- b. Mortar firing will not be permitted from 1000-1300, Sunday (Exceptions may be considered).

Note: *81mm illumination will not reach target area but 81mm H.E. will reach target area.

Chapter 14 – Armor.**14-1. Armor Training.**

a. Armor training on Fort Jackson is restricted primarily to the Fort Jackson authorized SCARNG McCrady Training Center (MTC) Cantonment I and II Licensed Areas and the SCARNG Maneuver Licensed Area in the southeast quadrant of the Fort Jackson Military Installation. (See Figure D-2)

b. For the use of the SCARNG maneuver licensed area for the conduct of armor, bradley, and other mechanized training:

(1) SCARNG and USMCR units will coordinate armor training requirements through SCARNG, McCrady Training Center (MTC), ATTN: Operations Office, Fort Jackson, SC 29207 or telephone 806-2207. All other units will coordinate with DPTMS Scheduling Branch, Fort Jackson 751-7586. DPTMS Scheduling will coordinate other than SCARNG/USMCR units armor requirements with SCARNG, MTC, prior to finalizing the request.

(2) Armor units will established and maintain an armor certification program for their personnel. Annually, unit commander's will provide Range Operations with a signed memorandum which lists personnel by rank, name, SSN, position, and a comment which states that the listed personnel are certified on the weapons system for OIC and or SO duty. The memorandum can be facsimiled (1-803-751-4501), mailed to DPTMS, or hand delivered to Range Operations at least one hour prior to training start time.

14-2. Tank Trails (See Para 7-4).

a. All tracked vehicles are prohibited from operations on hard surfaced roads and maintained shoulders adjacent to hard surfaced roads or improved roads. Exceptions must be approved by DPTMS Range Operations Officer in writing.

b. Established tank trails, such as those within the southern SCARNG licensed area, secondary dirt roads, and fire break roads, are the only roads authorized to cross hard surfaced roads in order to continue with maneuver training mission.

c. Unsafe and or non-negotiable tank trails should be reported immediately to Range Operations, telephone 751-7171/4732, so that corrective action may be taken.

14-3. Movement of Tracked Vehicles.

a. Tracked vehicle movement from DOL maintenance sites on main post or from any off post location to Fort Jackson training areas, will be accomplished by wheeled vehicle hauling regarding transporting tracked vehicles on Fort Jackson contact, or telephone 751-7696/7697 for assistance and clearance.

- b. Tracked vehicles are not allowed within administrative bivouac sites.
- c. The maximum speed limit for tracked vehicles is 10 miles per hour (MPH), no exceptions.
- d. During movement on all roads in the training areas, wheeled front and rear escort vehicles are required. Vehicles will have track commanders. The driver may not act as a track commander. The track commander and the driver will maintain communications at all times. Do not operate tracked vehicles without CVC or Kevlar equipped with an intercommunication system.
- e. Two ground guides will be used at all times when backing tracked vehicles or moving in confined or congested areas. One ground guide will be used when traveling cross-country during reduced visibility or blackout drive.
- f. In the interest of safety and to decrease damage to roads caused by tracked vehicles, all units will:
 - (1) Post guards at damaged areas, which might possibly cause accidents.
 - (2) Repair damage to roads and shoulders of roads within capability of unit 24 hours of incidents.
 - (3) Ensure tracked vehicles remain within the reservation boundaries.
 - (4) Remove mud and debris deposited at crossing sites. This will be done where possible with the DES to prevent disruption of traffic. When mud or debris removal exceeds the capability of the unit, the unit will notify Range Operations and request DPW road scraping support of clearing operations.
 - (5) Ensure that trash or debris is not deposited along roads during mounted marches.
 - (6) Caution drives to avoid driving or parking vehicles on shoulders or roads.

14-4. Blackout Drive Operations Guidance (Refer to Chapter 7 for Detailed Specifics).

- a. Blackout drive is prohibited in the cantonment area.
- b. Passing is prohibited under blackout conditions.

c. Tactical night blackout moves across public traffic routes is prohibited. Vehicles operating across public traffic routes (Dixie at Wildcat) will have service lights/headlights on low beam.

d. Blackout drive routes will be presented to Range Operations for approval prior to scheduling at DPTMS Scheduling Office or using blackout drive in the Fort Jackson training areas, to include the maneuver licensed area.

e. Range Operations may lift unit blackout drive during periods of reduced visibility. When Range Operations lifts blackout operations, all affected units will be advised.

f. Range Operations will ensure that DPTMS approved blackout drive routes are published in the Fort Jackson Leader newspaper two weeks prior to scheduled training. In addition, Range Operations will notify units conducting training in affected blackout drive training area/route of dates and times.

(a) Vehicle operators driving with Night Vision Devices (NVDs), or in blackout drive, will have met the training and testing requirements of AR 600-55.

(b) Parking lights will not be substituted for blackout drive on non-tactical vehicles.

14-5. Time Limitations in Live-Fire. Tank cannon live-fire will not be between 2400 to 0630, daily or between 1000-1300, Sunday.

Chapter 15 – Demolition and Explosive Charges.**15-1. Demolition Training.**

a. Demolition training on Fort Jackson will be conducted IAW AR385-63 and DA PAM 385-63, FM 5-250 C1, 30 June 1999, this regulation, and unit SOP/Risk Assessment.

b. All safety designated personnel conducting demolition training on Fort Jackson will know misfire procedures for the type of firing system being used.

15-2. Demolition Training Sites. This paragraph is under review and verification of safety explosive site plans based on amounts and type of demolition being utilized. Any and all requests to utilize UXO / explosive demolition on FJ and McCrady Training Center will be forwarded to Fort Jackson Range Operations for review and initial approval prior to EOD demolition to include training. A completed form must be submitted to Range Operations prior to conducting any demolition of UXO or explosives for training prior to the event.

15-3. Crater Training. Requests for cratering will include plans for repair and will specify the time repairs will be completed. Repairs will consist of tamped fill with the finish level higher than the surrounding area. Requests for catering any hard surface or secondary roads will not be honored.

15-4. Placement of Charges and Blasting Cap Insertion.

a. For the purpose of training, non-electric caps and time fuses will only be use for surface blasts. This helps in the investigation of misfires. Sub-surface blasts (buried shots) will be done electrically.

b. Charges placed against wood, steel, concrete, or other solid material will be placed on the side nearest the observers, so that major fragments are propelled away from them.

c. Actual insertion of the blasting caps or priming explosives into the main demolition charge should be done by not more than five personnel under supervision of one supervisor to ensure the safety of the operations. All other personnel will withdraw to a safe position IAW FM 5-250.

d. The OIC of firing is responsible for the supervision of all phases of the demolitions training mission. The responsibility for the supervision of the preparation, placement, and firing of charges must not be divided.

15-5. Responsibility for Demolition Exercises.

The OIC of firing will:

- a. Ensure that safety of personnel, equipment, and explosives are being conducted IAW-DA PAM 385-63, FM 5-250, unit SOP, and this regulation.
- b. Supervise the handling of explosives and ensure DA PAM 385-63, DA PAM 385-64, and FM 5-250, this regulation, and unit SOP is being followed.

15-6. Missile Hazards.

- a. Explosives can propel lethal missiles to great distances. The distance that an explosion-propelled missile will travel in the air depends on many variables. The table below displays the distances at which personnel in the open are relatively safe from missile hazards created by bare charges placed in or on the ground, regardless of type of condition of the soil.
- b. The distance depicted in the table below may be reduced to 50 meters for surface firing or bare charges of less than four pounds providing:
 - (1) A specifically prepared detonation site is free from gravel, rock, metal, and other possible missiles, and is known to be free of such to a depth of not less than six inches.
 - (2) A barricade, not less than five sandbags high and at least 1 meter high, is placed between the personnel and the charge. Barricades will be from one (1) to two (2) meters from explosives.

POUNDS OF EXPLOSIVES	SAFE DISTANCE IN METERS
1-27	300
50	369
100	465
150	534
200	585

Table 15-1. Missile Hazard Distance.

15-7. Safety.

- a. When using detonating cord and for demonstration purposes, the amount of cord used will not exceed 50 feet. Less than 50 feet of detonating cord primed with a blasting cap, the minimum safe distance for protected personnel is 50 meters. Under these conditions, the OIC of the firing must be an E7 or above, designated by the commander. He/she will ensure that unprotected personnel are at least 300 meters away from the blast, the unit has scheduled the training area, and he/she has opened the training area IAW this regulation. Range Operations

will be notified of the intention to use detonating cord and communication will be maintained with Range Operations.

Note: Protected personnel refers to Soldier's equipped with ACU helmets, flak vests/Individual Body Armor (IBA), and earplugs, lying in the prone position using their hands and the terrain to protect their eyes and torso from possible fragmentation.

b. When detonating explosives, the OIC will be present to supervise training at the firing site for each charge. He will ensure that all connections are inspected by qualified personnel before firing and that the area is inspected after firing to determine if all charges have been detonated. The OIC, with proper assistance, will supervise the neutralization of all misfires.

c. The OIC must use all means at his disposal to include audible and visual warning signals and road guards to ensure that the minimum safe distance for personnel in the open is clear and helicopters in flight are also clear.

d. Prior to a demolition firing exercise, the OIC of firing will compute and submit an overlay depicting the minimum safe distance zone for personnel in the open to Range Operations.

e. Prior to conducting a firing exercise involving demolition charges or assemblies, the unit OIC for firing will report blast location to Range Operations and provide a five-minute blast warning prior to detonation. An "after blast report of detonation," to include the total number of explosives, electrical/non-electrical blasting caps, time fuse and detonating cord, will be submitted to Range Operations at the completion of the firing exercise or prior to closing training site.

f. All demolition training operations during or on the approach of an electrical storm/severe dust storm will cease.

g. Demolition training will not be within 155 meters of energized power transmission lines.

h. No detonations will occur within 300 meters of any main or range road unless road guards are posted and traffic halted.

i. The gasses released by detonation of common explosives are toxic. Inhaling these fumes should be avoided by positioning personnel upwind from training demolition point.

j. Electric blasting caps can be detonated by radio frequency. The OIC/RSO will adhere to the minimum safe distances from transmitter antennas IAW Table 2-1 within FM 5-250 and DA PAM 385-63.

Chapter 16 – Chemical/CS and Smoke.**16-1. General.**

a. All OICs must receive the Range Operations safety brief and have a Fort Jackson Safety card (FJ 385-63-100) prior to the conduct of any chemical and smoke training. This safety class is conducted in Room 302, Education Center, Bldg 4600 every Monday and Friday at 1300, with the exception if these two days fall on 25 December or 1 January (Special requests may be requested).

b. All chemical and smoke training will be conducted IAW DA Pamphlet 385-63, this regulation, FM 3-10-1 (Chemical agents) and FM 3-50 (Deliberate Smoke Operations).

c. All units and personnel will submit in their initial request to conduct chemical agent and or smoke training on Fort Jackson using the following minimum information online to DPTMS Scheduling as well as IAW Para 3-1 of this regulation:

(1) Unit designation and station.

(2) Date and time of use.

(3) General plan or proposed location of training by 8 digit grid coordinates and alpha-numeric training area with CS and or smoke will be located on range and training area requests and overlays.

(4) Type of agent or smoke to be used.

(5) Type delivery.

(6) OIC, name, rank and telephone number.

(7) OIC date of Nuclear Biological Chemical (NBC) School trained certification when conducting training involved the use of chemical/CS agents. The safety officer (SO) is not required. However, if CS agents are used during NBC training, SO must also be NBC School trained (certificate).

d. DPTMS Scheduling will forward all requests and overlays for the use of CS and smoke devices to the Range Operations officer for final approval and to prevent violations of this regulation and AR/DA PAM 385-63. Prior to using CS and/or smoke at any location, units or personnel will contact Range Operations 15 minutes prior to use in order to determine if any restrictions are in effect.

16-2. Chemical Agents. The use of lethal or incapacitating chemical agents in training on Fort Jackson is prohibited.

16-3. Riot Control Agents (RCA).

- a. RCA's will not be used under conditions that are dangerous to life or property.
- b. The only tear agents authorized for use on Fort Jackson is CS.
- c. For NBC training using chemical/CS agents, the OIC will be Range Operations safety card holder and NBS School trained SSG (E6) or above. Use of RCA's in training requires supervision by the NBC School trained OIC (SSI 3R) and NCOs (SQI C).
- d. Training with CS is restricted to authorized training exercises and the chamber. Only CS in capsule form may be used in CS chambers and will be at least 100 meters away from heavily traveled roads, 500 meters from aircraft operations and inhabited areas, and 1000 meters from the Fort Jackson Military Reservation Boundaries.
- e. Field training involving gases will be 500 meters or more away from public traffic routes, the nearest inhabited range building or buildings, and 1000 meters from the Fort Jackson Military Reservation Boundaries.
- f. Prior to RCA exercises, commanders must conduct a readiness evaluation of personnel.
- g. Commanders must ensure that protective masks are available for all Soldiers participating in chemical/CS training.
- h. Wearing of contact lenses while masked is prohibited.
- i. Unprotected Soldiers should not be exposed to RCA's longer than 15 seconds.
- j. Firing of projectiles containing chemical agents determined to be harmful to the environment or wildlife is prohibited.
- k. RCAs will not be released when personnel located downhill will be affected, unless exposure is desired. CS agents will not be released within 50 meters of spectators.
- l. OICs will ensure police of expended CS grenades and dispose of them in plastic bags which can seal shut while transporting them. Unit will turn in expended CS canisters to unit supply personnel. In addition, unit will turn in all grenade spoons and pull rings to the ASP.
- m. Commander's will use good judgment and discretion when using CS in situations involving moving vehicles or aircraft.

16-4. Smoke Training.

a. Sulfur trioxide-chlorosulfonic acid solution (FS) and titanium tetrachloric (FM) smoke shall not be used in training at Fort Jackson.

b. Smoke producing materials will not be used under conditions that are dangerous to life or property outside of the training area(s). Smoke will not be released within 500 meters of the installation boundaries. Smoke, CS, pyrotechnics, and simulators will not be activated within 500 meters of paved roads or inhabited buildings or within 1000 meters of the installation boundary. An exception is static ranges as approved by Range Operations.

c. Use of smoke in demonstrations, displays, or ceremonies is not authorized unless positive dissipation of the smoke can be assured and no exposure to the public or non-participating personnel is expected.

d. For training exercises involving the use of smoke, the OIC will be SSG (E6) or above. For training exercises involving smoke, the OIC must have knowledge of and exercise the health and safety precautions that are associated with fog oil, Hexachloroethane (HC), red phosphorus (RP), terephthalic acid (TA), colored and diesel smoke. All personnel will carry the protective mask when participating in exercises involving the use of smoke. Personnel will mask:

(1) Before exposure to any concentration of smoke produced by M8 white smoke grenades (HC), M83 TA smoke grenades, smoke pots (HC or TA smoke), or metallic powder obscurants.

(2) When passing through or operating in dense (visibility less than 50 meters) smoke concentrations such as smoke blankets and smoke curtains.

(3) When passing through or operating in a smoke haze (visibility less than 50 meters) and the duration of exposure will exceed four hours.

(4) Anytime exposure to smoke produces breathing difficulty, eye irritation, or discomfort. One effected Soldier will serve as a signal for all similarly exposed personnel to mask.

(5) Smoke will not be used in buildings, vehicles, culverts, or any other confined/enclosed space.

Note: Care must be taken not to enter areas where oxygen may have been displaced. The protective mask is not effective in oxygen deficient atmospheres.

e. Do not use smoke to obscure tactical roadblocks or bridges without posting road guards and obtaining Range Operations approval.

f. Clothing is to be laundered and personnel will shower after exercises involving exposure to smoke. Soldiers exposed to smoke should reduced skin exposure rolling down their sleeves.

g. Considerations must be given to weather conditions and the potential downwind effects of smoke when using HC smoke in training on Fort Jackson. Positive controls (observation, control points, communications) must be established to prevent exposure of unprotected personnel. Maintain communication between the OIC and personnel manning the smoke control pints at all times.

h. Smoke Generators.

(1) Coordinate all smoke generator operations with Range Operations prior to scheduling with DPTMS. Operations planned using smoke generators must have a Record of Environmental Consideration (REC) completed by the DPW Environmental Division prior to the actual exercise.

(2) Prior to any smoke generator operations that is closer than 3,000 meters to any installation boundaries, use a single smoke source to determine the weather effects on the smoke.

(3) Do not conduct any smoke generator operations closer than 3,000 meters of any installation boundaries if the wind direction is not in the opposite direction of the closest installation boundary.

(4) Post smoke control points no closer than 1000 meters from the installation boundaries.

(5) If smoke operations impact on range or other units in the field, then Range Operations and the unit training with smoke will take appropriate measures to reduce the problem to a manageable level for all concerned.

i. When winds in general exceed 15 mph and control of direction or tear agent residue is questionable, the OIC will terminate training and notify Range Operations.

16-5. Chloracetophenone. Chloracetophenone is classified as obsolete and is no longer authorized for use in training.

16-6. Smoke Pots. Smoke pots will be utilized IAW DA Pamphlet 385-63. Operations planned using smoke pots must have a REC completed by the DPW Environmental Division prior to the actual exercise.

Chapter 17 – Pyrotechnics, Simulators, and Blanks.

17-1. Pyrotechnics. Reference FM 3-23-30 Grenades and Pyrotechnic Signals; Ammunition Information Notice (AIN) 090-10, Use of Simulator, Hand Grenade, M116A1 (DODAC 1370-L 601); AIN 018-09, Use of Simulator, Projectile Ground Burst, M115A2 (DODAC 1370-L594) and Simulator Hand Grenade, M116A1 (DODAC 1370-L601) and Surface Danger Zone (SDZ) is 60 meters IAW FJ 385-10.

a. The care and handling of pyrotechnics, especially simulators, should be a major concern to all users due to the fact that they are very dangerous when misused, misplaced, or lost. Commanders, OICs, and safety officers (SO) will ensure that Soldiers using pyrotechnics or explosive hand-fired simulators are thoroughly trained in safe control, preparations, and use of these items. Commanders and OICs are responsible for selecting personnel in the grade of E5 or above to become certified (see FJ 385-10, Chapter 20) in the control, preparation, and safe use of pyrotechnics and simulators. Individuals selected for certification will be E5 or above and records of certified personnel will be maintained. Cadets are not authorized to use pyrotechnics or simulators. A written risk assessment will be presented to Range Operations for review whenever pyrotechnics will be used during training.

b. Pyrotechnics may be used within the training area complex (1-35). The use of pyrotechnics within 1000 meters of the reservation boundary and Fort Jackson National Cemetery is prohibited. In addition, pyrotechnics will not be active within 500 meters of paved roads or inhabited buildings.

c. Do not use pyrotechnics in any manner where there may cause injury/damages, or malicious intent to harm personnel, equipment/vehicles, and wildlife or the environment.

d. Do not use but turn in any and all pyrotechnics with evidence of moisture contamination in the item or any indication of mishandling: dents, breaks, and/or cracks.

e. All units, to include USAR, USANG, and ROTC, must obtain permission from the Range Officer for the use of any type of pyrotechnics.

f. The firing of pyrotechnics in the training areas may cause range fires; therefore, personnel using pyrotechnics must exercise caution to avoid the accidental start of fires during non-restrictive periods.

g. When a range fire is started in a training area, the OIC will stop all training, contact the Fort Jackson Fire Department via 911 (landline or (803) 751-9111 (cell phone) and fight the fire if safe to do so. Use only water type extinguishers and or water containers and available shovels for brush type fires. Range Operations will be notified as soon as possible.,.

h. If during use a pyrotechnic fails to properly operate and causes injury, Range Operations will be immediately notified. The OIC of training will freeze the accident site until released by a representative of DOL Ammunition Section.

i. During training, commanders and/or OICs will report the location of UXOs or abandoned pyrotechnics to Range Operations immediately. Only EOD personnel will handle and dispose of pyrotechnics.

j. Do not touch malfunctioning pyrotechnics. Mark and report IAW FM 5-250 to Range Operations.

k. The commander and/or OIC are responsible for the accountability of all pyrotechnics.

17-2. Flares.

a. Trip flares: E5 and above will be trained and certified by the commander or OIC.

(1) Each service trip flare (M48, M49) will be fenced with engineer tape, etc. or guarded to prevent personnel from approaching within two meters of the emplace flare.

(2) Clear trip flare firing positions of flammable material to prevent accidental fires. Do not use M48 Trip Flares in areas where fire could cause serious damage to facilities, equipment, and vehicles.

(3) Trip flares and booby traps not detonated during training will be removed prior to departing the area.

b. Aerial flares: E5 and above must be trained and certified by the commander or OIC.

(1) User will not aim aerial flares directly at Soldiers.

(2) Aerial flares will be fired at a minimum of 45 degrees elevation.

(3) Operator will wear kevlar helmet, gloves, IBA, eye protection, and aim flare away from face and body.

(4) Caution will be taken in the selection of the location for launching flares with particular attention being given to wind conditions, direction, and overhead clearance/obstacles.

17-3. Simulators.

a. The care and handling of pyrotechnics especially simulators should be a major concern to all users due to the fact that there are very dangerous when misused, misplaced, or lost. Commanders, OICs, and safety officers (SO) will ensure that Soldiers using pyrotechnics or

explosive hand-fired simulators are thoroughly trained in the safe control, preparation, and use of these items. Commander's and OICs are responsible for selecting E5 or above and records of certified personnel will be maintained. A written risk assessment will be accomplished prior to the use of pyrotechnics. Risk assessment will be presented to Range Operations for review whenever pyrotechnics are used during training.

b. Personnel authorized to use pyrotechnics simulators will be in grade E-5 or above. A thorough safety briefing will be conducted by the OIC of training, addressing the proper use of pyrotechnic simulators prior to the use of such devices.

c. E5 and above personnel designated and authorized to use simulators (artillery and hand grenade simulators) will utilize leather gloves, kevlar helmet, IBA, and eye protection. The simulator will be employed only from behind a barrier and 2 foot by 2 foot earth type pit. Once activated, a grenade or artillery simulator will be immediately thrown. Holding or cooking off is prohibited. All personnel within 60 meters of the simulator, hand grenade (M116A1) must be protected by suitable cover, such as within armored vehicles, in buildings, in dug-in emplacements, etc. Personnel would normally be considered protected where the simulator is separated from personnel from masking terrain or is detonated within a designated, barricaded pit or area. Personnel designated and authorized to use the M115A2 Ground Burst Simulator will ensure that it is NOT thrown to any point within 35 meters of unprotected personnel. Thrower will turn away from the M115A2 simulator after throwing and assume a protective stance.

d. Individuals using any simulator, etc., must be knowledgeable of the requirements in FM 3-23-30, TM 9-1370-207-10, AIN 37-05, AIN 104-04 and DA Pamphlet 385-63.

e. Do not attempt to disarm or disassemble simulators under any conditions. Personnel using simulators will not activate them in loose gravel, sticks, or other material that are subject to protection, nor should they throw simulators into dry leaves, grass, or other flammables.

f. Operational instructions for the use of the M117, M118, and M119 are included in each packet. Instructions for use of the M115A2 and M116A1 are printed on container and in TM 9-1370-203-10 and TM 9-1370-203-20.

g. M80 Simulators.

(1) Do not hold the M80 when ignited, it will detonate three to five seconds after ignition of the fuse.

(2) Do not use M1 and M2 type fuse igniters to ignite the M80 fuse cord.

17-4. Use of Blank Ammunition.

a. Blank cartridges will not be used for other than their intended use. Use of the blank ammunition in hand to hand training is prohibited.

b. Each round of blank ammunition will be inspected by the person receiving the ammunition to ensure that each round is blank ammunition and has not been tampered with in any way. Safety personnel will visually inspect all ammunition and magazines for use in training requiring blank ammunition. Blank ammunition will not be stored or transported in any ammunition box or container containing ball ammunition.

c. Blank cartridges will not be fired toward personnel within six meters of the weapon.

d. Live and blank small arms ammunition will not be fired at the same time during any phase of tactical exercise and a complete physical search of all personnel will be conducted prior to change over.

e. When misfires in excess of five percent occur in firing blank cartridges, the lot of ammunition will be suspended and reported to Range Operations and the ASP.

17-5. Safety.

a. Accountability and use of pyrotechnics will be controlled by the commander or OIC of training. Pyrotechnics will be used as intended. A safety briefing for all personnel is required prior to the start of training. Risk assessments must be prepared and address all risks associated with the pyrotechnic, simulator, and blanks prior to conduct of use during the training event. All vehicles and personnel will be checked for the pyrotechnics, simulators, and blanks before departing the training area.

b. Unfired pyrotechnics, simulators, and blanks and all related residue will be cleared from the training areas/training facility and or training location. Units requiring EOD assistance to clear UXO will be immediately coordinated with Range Operations.

Chapter 18 – Damage, Loss, or Theft of Range Equipment, Facilities, or Roads.**18-1. Damage, Loss, or Theft of Range Equipment, Facilities, or Roads.**

a. Restitution for any damage, loss, or theft of range equipment, facilities, or roads is the responsibility of the using unit. The using unit may make restitution, as required, by immediately repairing any damage or replacing any lost or stolen equipment. Arrangement for appropriate restitution or intent must be made before the using unit will be cleared from the range or training facility by Range Operations.

b. Any unit which fails to clear a range or training area through failure to correct a deficiency or to provide restitution for any damage, loss, or theft of range equipment or facilities will be denied further access to Fort Jackson Ranges Training Facilities until the required correction or restitution is made IAW AR 735-5 and DA PAM 710-2-1.

Chapter 19 – Hunting and Fishing.**19-1. Hunting and Fishing.**

- a. Procedures and directives for personnel wishing to hunt or fish on Fort Jackson are published in FJ Reg 28-4, Hunting and Fishing Regulation.
- b. DPTMS Scheduling Branch will notify Heise Pond personnel when training areas 10A and 10B and the BRM Impact area are available for hunting. Upon DPTMS notification, Heise Pond may schedule use of the above locations.
- c. Game Warden personnel shall notify Range Operations personnel when the last hunter departs a location used for hunting in the training areas and bow areas.
- d. Access by ground or water into the area of Weston Lake north of Mortar Rd. is prohibited for recreational use, as that specific land and water is within the EIA UXO boundaries IAW AR 385-63 Para 2-7 e(1) (a) – (c).

Chapter 20 – References/Management Information Requirements (MIR).**20-1. Management Information Requirement (MIR- not required).****20-2. Required Publications.****a. Army Regulations.**

- (1) AR 15-6 Procedures for Investigating Officers and Board of Officers.
- (2) AR 40-46 Control of Health Hazards from Lasers and Other High Intensity Optical Sources.
- (3) AR 75-1 Malfunctions Involving Ammunition and Explosives (RCS (CSGLD-1961 (MIN).
- (4) AR 75-15 Responsibilities and Procedures for Explosives Ordnance Disposal (EOD).
- (5) AR 190-11 Physical Security of Arms, Ammunition and Explosives.
- (6) AR 200-1 Environmental Protection and Enhancement/ 32 C.F.R. Part 651 (Environmental).
- (7) AR 350-19 The Army Sustainable Range Program.
- (8) AR 385-10 The Army Safety Program.
- (9) AR 385-40 Accident Reporting and Records.
- (10) AR 385-55 Prevention of Motor Vehicle Accidents.
- (11) AR 385-62 Regulation for Firing Guided Missiles and Heavy Rockets for Training, Target Practice and Combat.
- (12) AR 385-63 Range Safety, 19 May 2003.
- (13) AR 420-1 Army Military Construction Program, Development, and Execution.
- (14) AR 420-19 Solid and Hazardous Waste Management.
- (15) AR 735-5 Policies and Procedures for Property Accountability.

b. TRADOC Regulations.

- (1) TRADOC Reg 350-6 Initial Entry Training (IET) Policies and Administration.
- (2) TRADOC Reg 385-2 TRADOC Safety Program.

c. Fort Jackson Regulations.

- (1) FJ Reg 28-4 Hunting and Fishing Regulation.
- (2) FJ Reg 40-1 Preventive Medicine Sanitation and Hygiene.
- (3) FJ Reg 350-1 Training Policies and Administration (Permanent Party, Professional Development Students and some areas of IET).
- (4) FJ Reg 385-10 Safety and Occupational Health Program.
- (5) FJ Reg 420-90 Fire Protection.
- (6) FJ Reg 200-8 Environmental Protection and Enhancement.

d. Field Manuals.

- (1) FM 3-04.300 Flight Operations Procedures.
- (2) FM 3-06, Urban Operations, 1 Jun 2003, FM 3-09.12 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition.
- (3) FM 3-09.12 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition.
- (4) FM 3-09.70 Tactics, Techniques, and Procedures for M109A6 Howitzer (Paladin) Operations.
- (5) FM 3-5 NBC Decontamination.
- (6) FM 3-6 Field Behavior of NBC Agents (including smoke and incendiaries).
- (7) FM 3-7 NBC Field Handbook, 29 Sep 1994, FM 55-30, Army Motor Transport Units & Operations.
- (8) FM 3-20.12 Vol I & II Tank Gunnery (Abrams).
- (9) FM 3-22.1 Bradley Gunnery.

- (10) FM 3-22.9 Rifle Marksmanship, M16A1, M16A2/3, M16A4 and M4 Carbine.
- (11) FM 3-22.31 40mm Grenade Launchers, M203.
- (12) FM 3-22.31 MK-19, 40mm Grenade MG, MOD 3.
- (13) FM 3-22.34 TOW Weapon System.
- (14) FM 3-23.35 Combat Training with Pistols M9 & M11.
- (15) FM 3-22.37 Javelin Medium Antitank Weapon System.
- (16) FM 3.23.24 M47 DRAGON Medium Antitank Assault Weapon System.
- (17) FM 3.23.25 Light Anti-armor Weapons.
- (18) FM 3.22.68 Crew -Served Machine Guns, 5.56mm and 7.62mm.
- (19) FM 3.23.24 M47 DRAGON Medium Antitank Assault Weapon System.
- (20) FM 3.23.25 Light Anti-armor Weapons.
- (21) FM 3-23.30 Grenades and Pyrotechnic Signals.
- (22) FM 3-25.26 Map Reading & Land Navigation.
- (23) FM 3-25.150 Combatives.
- (24) FM 3-50 Smoke Operations.
- (25) FM 4-25.11 First Aid.
- (26) FM 5-250 Explosives and Demolitions.
- (27) FM 5-415, Fire Fighting Operation.
- (28) FM 6-50 Tactics, Techniques, & Procedures for Field Artillery Cannon Battery.
- (29) FM 6-60 Tactics, Techniques, and Procedures for Multiple Launched Rocket System.
- (30) FM 9-15 Explosive Ordnance Disposal Service & Unit Operations.
- (31) FM 21-10 Field Hygiene and Sanitation.

- (32) FM 21-16 Unexploded Ordnance Procedures.
- (33) FM 21-18 Foot Marches.
- (34) FM 23-14 Light Machine Gun in Automatic Role (SAW), M249.
- (35) FM 23-23 Antipersonnel Mine, M18A1 and M18 Claymore.
- (36) FM 23-41 Submachine Guns, Caliber .45, M3 and M13A1 (Obsolete).
- (37) FM 23-65 Browning Machine Gun, Caliber .50 HB, M2.
- (38) FM 23-90 Mortars.
- (39) FM 23-91 Mortar Gunnery.
- (40) FM 25-5 Training for Mobilization & War.
- (41) FM 55-30 Army Motor Transport Units & Operations, C1, 15 Sep 1999.
- (42) FM 90-10 MOUT.
- (43) FM 5-19 Risk Management.

e. Department of the Army (DA) Pamphlets.

- (1) DA PAM 385-64 Ammunition and Explosives Safety Standards.
- (2) DA PAM 385-63, Range Safety.

f. DA Training Circulars.

- (1) TC 5-400, The Soldier & The Environment.
- (2) TC 25-8, Training Ranges.
- (3) TC 23-24 DRAGON Medium Antitank Assault Weapon System M47.

g. TRADOC Pamphlet, IET Soldiers Handbook.

h. Technical Manuals.

- (1) TM 10-4500-200-13 Operator's Organizational Direct Support Maintenance Manual (Including repair parts and special tools list); Heaters, Space, Radiant Type, Portable, Type I.

- (2) TM 9-1300-200 Ammunition, General.
- (3) TM 9-1300-214 Military Explosives.
- (4) TM 9-1370-206-10 Use of Military Pyrotechniques Standards.
- (5) TM 9-1370-207-10 Operator's Manual for Pyrotechnic Simulators.
- (6) TM 9-1005-224-10 Operation's Manual for MG, 7.62mm M60.
- (7) TM 9-1005-317-17 Operation's 9mm, M9.

20-3. Referenced Publications.

- a. TRADOC Reg 350-6 Initial Entry Training (IET) Policies & Administration.
- b. TRADOC Reg 350-29 Prevention of Heat and Cold Casualties.

20-4. Prescribed SOPs.

- a. DPTMS Range Operations Electrical Storm SOP.
- b. DPTMS Range Operations SOP.
- c. 171st Infantry Brigade Range/Training Facility SOPs.

20-5. Prescribed Forms.

- a. Fort Jackson 385-63-100, Range Safety Card.
- b. Fort Jackson SO Form 7566 and 7566A.
- c. Hunting/Fishing Vehicle Control Card ATZJ-DES Form 190-11.

Appendix A**Terms**

The following terms apply to this regulation:

Barrier

A permanent or temporary impediment to foot and or vehicular traffic which personnel are prohibited to pass without approval from Range Operations. A barrier may be a sentinel, wire fencing, gate, sign, or other access-limiting device.

Check Firing

A temporary cessation of fire imposed on a firing unit due to an unsafe condition or to accommodate other training activities or an inadvertent aircraft/helicopter.

Dedicated Impact area

See impact area.

Deviation

A departure from the requirements of this regulation/order or standards of AR 385-63.

Direct Fire.

Fire delivered on a target when the piece is laid by sighting directly on the target, using the gun sighting equipment.

DUD

An explosives item or component of a weapon system, which fails to function as intended when fired or detonated.

Explosive Ordnance Disposal (EOD)

An ordnance unit that performs reconnaissance, identification, field evaluation, recovery, and final disposal of unexploded ordnance, both United States and foreign, which has been fired, dropped, or placed in such a manner as to constitute a hazard to personnel, material or operations.

Firing Line

The line from which weapons are fired and forward of which no one is permitted during firing except as specified in AR385-63/DA PAM 385-63.

Firing Position (Gun Position)

The point or location at which a weapon other than demolitions is placed for firing. For demolitions, the firing position is the location at which the firing crew will be located during demotion operations.

Guided Missile

An unmanned vehicle moving above the surface of the earth whose trajectory or flight is capable of being altered by an external or internal mechanism.

Hang-fire

A hang-fire is a delay in the functioning of a propelling charge explosive train at the time of firing.

Hazard

Any actual or potential condition that can cause injury, illness, or death of personnel, damage to or loss of equipment, property or mission degradation; a condition or activity with the potential to cause damage, loss or mission degradation.

High Angle Fire

Fire delivered at elevations greater than the elevation producing maximum range; range decreases as the angle of elevation increases. Mortars deliver high angle fire.

Impact Area

The ground and associated airspace within the training complex used to contain fired, or launched ammunition and explosives, and the resulting fragments, debris, and components from various weapon systems. A weapon system impact area is the area within the surface danger zone used to contain fired, or launched ammunition and explosives, and resulting fragments, debris, and components. Indirect fire weapon system impact areas include probably error for range and deflection. Direct fire weapon system impact areas encompass the total surface danger zone from the firing point or position down range to distance X.

Temporary Impact area

An impact area within the training complex used for a limited time period to contain fired, or launched ammunition and explosives, and the resulting fragments, debris, and components. Temporary impact areas are normally used for non-DUD producing ammunition and explosives, and should be able to be cleared and returned to other training support following termination of firing.

Dedicated Impact Area

An impact area that is permanently designated within the training complex and used indefinitely to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components. Dedicated impact areas are normally used for less sensitive ammunitions and explosives than that employed in high hazard impact areas. However, any impact area containing fused HE or WP duds represents a high risk to personnel and access must be limited and strictly controlled.

Environmental Compliance Officer (ECO)

A qualified commissioned, warrant or noncommissioned officer (E6-E9) for each company, battery/detachment level. A qualified commissioned officer at the battalion or brigade level. The ECO is responsible for ensuring that their unit complies with all environmental requirements found in AR 200-1, 200-2, and FJ 200-8. ECOs shall attend the Environmental Compliance Officer Course and the Environmental Awareness (EA) Training from Range Operations prior to their unit conduct of training at Fort Jackson. The ECO will conduct EA training for all unit personnel prior to the start of training on Fort Jackson.

High Hazard Impact Area

An impact area that is permanently designated within the training complex and used to contain sensitive high explosive ammunition and explosives and the resulting fragments, debris, and components. High hazard impact areas are normally established as part of dedicated impact areas where access is limited and strictly controlled due to the extreme hazard of DUD ordnance (e.g., ICM AT-4 40mm, and other highly sensitive ammunition and explosives).

Improved Conventional Munitions

Munitions characterized by the delivery of two or more antipersonnel or anti-material and or anti-armor sub-munitions.

Laser Range Safety Officer/Noncommissioned Officer (LRSO/LRSNCO)

A designated officer or NCO of the firing unit.

Laser Surface Danger Zone (LSDZ)

A “V” shaped zone designed to contain the laser beam (while lazng) with buffer (safety) zones on either side, above and below the approved target area.

Low Angle Fire

Fire which is delivered at angles of elevation equal to or below the elevation corresponding to the maximum range of the gun and ammunition being used.

Officer-in-Charge (OIC)

The commissioned, warrant, or noncommissioned officer in grade E7-E9 in charge of the troops (or of the training of troops in a school situation) conducting firing on or utilizing range facilities.

Overhead Fire

Weapon system firing that is delivered over the heads of Soldiers/marines in training or Department of Defense civilians located in the surface danger zone.

Range

The distance between any given point and an object or target. An area reserved and normally equipped for practice in weapons deliver and or shooting at targets.

Range Officer

The commissioned officer or civilian charged with the supervision and enforcement of installation range safety and coordination and scheduling of range use, maintenance, modification, and installation of ranges and training facilities IAW published regulations and the policies of the commander.

Risk

Chance of hazard or bad consequences; the probability of exposure to chance of injury or loss from a hazard; risk level is expressed in terms of hazard probability and severity.

Risk Management

The process of identifying, assessing, and controlling risk arising from operational factors and making decisions that balance risk cost with mission benefits.

Risk Management Process

See Fort Jackson Garrison SOP and or FM 5-19.

Range Safety Officer (RSO)

A qualified commissioned, warrant, or noncommissioned officer (E5 or above) or civilian GS-07 and above, who is the direct representative of the command for adequacy of safety when firing is being conducted. The authority to make final determination, prior to firing, that settings placed on indirect fire weapons and ammunition represents data within prescribed safety limits. Indirect weapon systems safety officer duty may be delegated to an E6 and above as long as the Soldier is designated the section chief of the weapon to be fired and is command certified by the commander of the unit.

Surface Danger Zone (SDZ)

The ground and airspace designated within the training complex for vertical and lateral containment of projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of weapon systems to include explosives and demolitions.

Target Area

The point to which the weapon is to be fired. In the case of demolitions, the target area is that point or location at which the demolition charge is emplaced.

Training Complex

Firing ranges and weapons training facilities designated for firing ammunition and explosives, rockets, and guided missiles for training and target practice, and non live-fire sites for maneuver exercises and operations.

Unexploded Ordnance (UXO)

Ammunition and explosives which have been primed, fused, armed, or otherwise prepared for action, and which have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, personnel, or material, and remain unexploded either by malfunction, or design, or any other cause. The term UXO is synonymous for the word DUD.

Misfire

A complete failure to fire that is not necessarily hazardous because it cannot be readily distinguished from a delay in functioning (hang fire), it must be handled as worst case IAW procedures for the weapon system.

Malfunction

Failure of an ammunition item to function as expected when fired, launched, or when explosive items function under conditions that should not cause functioning. Malfunctions include hang fires, misfires, UXOs, abnormal functioning and premature functioning of explosive items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions do not include accidents or incidents that arise solely from negligence, malpractice, or situations such as vehicle accidents or fires.

Other terms

See AR 385-63/DA PAM 385-63 AND AR 385-62/DA PAM 385-64.

Appendix B - Description of Ranges

Range 1

Range Number: 1

Range Name: South Carolina

Location: 17S NT 0788966055, Dixie Road and Trainfire Road

Type Weapon Fired: M16A2

Type Range: BRM Zero, 25 Meter

Ammunition: 5.56MM Ball

Number of Firing Points/ Lanes: 80 Points

Type Targets: Wood Frame E-Silhouette

Sponsor Unit: DPTMS, Range Operations.

Facilities: Range wood shack, wood tower, wood range office, wood ammunition point, wood company mess structure, 7 portalets for troops, 1 Cadre Portalet, 1 company bleacher (Lightning Protection Area-LPA), 1 off-limits vault latrine, 4-two bag Lyster bag wood structures, 1 weapons cleaning Point, 1 company size wood mess structure (LPA). City water point (potable) with hose.

Communication: FM Base Radio; Telephone: 751-5191

Special Equipment: None

Range Restrictions: Day light firing only. 10 POV parking spaces.

PDF in Degrees from Center of Firing Line: Mag AZ: 105 Degrees; Grid AZ: 100 Degrees

Range 2

Range Number: 2

Range Name: CPT Raymond V. Blanford

Location: 17S NT 0805566432, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: BRM Zero, 25 Meter

Ammunition: 5.56mm Ball

Number of Firing Points/Lanes: 80 points

Type of Targets: Wood Frame E-Silhouette

Sponsor Unit: DPTMS, Range Operations

Facilities: two range wood shacks, wood tower, metal range office, wood ammunition point, wood company mess structure (LAA), company wood bleacher structure (LAA), two concrete vault latrines (condemned), one cadre portalet, eight troop portalets, and weapons clearing point, four water point structures, well water point with hose (potable), one plastic ice chest.

Communication: FM base radio; telephone: 751-4079

Special Equipment: none

Range Restrictions: (5) POV parking spaces and (3) cadre POV spaces; Group Zeroing (See Appendix D-14)

PDF in degrees from center of firing line: MAG AZ: 120 degrees; GRID AZ: 115 degrees

Range 3

Range Number : 3

Range Name: CPT Charles E. Vernon

Location: 17S NT 0819666687, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: BRM zero, 25 meter

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 50 points

Type of Targets: Wood Frame E-Silhouette

Sponsor Unit: DPTMS, Range Operations

Facilities: wood tower, metal range office, wood ammunition point, wood company mess structure (LAA), wood bleacher structure, eight troop portalets, well water point (potable), four water point structures and one plastic ice chest.

Communication: FM base radio; telephone: 751-7453

Special Equipment: none

Range Restrictions: three (3) cadre POV parking spaces at BRM headquarters and 10 POV spaces on the range; Group Zeroing (See Appendix D-14)

PDF in degrees from center of firing line: MAG AZ: 122 degrees; GRID AZ: 117 degrees

Range 4

Range Number: 4

Range Name: 1LT Edward I. Carnes

Location: 17S NT 0839266873, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: BRM zero, 25 meter

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 80 points

Type of Targets: Wood Frame E-Silhouette

Sponsor unit: DPTMS, Range Operations

Facilities: wood range shack, wood tower, wood ammunition point, wood company mess structure (LAA), platoon bleachers, one weapons clearing point, one (condemned) concrete vault latrine, one cadre portalet, eight troop portalets, well water point (potable) with hose, four water point structures and, one plastic ice chest.

Communication: FM base radio; telephone: 751-7291

Special Equipment: none

Range Restrictions: 10 POV parking spaces; Group Zeroing (See Appendix D-14)

PDF in degrees from center of firing line: MAG AZ: 145 degrees; GRID AZ: 140 degrees

Range 5

Range Number: 5

Range Name: SP5 David L. Tiffany

Location: 17S NT 0865567089, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: BRM zero, 25 meter

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 80 points

Type of Targets: Wood Frame E-Silhouette

Sponsor Unit: DPTMS, Range Operations

Facilities: wood range shack, wood tower, wood ammunition point, wood company mess structure (LAA), wood company bleacher (LAA), one vault latrine (condemned), one cadre portalet, eight troop portalets, weapons clearing point, well water point (potable) with hose, four water point structures and one plastic ice chest.

Communication: FM base radio; telephone: 751-5587

Special Equipment: none

Range Restrictions: three (3) POV parking spaces on range and 14 POV spaces across Dixie Road at Biv 4 location entrance; Group Zeroing (See Appendix D-14)

PDF in degrees from center of firing line: MAG AZ: 145 degrees; GRID AZ: 140 degrees

Range 6

Range Number: 6

Range Name: 2LT Mark S. Steiner

Location: 17S NT 0886667240, Dixie Road and Trainfire Road.

Type of Weapon Fired: M16/saw pistol/shotgun/75mm (12 GA) salute battery.

Type of Range: 25/50-meter zero/familiarization/saw 10m qualification.

Ammunition: 5.56 mm ball, 9 mm, 45cal shotgun

Number of Firing Points/Lanes: 34 points

Type Targets: Wood Frame E-Silhouette

Sponsor Unit: DPTMS, Range Operations.

Facilities: wood tower, wood ammunition point, wood company mess structure (LAA), wood company bleacher (LAA), one concrete vault latrine (condemned), wood weapons clearing point, one water point structure, well water point (potable) with hose and one plastic ice chest.

Communication: FM base radio; telephone: 751-7215

Special Equipment: Users supply own target/supplies; Users are responsible for military transport of own ammunition/weapons; All training conducted by user. OIC/RSO must report to Range Operations 30 minutes prior to opening time for pick-up of flag/equipment, etc.

Range Restrictions: firing line halogen lights will be used for night fire police call, 21 POV parking spaces, five cadre parking spaces and five military parking spaces on Trainfire Road. Tower has pa system and base station radio; Group Zeroing (See Appendix D-14).

PDF in degrees from center of firing line: MAG AZ: 145 degrees; GRID AZ: 140 degrees

Range 7

Range Number: 7

Range Name: PFC Walter Nutt

Location: 17S NT 0903167385, Dixie Road and Trainfire Road.

Type of Weapon Fired: M16A2/M4

Type of Range: 25 and 50 meter, BRM NBC / night fire/arm 4/arm 2/grouping and zero/battle march and shoot.

Ammunition: 5.56mm ball/tracer

Number of Firing Points/Lanes: 32 points

Type Targets: F and E Silhouette

Sponsor Unit: B CO, 4-10 IN

Facilities: metal tower, metal range office, metal ammunition point, wood company mess structure (LAA), metal company bleacher (LAA), two metal vault latrines, one wood weapons clearing point, two water point structures, well water point (potable) with hose and one plastic ice chest.

Communication: FM base radio; telephone: 751-5797

Special Equipment: none

Range Restrictions: night safety ratio: 1 to 4. 10 POV parking spaces

PDF in degrees from center of firing line: MAG AZ: 145 degrees; GRID AZ: 140 degrees

Range 8

Range Number: 8

Range Name: SP4 Howard E. Beagle

Location: 17S NT 0919867513, Dixie Road and Trainfire Road.

Type of Weapon Fired: M16A2/M4

Type of Range: 25 and 50 meter, NBC/night fire/arm 4/arm 2/grouping and zero/battle march and shoot.

Ammunition: 5.56mm ball/tracer

Number of Firing Points/Lanes: 32 points

Type Targets: F and E Silhouette

Sponsor Unit: B CO, 4-10 IN

Facilities: metal tower, metal range office, metal ammunition point, company metal bleacher structure (LAA), two metal vault latrines, and wood weapons clearing point, three water point structures, well water point (potable) with hose and one plastic ice.

Communication: FM base radio; telephone: 751-6780

Special Equipment: none

Range Restrictions: night safety ratio: 1 to 4. 18 POV parking spaces

PDF in degrees from center of firing line: MAG AZ: 145 degrees; ; GRID AZ: 140 degrees

Range 9

Range Number: 9

Range Name: 1LT Roger L. Vickers

Location: 17S NT 0951767725, , Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: BRM field fire, 75, 175 and 300 meters/200m zero

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 32 points

Type of Targets: F and E Silhouette

Sponsor unit: B CO, 4-10 IN

Facilities: wood range shack, metal tower, wood ammunition point, wood company mess structure (LAA), wood company bleacher structure (LAA), one metal vault latrine, eight troop portalets, one cadre portalet, one wood weapons clearing point, well water point (potable) with hose, three water point structures, one plastic ice chest.

Communication: FM base radio; telephone: 751-5090

Special Equipment: none

Range Restrictions: 15 POV parking spaces. No tracers authorized unless approved by Range Operations, DPTMS.; 200m zero positions restricted to positions 10 to 25

PDF in degrees from center of firing line: MAG AZ: 155 degrees; GRID AZ: 150 degrees

Range 10

Range Number: 10

Range Name: SGT Junior F. Roniger

Location: 17S NT 1004467874; Dixie Road and Trainfire Road.

Type of Weapon Fired: M16A2/M4

Type of Range: MRF. 16 pvc zero points, NBC. Night fire, field fire, qualify, target detection, and auto burst. 50, 75, 100, 150, 175, 200, 250, and 300 meter ERETS pop-up targets, and rifle qualification/arm 3/arm 2

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of Targets: F and E Silhouette

Sponsor Unit: B CO, 4-10 IN

Facilities: metal range platoon classroom, metal tower, metal range office, metal ammunition point, metal company mess structure (LAA), metal company bleacher structure (LAA), two metal vault latrines, and one metal weapons clearing point, two 2 metal and two wood water point structures and one plastic ice chest.

Communication: FM base radio; telephone: 751-1759.

Special Equipment: NA

Range Restrictions: 20 POV parking spaces. No tracers authorized unless approved by Range Operations, DPTMS.

PDF in degrees from center of firing line: MAG AZ: 179 degrees; GRID AZ: 174 degrees

Range 11

Range Number: 11

Range Name: General James J. Lindsay

Location: 17S NT 1029167897, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: Lomah kd: 75, 175, and 300 meters/field fire single and multiple/reconfirm zero

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 28 points

Type of Targets: LOMAH Pop-Up Computer Controlled Target System.

Sponsor Unit: B CO, 4-10 IN

Facilities: wood range shack, wood tower, wood range office, wood ammunition point, wood company mess structure (LAA), wood company bleacher structure (LAA), one portalet, one wood weapons clearing point, four water points structures, and one concrete vault latrine and one plastic ice chest.

Communication: FM base radio; telephone: 751-5990

Special Equipment: none

Range Restrictions: No POV parking spaces- use range 12 for POV parking. No tracers authorized unless approved by Range Operations, DPTMS.

PDF in degrees from center of firing line: MAG AZ: 181 degrees; GRID AZ: 176 degrees

Range 12

Range Number: 12

Range Name: 1LT Patrick M. Dixon

Location: 17S NT 1048967922, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: KD, Lomah: 75, 175 and 300 meters/field fire single and multiple/ reconfirm zero

Ammunition: 5.56mm ball/7.62mm sniper

Number of Firing Points/Lanes: 28 points

Type of Targets: LOMAH Pop-Up Computer Controlled Target System

Sponsor Unit: B CO, 4-10 IN

Facilities: one metal range shack, wood tower, wood ammunition point, wood company mess structure (LAA), wood company bleacher structure (LAA), one cadre and eight troop portalets, and one wood weapons clearing point, four water point structures and one plastic ice.

Communication: FM base radio; telephone: 751-6470

Special Equipment: none

Range Restrictions: 20 POV parking spaces

PDF in degrees from center of firing line: MAG AZ: 180 degrees; GRID AZ: 175 degrees

Range 13

Range Number: 13

Range Name: CPT Joseph W. Hudson

Location: 17S NT 1070267941, Dixie Road and Trainfire Road

Type of Weapon Fired: M16A2/M4

Type of Range: BRM zero, 25 meter

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 60 points

Type of Targets: Wood Frame E-Silhouette

Sponsor unit: licensed to SCARNG from CG, FJ.

Facilities: wood half-tower, wood ammunition point, wood company bleacher structure (LAA), and one metal vault latrine, no water point structures (bring five-gallon water cans, etc) and one plastic ice chest.

Communication: units provide FM radio or use hand-held from McCrady operations. Range telephone: 803-806-2207.

Special Equipment: bull horn, safety paddles, flag, and telephone required, acquire from McCrady range operations office: 803-806-2207.

Range Restrictions: no POV parking spaces use range 12 POV area. No tracer ammunition authorized unless approved by Range Operations, DPTMS.

PDF in degrees from center of firing line: MAG AZ: 180 degrees; GRID AZ: 175 degrees

Range 14

Range Number: 14

Range Name: NA

Location: 17S NT 1247767930, Dixie Road

Type of Weapon Fired: M16A2/M4

Type of Range: Qualification, 50, 100, 150, 200, 250, and 300 meters

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of Targets: F and E Silhouette

Sponsor Unit: licensed to SCARNG from CG, FJ.

Facilities: wood tower, metal range office, metal storage shed, one wood ammunition point, one wood mess shed, wood bleacher structure, no bleachers, two metal vault latrines, one wood weapons clearing point, no portalets and one plastic ice chest.

Communication: telephone: 751-7277

Special Equipment: none

Range Restrictions: 15 POV parking spaces

PDF in degrees from center of firing line: MAG AZ: 211 degrees; GRID AZ: 206 degrees

Range 15

Range Number: 15

Range Name: NA

Location: 17S NT 1288466256, Wildcat Road

Type of Weapon Fired: M16A2/M4

Type of Range: Modified Record Fire Qualification, 25, 50, 75, 100, 150, 175, 200, 250, and 300 meters

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of Targets: F and E Silhouette

Sponsor Unit: B CO, 4-10 IN

Facilities: wood tower, metal range office, metal storage shed, one metal ammunition point, one metal mess shelter (LPA), metal bleacher structure (LPA), one metal vault latrine and one wood weapons clearing point, no Portalets and one plastic ice chest.

Communication: telephone: 751-1138

Special Equipment: none

Range Restrictions: 15 POV parking spaces

PDF in degrees from center of firing line: MAG AZ: 211 degrees; GRID AZ: 206 degrees

Range 17

Range Number: 17

Range Name: SSG Thomas R. Brazil

Location: 17S NT 1179764107, Hartsville Guard Road

Type of Weapon Fired: M16A2/M4

Type of Range: Qualification, 50, 100, 150, 200, 250, and 300 meter

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of Targets: F and E Silhouette

Sponsor unit: B CO, 4-10 IN

Facilities: metal range shed, metal tower, one wood ammunition point, wood mess shed, wood company size bleacher structure, eight portalets, wood weapons clearing point, one metal and one wood storage shed, three water point structures, wood weapons storage point, and three platoon size open air wood bleacher structures and one ice chest.

Communication: FM radio; telephone: 751-4568

Special Equipment: none

Range Restrictions: 30 POV parking spaces. No 5.56mm tracer authorized unless approved by DPTMS, Range Operations.

PDF in degrees from center of firing line: MAG AZ: 310 degrees; GRID AZ: 305 degrees

Range 18

Range Number: 18

Range Name: PFC Florentino Gonzales

Location: 17S NT 1133063541, Hartsville Guard Road

Type of Weapon Fired: M16A2/M4

Type of Range: qualification, 50, 100, 150, 200, 250, and 300 meters/field fire single/multiple/nbc/night fire; field fire: 75, 175, and 300 meters

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of targets: F and E Silhouette

Sponsor unit: B CO, 4-10 IN

Facilities: metal range shed, metal tower, two metal and one wood ammunition points, metal mess shed, wood company size bleacher structure, one metal vault latrine, wood weapons clearing point, two metal water point structures, one metal storage shed, and seven portalets and one ice chest.

Communication: FM radio; telephone: 751-4203

Special Equipment: none

Range Restrictions: 12 POV parking spaces. No 5.56 mm tracer authorized unless approved by Range Operations, DPTMS.

PDF in degrees from center of firing line: MAG AZ: 335 degrees; GRID AZ: 330 degrees

Range 19

Range Number: 19

Range Name: SGT Russell P. Tyler

Location: 17S NT 1034263207, Hartsville Guard Road

Type of Weapon Fired: M16A2/M4

Type of Range: qualification, 50, 100, 150, 200, 250, and 300 meters

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of Targets: F and E Silhouette

Sponsor unit: B CO, 4-10 IN

Facilities: wood range shack, metal tower, wood ammunition point, mess shed, company size metal bleacher structure, metal vault latrine, metal and wood weapons clearing points, one wood lyster bag structure across street from range and three water point structures, one cadre portalet and seven troop portalets, two plt wood structures in concurrent area, and small open air wood structure in concurrent area, one ice.

Communication: FM radio; telephone: 751-6327

Special Equipment: none

Range Restrictions: 10 POV parking spaces on range and six POV slots at concurrent area across the road. No 5.56mm tracer authorized unless approved by Range Operations, DPTMS.

PDF in degrees from center of firing line: MAG AZ: 020 degrees; GRID AZ: 015 degrees

Range 20

Range Number : 20

Range Name: Major James R. Taylor

Location: 17S NT 0922464119, Hartsville Guard Road

Type of Weapon Fired: M16A2/M4

Type of Range: Qualification, 50, 100, 150, 200, 250, and 300 meters

Ammunition: 5.56mm ball

Number of Firing Points/Lanes: 16 points

Type of Targets: F and E Silhouette

Sponsor Unit: B CO, 4-10 IN

Facilities: metal tower, range office/storage, metal ammunition point, wood mess shed, metal platoon enclosed classroom, company size metal bleacher structure, two metal vault latrines, metal and wood weapons clearing points, metal well water pump building, one cadre and eight troop portalets and four lyster bag structures (2 bags per), one ice chest

Communication: FM radio; telephone: 751-7144

Special Equipment: none

Range Restrictions: 10 POV parking spaces. No 5.56 mm tracer authorized unless approved by Range Operations, DPTMS.

PDF in degrees from center of firing line: MAG AZ: 044 degrees; GRID AZ: 039 degrees

Aachen

Range Number: NA

Range Name: Aachen (Co-Use For FMWR)

Location: 17S NT 0806165498, off of Golden Arrow Road

Type of Weapon Fired: M16A2/M4; approved civilian recreational personal weapons

Type of Range: 200 meter

Ammunition: 5.56mm and 9mm Small Arms: Non-Military

Number of Firing Points/Lanes: 28 points

Type of Targets: wood frame civilian silhouette

Sponsor Unit: Range Operations for general use and FMWR on Thursday afternoons and Saturday mornings, Heise pond. Cost is \$1.00 (subject to change). Open 2nd and 4th Saturday from 0900-1300. Telephone number 751-3484

Facilities: metal bleachers, mess shed (wood), ops/storage building, tower, and ammunition point, and 10 portalets.

Communication: FM radio from Range Operations; telephone: use cell phone.

Special Equipment: none. Heise pond provides targets, spotting scopes, hearing protection, and safety officer.

Range Restrictions: all FMWR personnel must pay to use this range. Live fire is only authorized when the range is scheduled for use by DPTMS and given a live-fire opening time from Range Operations. Military personnel have priority outside of FMWR scheduled periods. 10 POV parking spaces as designated. All ammunition spent casings and misfired ammunition must be policed and placed in a plastic bag and provided to the safety officer. No ammunition spent casings, unfired or misfired rounds, will be placed in the trash barrel nor will the trash barrel be used for any type of open fire burning.

NOTE: *If the either the Skeet Range or Aachen Range is live firing then one will cancel out the other range.*

PDF in degrees from center of firing line: MAG AZ: 61 degrees; GRID AZ: 56 degrees

Anzio 1

Range Number: NA

Range Name: Anzio I

Location: 17S NT 1415 6770 , Dixie Road

Type of Weapon Fired: M16A2/M4 and/or SAW

Type of Range: day/night battle, march, and shoot

Ammunition: 5.56mm ball/tracer/saw

Number of Firing Points/Lanes: five two-Soldier concrete bunkers; five hasty positions; saw position, concrete bunker.

Type of Target: ERETS SAAB, E-silhouette

Sponsor unit: DPTMS, Range Operations

Facilities: one metal range shack, wood tower, wood ammunition point, wood mess shed, metal company size bleacher structure, two metal vault latrines, one portalet, wood weapons clearing point, four lyster bag structures, one green ice chest, and one 305 gallon water blivet.

Communication: FM radio; telephone: 751-4666

Special Equipment: none

Range Restrictions: 15 POV parking spaces and four cadre POV slots

PDF in degrees from center of firing line: Mag AZ: 170 Degrees; Grid AZ: 164 Degrees

Anzio II

Range Number: NA

Range Name: Anzio II

Location: 17S NT 1415 6770; Dixie Road

Type of Weapon: M16A2/M4

Type of Ammunition: 5.56mm STRA for AIT; blanks for BCT

Type of Range: modified field fire: 75, 175, 300mm. converted to convoy ops

Number of Firing Points/Lanes: two vehicle moving lanes and one IED block lane

Type of Target: 36 COE positions and 43 concrete target positions with M31A1s

Sponsor Unit: DPTMS, Range Operations

Facilities: metal tower w/pa set and wood company size bleacher structure and one ice chest.

Range Restrictions: ACH and IBA required. Entrance closed by gate bar during live-fire. High risk range with medics on site. POV slots: use Anzio 1 POV slots.

PDF in degrees from center of firing line: Mag AZ: 151 Degrees, Grid AZ: 145 Degrees

Argentan

Range Number: NA

Range Name: Argentan

Location: 17S NT 14656365 off of Mortar Road

Type of Weapon Fired: M16/M4, 9mm

Type of Range: Zero/Grouping/AWG/300M zero

Ammunition: 5.56mm , 9mm ball

Number of Firing Points/Lanes: 17 points

Type of Targets: Wood Target Frames

Sponsor Unit: SCARNG, licensed thru Savannah COE via CG, FJ

Facilities: One storage conex and one ice chest.

Communication: FM radio; telephone: handheld radio/cell phone

Special Equipment: none

Range Restrictions: 10 POV parking spaces.

PDF in degrees from center of firing line: MAG AZ: 26 degrees/GRID AZ: 21 degrees

Bastogne

Range Number: NA

Range Name: Bastogne

Location: 17S NT 127653, Wildcat Road

Type of Weapon Fired: MK19; AT-4 (TP and HE), M203 (TP and HE), M249, M240B MG, CAL. 50MG.

Type of Range: US Weapons Training

Ammunition: 7.62mm ball/tracer, 9mm tracer, 40mm tp/he, 84mm he, cal. 50 ball.

Number of Firing Points/Lanes: combination of eight -M240Bmg (positions 6-18); six - AT4; five-M203 and two cal. 50mg points (positions 1-5); four claymore concrete in ground positions capable of two claymores per position. Six MK-19 positions (capability)

Type of Targets: hard and soft

Sponsor unit: B CO, 4-10 IN, 171st Infantry Brigade

Facilities: range shack-storage, wood tower, small metal storage shed, wood ammunition point, wood mess shed, wood company size bleacher structure, four platoon size outdoor overhead cover classrooms, fifteen portalets, and four water point structures and one ice chest.

Communication: FM radio; telephone: 751-7804

Special Equipment: none

Range Restrictions: 15 POV parking spaces and five cadre slots. Targets are located in a UXO designated impact area and proper personnel protection and communication equipment is required when in the UXO impact area and EOD must escort into the area. MK-19 ammunition for use is TP only.

PDF in degrees from center of firing line: MAG AZ: 085 degrees/GRID AZ: 080 degrees

Casablanca

Range Number: NA

Range Name: Casablanca

Location: 17S NT 129658, Wildcat Road

Type of Weapon Fired: MK19; M203

Type of Range: weapons familiarization; artillery and mortar op; and laser

Ammunition: 40mm TP (M918)

Number of Firing Points/Lanes: three for MK-19 points

Type of Targets: hard

Sponsor Unit: DPTMS, Range Operations

Facilities: none. 29 POV parking spaces.

Sponsor Unit:

Communication: FM radio; telephone: 751-5470

Special Equipment: none.

Range Restrictions: POV parking designated. No high explosive ammunition due to Bastogne target maintenance requirements in impact area.

Note: *When Bastogne or Range 15 are conducting live-fire, this range will not be operational for live-fire.*

PDF in degrees from center of firing line: MAG AZ: 081 degrees/GRID AZ: 076 degrees

Chip Yong-Ni

Range Number: NA

Range Name: Chip Yong-Ni

Location: NT 143678, Dixie Road

Type of Weapon Fired: M16A2/M4 with blank adapter/miles system

Type of Range: ITT basics w/miles equipment

Ammunition: 5.56mm blanks

Number of Firing Points/Lanes: 8 PLT training areas

Type of targets: E-silhouette

Sponsor unit: Unit Run

Facilities: cadre wood range office, company size wood and metal bleacher structures, wood ammunition point, metal mess shed, wood and metal storage bldgs, two metal vault latrines, wood weapons clearing point, four water point structures, and one cadre portalet, one ice chest.

Communication: FM radio; telephone: 751-6163

Special Equipment: M16A2w/blank adapters (unit will provide their magazines)

Range Restrictions: **NO LIVE-FIRE.** 40 POV parking spaces.

PDF in degrees from center of firing line: MAG AZ: 175 degrees/GRID AZ: 170 degrees

Corregidor I & II

Range Number: NA

Range Name: Corregidor I & II

Location: NT off of Hartsville Guard Road

Type of Weapon Fired: NA

Type of Range: Day/Night Land Navigation Qualification

Ammunition: NA

Number of Lanes: 10 per course

Course Capacity: 75 to 100 Soldiers per four hours

Sponsor unit: DPTMS, Range Operations

Facilities: one lyster bag structure (2 bags per), a wood mess outdoor overhead cover structure, ice chest.

Communication: cellular phone; hand held radio

Special equipment: maps and compasses

Range restrictions: 5 POV parking spaces

PDF in degrees from center of firing line: MAG AZ: per lane sheet/GRID AZ: NA

Kasserine Pass

Range Number: NA

Range Name: Kasserine Pass

Location: 17SNT 170629, off of Mortar Road

Type of Weapon Fired: AT-4 (Trainer), M203; SAW; IED, pistol

Type of Range: saw familiarization; Qualification M203 and familiarization: AT-4 ; IED lanes

Ammunition: 5.56mm, 9mm tracer, and 40mm TPT

Number of Firing Points/Lanes: four positions per lane, there are two lanes for m203; at-4 has eight firing positions; saw has six positions. 10 pistol fam lanes

Type of Targets: metal area targets; vehicles; metal, rail mover

Sponsor Unit: licensed to SCARNG

Facilities: concrete range storage/latrine bldg, wood/concrete tower, large company size wood mess shed, platoon size bleacher structure; well water on range for troops.

Communication: FM radio; telephone: 751-4579.

Special Equipment: none

Range Restrictions: 40 POV parking spaces. No high explosive allowed due to AR/DA PAM 385-63 non-compliance.

PDF in degrees from center of firing line: MAG AZ: 027 degrees/GRID AZ: 022 degrees

Cowpens

Range Number: NA

Range Name: Cowpens

Location: NT 135662, off of Wildcat Road

Type of Weapon Fired: 81, 107, and 120mm mortar

Type of Range: Mortar

Ammunition: Mortar: HE, WP, and Illum

Number of Firing Points/Lanes: 6 points

Type of Targets: hard targets within artillery impact area

Sponsor Unit: DPTMS, Range Operations

Facilities: ammunition range overhead open shed; one water point structure.

Communication: FM radio and landline: 751-7986

Special equipment: none

Range restrictions: No POV parking spaces. Unit must coordinate with Range Operations. Portalets must be coordinated by unit via work order with DPW. Water will be coordinated with DPW.

Note: *81mm illumination will not reach target area. If Range 15 is live firing this range cannot be used.*

PDF in degrees from center of firing line (base tube): per issued Range Operations safety fan data book.

Combat Pistol

Range Number: NA

Range Name: Combat Pistol

Location: 17S NT 167628, off of Mortar Road

Type of Weapon Fired: 9mm

Type of Range: Familiarization; Qualification

Ammunition: 9mm ball

Number of Firing Points/Lanes: 15 positions

Type of Targets: E-Silhouette (ERETS), seven targets from 10m to 31 meters

Sponsor Unit: licensed to SCARNG

Facilities: concrete tower, concrete ammunition point, platoon size bleacher structure, platoon size mess shed, weapons clearing point, and one concrete vault latrine.

Communication: FM radio; telephone: 751-4579

Special Equipment: NONE

Range Restrictions: 10 POV parking spaces. Range proper is placed 80 meters to the rear and left flank of Kasserine Pass.

Note: *Combat pistol will not be scheduled when Kasserine Pass range is in use.*

PDF in degrees from center of firing line: MAG AZ: 005 degrees/GRID AZ: 000 degrees

Main Tank

Range Number: NA

Range Name: Main Tank; 1LT James C. Little

Location: 17S NT 129647, off of Wildcat Road

Type of Weapon Fired: 25mm, cal .50, M60/M240B 7.62mm, and 120mm

Type of Range: Tank Tables IV to VII subcal; Tank Tables V to VI live-fire. Tank Tables VII and VIII mover rail under construction for (undetermined) Mid-FY 00 firing. Draw SDZ from Range Operations when tank range (tables VII and VIII) is ready for use.

Bradley to Table VI. Mg familiarize; MICLIC (inert); volcano mine (inert); AH-64 laser only platform hover training with 30mm (laser use is in an on call mission).

Ammunition: 25mm TPT only; cal .50, 7.62mm, 120mm TPT; heat / sabot; M68 inert charge for MICLIC

Number of Firing Points/Lanes: 4 points; AH-64; one aerial laser platform

Type of Targets: portable and wood frame e-silhouette

Sponsor Unit: licensed to SCARNG

Facilities: wood tower, wood ammunition point, wood mess shed, four portalets, and small metal storage bldg.

Communication: FM radio; telephone: 751-3901

Special Equipment: none

Range Restrictions: no POVs. No high explosive ammunition due to personnel movements for maintenance of targets. Only two bradleys/tanks on line to live-fire at a time others can bore sight. The firing line, target pits, access dirt roads for target maintenance is in UXO impact area. IBA, ACH, two man rule will be followed in impact area, communication with Range Operations will be established and permission to service targets will be obtained by Range Operations prior to entry past firing line into impact area. Only military vehicles in impact area with Range Operations authorization. Only one AH-64 forward of firing line for laser use (no 30 mm live-fire allowed).

PDF in degrees from center of firing line: MAG AZ: 082 degrees/GRID AZ: 077 degrees

MOUT Site A and B

Range Number: NA

Range Name: MOUT Site A and Site B

Location: 17S NT 188686, Johnson Rifle Road

Type of Weapon Fired: M16A2/M4/SAW

Type of Range: MOUT training (non-standard and standard sites)

Ammunition: 5.56mm blank, outdoor use only for smoke grenades, CS grenades, and artillery/grenade simulators

Number of Firing Points/Lanes: four wood structures and eight mobile MOUT metal structures.

Type of Targets: NA

Sponsor Unit: DPTMS, Range Operations

Facilities: one metal cadre office building eight (8) metal mobile conex/milvan at 8 ft wide and 40 ft long and one dumpster. Unit must coordinate extra portalets thru DPW via work order and ensure coordination of water resupply for 5-gallon cans and water buffalo through DPW or Range Operations.

Communication: FM radio; telephone: 751-7918

Special Equipment: none

Range Restrictions: no POV parking spaces. No inside structure use of CS, smoke, and grenade/artillery simulators in eight mobile MOUT structures or wood two story structures.

PDF in degrees from center of firing line: MAG AZ: NA/GRID AZ: NA

Night Infiltration Course (NIC)

Range Number: NA

Range Name: Night Infiltration Course - NIC; 1LT Joe V. Abernathy

Location: 17S NT 185682, Johnson Rifle Road

Type Of Weapon Fired: 7.62mm

Type Of Range: ITT, Infiltration Course, day/night

Ammunition: 7.62 flat trajectory ball/tracer- only

Number of Firing Points/Lanes: one trench

Type of Targets: for zero, wood frame with paper

Sponsor Unit: B CO, 4-10 IN, 171st Infantry Brigade

Facilities: concrete range shack, metal tower, wood ammunition point, wood mess shed, company size metal bleacher structure, four troop and one cadre portalets, two water point structures, three concrete mg towers, old concrete block mess bldg (PLT classroom potential or storage) and old concrete latrine bldg (storage only), old PLT metal bleacher structure, and old metal personnel equipment rack open air structure with metal roof, three charge pits and two mg simulation pits and one ice chest.

Communication: FM radio; telephone: 751-3258

Special Equipment: none

Range Restrictions: ACH, IBA, and ear plugs required. Five POV parking spaces, six cadre POV slots, and one vip slot. High risk range with medics on site. M240B test fired during daylight only (no exceptions).

PDF in degrees from center of firing line: MAG AZ: 145 degrees/GRID AZ: 140 degrees

RST-4 (EOD Demolition Range)

Range Number: NA

Range Name: RST-4 (EOD Demolition Range); LTC Terry D. Allen, Jr.

Location: 17S NT 194685, Johnson Rifle Road

Type of Weapon Fired: demolition

Type of Range: EOD net 50 lb surface/non fragmentation blast training range

Ammunition: NA

Number of Firing Points/Lanes: multi-pits

Type of Targets: hard and soft

Sponsor Unit: EOD Team/ DPTMS, Range Operations

Facilities: concrete range shack, metal tower, company size metal bleacher structure, one cadre portalet, one lyster bag structure (2 bags per), old concrete block mess bldg (storage)/and old concrete latrine bldg (storage only), old SQD metal bleacher structure, and old metal personnel equipment rack open air structure with metal roof.

Communication: FM radio; telephone: 751-5126/4188/6919

Special Equipment: none

Range Restrictions: six POV parking spaces. Range entrances must be closed by gate/cable and secured or guarded during demolition(s) use.

PDF in degrees from center of firing line: MAG AZ: NA/GRID AZ: NA

Omaha Beach I & II

Range Number: NA

Range Name: Omaha Beach I & II

Location: 17S NT 173673, off of Johnson Rifle Road

Type of Weapon Fired: M16A2/M4

Type of Range: ITT, Fire And Maneuver

Ammunition: 5.56mm ball/blanks

Number of Firing Points/Lanes: eight COE lanes for practice and for live-fire.

Type of Targets: Megget Remote Operated 31A1, E-Silhouette; 10 Target Mechanisms per lane

Sponsor Unit: Range Operations, DPTMS

Facilities: steel tower, ball and blank ammunition points, wood mess shed, one squad metal bleacher structure, two platoon size bleacher structures, one company size bleacher structure, two metal vault latrines and two wood weapons clearing points, six water point structures, three cadre portalets, one metal shed, one concrete old mess bldg, one metal break area shed, one concrete storage bldg (old latrine), one concrete storage shed, and one open air metal personnel equipment rack type structure. Seven elevated concrete/wood COE lane target control bunkers with windows.

Communication: FM radio; telephone: 751-7947

Special Equipment: miles, artillery simulators (each lane), M16 blank adapters for use during blank fire, and air compressor use is optional prior to entry onto live-fire lanes.

Range Restrictions: 10 POV parking spaces near live-fire area, one medic vehicle slot, six POV spaces at entrance of range near initial company brief area. High risk range; IBA and ACH will be worn during live-fire by anyone in the COE live-fire lanes. NOTE: If TA 24B demolition range is operational Lanes 1 & 2 are closed due to SDZ conflicts.

PDF in degrees from center of firing line: MAG AZ: 119 degrees/GRID AZ: 114 degrees

Remagen

Range Number: NA

Range Name: Remagen

Location: 17S NT 153679, Dixie Road

Type of Weapon Fired: Hand Grenade Practice and Fragmentation

Type of Range: Hand Grenade Assault Qualification and Live Bay Throw

Ammunition: M14 incendiary, smoke: M18, M8, and M69 Practice and M67 Fragmentation Grenade.

Number of Firing Points/Lanes: four practice and four live bays and eight (four in use) qualification lanes.

Type of Targets: E-Silhouette: Steel/Plastic

Sponsor Unit: B CO, 4-10 IN, 171st Infantry Brigade

Facilities: wood range shack, metal live bay tower, range office, metal ammunition point, wood mess shed, wood company size bleacher structure, live bay metal shed for grenade issue, two metal vault latrines (one inactive), nine troop portalets and one cadre portalet, seven lyster bag structures (2 bags per), KD wood tower, KD metal cadre/storage small bldg, concrete practice bay training bldg, live bay wood/plexiglass observation bay areas with roof, two old concrete block latrines (storage area), and old live bay wood tower with observation bay areas. Wood open air with roof structure, and wood bleacher structure.

Communication: FM radio; telephone: 751-4989

Special Equipment: none

Range Restrictions: 16 POV parking spaces outer perimeter, 15 range cadre POV parking spaces. No entry to live bay when guarded and gate closed.

PDF in degrees from center of firing line: MAG AZ: 015 degrees/GRID AZ: 010 degrees

ST. LO

Range Number: NA

Range Name: St Lo.

Location: 17S NT 137703, off of Wildcat Road

Type of Weapon Fired: NA

Type of Range: Day/Night Land Navigation Qualification

Ammunition: NA

Number of Lanes: 10

Number of Course Points: 13 over 10 square kilometers

Course Capacity: 75 to 100 Soldiers per four hours

Sponsor Unit: DPTMS, Range Operations

Facilities: one lyster bag structure (2 bags per), AA wood outdoor overhead cover structure, sign-in open air overhead wood structure, two portalets.

Communication: FM radio; telephone: 751-7178

Special Equipment: maps and compasses.

Range Restrictions: no POV parking spaces. Use Jackson Flyers POV area: 30.

PDF in degrees from center of firing line: MAG AZ: per lane sheet/ GRID AZ: convert mag via adding 5 degrees

Urban Assault Course (UAC)

Range Number: NA

Range Name: Urban Assault Course (UAC)

Location: Johnson Rifle Road

Type of Weapon: M16A2/M4, M203

Ammunition: 5.56mm ball/40mm TPT (M203 lane)

Type of Range: Urban Operations

Number of Stations: five (one lane M203 TP- 40mm and 5.56mm ball)

Type of Targets: computer operated remote SAAB and Caswell targets

Sponsor Unit: Unit Operated

Facilities: cadre shack, mess shed, weapons clearing structure , company size metal LAP structure, two ammo points two ice chests, two water 305 gallon pods.

Range Restrictions: ACH and IBA required. Entrance and exit closed by cable when live-fire is being used. High risk range with medic on site, SRE required. POV slot: in front of range entrance off of Johnson Rifle Road.

PDF in degrees from center of firing position seven firing position throughout the M203/M16 lane.

Wanat

Range Number: NA

Range Name: WANAT

Location: NT 16366706 Dixie Road

Type of Weapon: M16A2/M4

Ammunition: 5.56mm CCMCK and blanks

Type of Range: Mounted Convoy Operations Course

Number of Firing Points/Lanes: two vehicle moving lanes and one IED block lane. There will be a lead vehicle, maximum of three five ton vehicles, and an FLA on the course.

Type Targets: 60 COE positions with remote Meggitt and Caswell target and, two moving target systems.

Sponsor Unit: B CO, 4-10 IN, 171st Infantry Brigade

Facilities: cadre shack, tower w/pa set and, mess shed, platoon size bleacher structure, ammo point, ice chest, and one water blivet (305 gal), two conexes for storage.

Range Restrictions: ACH and IBA required. Entrance and exit closed by cables when live-fire is not being used. High risk range with medic on site, SRE required. POV slots in front of range by cadre shed.

PDF in degrees from center of firing line: multiple firing positions throughout the range.

Appendix C - Safety Procedure for Field Artillery and Mortars

C-1. General.

a. This appendix establishes policies and procedures for the firing of all field artillery and mortars on the Fort Jackson Military reservation to include the SCARNG McCrady Training Center (MTC) Licensed Training Areas.

b. The information, policies and procedures are established to permit unit commanders maximum training freedom and flexibility while ensuring the maximum personnel and training safety.

c. For the purpose of this regulation, the following definitions are applicable:

(1) Officer-in-Charge (OIC). Each commander that is conducting or supporting training, and or an exercise/problem on the Fort Jackson Military Reservation will designate a commissioned officer as the OIC. The OIC has overall responsibility for his/her exercise of the mission exercise/problem. Noncommissioned officers (E7 and above) may be used as OICs. Use of E7s and above as OICs is authorized only when approved by the installation commander.

(2) Position Commander. The designated commissioned officer OIC of all activities at a particular firing position and responsible for all firing safety aspects associated with those activities. The position commander may be the commander, officer, or platoon leader of the unit firing.

d. The chain of command (CoC) to which the OIC and position commander are assigned, shall have complete responsibility for all aspects of training, firing and firing safety. Each commander will ensure that all personnel are trained and or command certified on the weapon system prior to use on Fort Jackson. Also, the chain of command must ensure that personnel are properly supervised when on Fort Jackson IAW Army, unit, and Fort Jackson regulations, directives, and policies. CoC will provide Range Operations with command certification memorandum every 12 months for each OIC/Pos Cdr).

e. The appropriate commander will ensure that the positions of OIC and Position Cdr are firmly established prior to the firing exercise. The following examples are presented as examples only. Examples of combinations of responsibility:

Type Of Exercise	OIC	POS CDR
ARTEP	Bn/Btry	Battery Cdr/Plt Ldr (Officer)
FTX	Bn/Btry	Battery Cdr/Plt Ldr (Officer)
Battery FTX	Battery Cdr/Platoon Ldr	XO and or AXO (FDO) when split battery (FA only)

Table C-1. Field Artillery and Mortars Exercise Position Commanders.

f. Battalion commander's will establish procedures for qualifying and certifying all personnel within their commands who will be required to perform safety duties IAW this regulation and unit policies. Certification procedures will include, as a minimum, a comprehensive proficiency test covering those duties that the Soldier will be required to perform IAW FM 6-50 and memorandum to DPTMS Range Operations of certification.

g. Major subordinate commanders are authorized to publish safety directives which conform to the provisions of AR 385-62, AR/DA PAM 385-63 and spirit of this regulation, in order to meet the requirements of special training situations. In no case will subordinate command safety publications be less restrictive or eliminate any of the safety checks required herein (Remember, the watch word is SAFETY).

C-2. Personnel to Perform Safety Duties.

a. Position Commander (Pos Cdr)

(1) The next higher commander will ensure that the position commander is properly instructed in his/her safety duties and responsibilities, and is certified and qualified.

(2) The Pos Cdr's duties are spelled out in detail (Paragraph 3 below). Generally, the Pos Cdr's duties include:

(a) Coordinating for proper, authorized firing position and impact area at Fort Jackson.

(b) Establish and supervise an overall safety system within the firing position.

(c) Ensuring the personnel required to perform safety checks are competent, properly briefed on their duties, and command certified.

(d) Ensuring rigid compliance with this regulation and common sense safety rules and practice.

(3) The Pos Cdr may also perform other functions as required when the size and scope of the exercise or problem are such that he/she can accomplish the functions and still assure safety.

b. Battery/Platoon Personnel.

(1) The Battery Executive Officer (XO/ Platoon Leader), the Chief of the Firing Battery (C/FB/Platoon SGT's) (PSG), and the Gunnery Sgt (GSG) are responsible for the general safety practices of the firing battery/platoon and for the professional competence of their personnel.

(2) The Fire Direction Officer, FDO/Chief Computer, normally the assistant XO, is responsible for plotting the impact area and preparing the safety diagram, and supervising the construction of the required Safety T's, he or she will ensure that the commands sent to the guns

are within specified limits. In order to have a double-check on the safety diagram and Safety T's, a safety certified Soldier other than the position FDP/Chief Computer must independently verify the Safety T. This may be accomplished in one of two places.

(a) A firing position is selected before occupation. The unit must then occupy the FP and ensure that the battery is in the position specified for which data was prepared. The Safety T may be prepared before movement to the position in this situation.

(b) Firing positions are selected while in the field for which no initial Safety T has been prepared. In this instance, it is necessary for a second officer to independently prepare a Safety T and verify that the data prepared by the position(s) FDO/Chief Computer there is no requirement for the officer verifying safety data to go to the firing position.

(c) In both cases, an officer other than the Position Cdr must verify that the grid of the position, which has or will be occupied at the grid for which the diagram has been prepared.

(3) The Chief of Section (C/Sec/Squad Leader) is responsible for all safety checks required within his section/squad to include checks of the weapon and ammunition, provided that he is command certified as being qualified to perform these checks. When he/she is not certified, a qualified/certified officer/NCO will assume responsibility for the safety of the weapon or the weapon will not be fired.

c. Cannon/Mortar Safety Officer (For close-in Firing).

(1) A minimum of one Cannon/Mortar Safety Officer per position area will be used for an independent safety check whenever a unit is firing DANGER CLOSE in support of maneuver elements. (This normally does not happen at Fort Jackson) he/she is directly responsible to the OIC of firing or the Pos Cdr (as appropriate) for safety at the weapon and will have no other assigned duties.

(2) Cannon/Mortar Safety Officer duties may be performed by a certified safety officer or NCO (E6 or above).

(3) The Cannon/Mortar Safety Officer must be competent and qualified to perform his/her duties, as the RSO is responsible for ensuring that all rounds fired are within the safety limits as shown and stated on the safety diagram and that the data set on the piece is the same sent from the controlling FDC.

d. All personnel acting as RSO's must be command certified with memorandum of such signed by an 0-5 or above and forwarded to Range Operations: every 12 months.

C-3. Safety Duties.

a. Units will follow the current regulations, FM's, TMs, and SOP's.

- (1) AR 385-62 and AR/DA PAM 385-63.
- (2) Fort Jackson Regulation 350-14, Ranges.
- (3) Fort Jackson Garrison SOP, Annex T, Safety.
- (4) FM 6-40 and FM 6-50.
- (5) Appropriate FM's and TMs for the appropriate weapon and ammunition.
- (6) Unit SOP's.

b. Before departing for the range, the Pos Cdr will ensure that the following references and items of equipment/personnel are available for use in the firing position for safety purposes:

- (1) AR/DA PAM 385-63.
- (2) Applicable Tabular Firing Table, Graphical Firing Table, Graphical Site Table, and Fort Jackson Map.
- (3) A second properly functioning and declinated-aiming circle.
- (4) Radio: SINCGARS or larger, with operator.
- (5) Medical support and means to transport a litter patient in a covered vehicle.
- (6) Weapon has been bore sighted within prescribed time frame.

c. Before firing.

(1) The Position Commander will accomplish or ensure the following tasks are accomplished:

- (a) Verify that the training schedule and training areas/locations are still applicable by date. Confirm any pen and ink changes with Range Operations.
- (b) Have in his possession copies of the appropriate safety diagrams. The accuracy of safety diagrams is normally accomplished by the Fire Direction Officer (FDO)/Chief Computer.
- (c) Verify that all personnel responsible for safety checks are command certified, have the appropriate safety diagram or Safety T, and are briefed: regarding safety.
- (d) Verify that the battery is within 100 meters of the gun base piece position specified on the training schedule.

(e) Verify bore sight and lay of the battery. When verifying, a maximum variation of plus or minus 2 mils will be allowed between a properly declinated second aiming circle used for the initial lay of the guns.

(f) Verify that the azimuth of fire and the referred deflection used by all sections and the FDC is the same that is used to compute the safety diagram.

(g) Verify that the FDC has the impact area drawn on the firing chart/computer.

(h) Verify that range clearance has been obtained from Range Operations and that the radio operator maintains continuous communications and makes a communication check every hour.

(i) Ensure that road guards are posted, as required.

(2) The Pos Cdr will ensure that the following actions are properly accomplished. He/she may be assisted by command certified members of the chain of command, such as the Battery XO, FDO, C/FB, of GSC or the PSG and/or Chief Computer.

(a) Verify the proper positioning of the aiming posts, collimator, or aiming point in reference to the referred direction by sighting through the weapon sight. (Ensure gunner's aid is zeroed).

(b) Verify the bore sight of each weapon after each change of firing position.

(c) Verify the sight setting after initial lay (to include ensuring that when the recorded deflection to the aiming point appears on the azimuth counter, 3200 appears on the reset counter scale) and the placement of any safety stakes or safety tapes/chalk mark (SP weapons).

(d) Verify minimum quadrant elevation (Min QE) determined by the XO/Firing Platoon Commander. Compare the XO's Min QE with the QE for the minimum range shown on the safety diagram and use the larger of the two Min QE.

(e) Verify that weapons to be fired are the type specified on the training schedule and the initial firing request.

(f) Verify that the visible portions of applicable danger areas are clear of personnel (Check with FO). Ensure that firing does not commence until the impact of the first smoke or WP rank is observed safe.

d. During firing. The Pos Cdr, assisted by the command certified battery XO, FDO, C/FB and GSC or PSG and Chief Computer will:

(1) Supervise closely the safe firing of the battery/platoon, to include proper performance of the safety duties by all personnel and elimination of unsafe conditions. This responsibility will normally fall to the XO/PL when he/she is also present in or at the firing position.

(2) Ensure that no weapon fires unless it has been checked by a certified C/Sec or SL or the responsibility for its safety has been assumed by a command certified officer or NCO.

(3) Check visually for parallel laying.

(4) Report accidents, malfunctions, erratic firing, Duds and violations of this regulation immediately to the next higher Commander and Range Operations.

(5) Supervise removal of misfire(s).

(6) Secure clearance from Range Operations prior to firing shell illuminating.

e. During Firing. The command certified Chief of Section/Squad Leader, supervised by the Pos Cdr, Battery XO, C/FB (PSG), and or GSC will:

(1) Ensure that his section fires only serviceable rounds of authorized ammunition. If there is any doubt whether a particular type of round is authorized, he/she will check with the Pos Cdr before allowing the type of round in question to be loaded and fired.

(2) Ensure his/her section fires only the proper, safe charge as reflected in the safety diagram.

(a) Ensure that the proper charge increments for each type round are present before the round is prepared for firing. Once the round is prepared, ensure that the correct number and type of remaining charge increments are held up and visually counted before firing.

(b) For mortar rounds, the remaining charge increments must be physically counted and verified as correct before each round is fired. Charge boxes will not be used.

(3) Ensure that rounds are not fired below Min QE or above Max QE, outside lateral safe deflection limits, or with fuse setting below minimum time, as specified on safety diagram.

(4) For all commands that are unsafe to fire, command "UNSAFE TO FIRE" and give all reasons. Examples: "UNSAFE TO FIRE, five (5) mils below Min QE".

(5) Accept final responsibility for safety of weapon setting and crew prior to command to "FIRE."

(6) Command “CHECKING FIRE” if one observes any unsafe condition(s) to the chain of command, and suspends firing until the unsafe condition(s) are corrected.

Note: *Checking fire may be commanded by anyone observing unsafe acts and or firing condition(s).*

f. The Fire Direction Officer/Chief Computer. Will ensure that the safety limits specified are properly plotted on the firing charts and that only safe fire commands are transmitted to the firing sections. Further, will:

(1) Verify and apply registration corrections to appropriate safety diagrams, to include those held by other individuals performing safety duties within the firing position.

(2) Exercise special caution in special situations. If a deflection difference or special corrections are sent to the firing sections, he/she must ensure that for each section the total of the announced deflection and the deflection on the gunner’s aid will be within lateral safety limits. This applies to quadrant corrections and range limits as well.

g. After Firing. Pos Cdr, assisted by a command certified Battery XO, FDO, C/FB and GSC or PSG or ammunition SGT will:

(1) When conducting training, ensure that all unused propellant increments are burned or burned at an approved site or turned into ASP IAW existing regulations.

(2) If not conducting increment burn training, then properly pack and transport unused increments thru supply channels; close range/firing position with Range Operations.

h. Grid Coordinates for Artillery Firing:

Firing Point (FP)	Grid Coordinate	Authorized Weapon
01	NT 14417129	105/155MM
02	NT 14277160	105/155MM
03	NT 14107155	105/155MM
04	NT 14077149	105/155MM
05	NT 13636990	105/155MM
06	NT 13736987	105/155MM
07	NT 13906990	105/155MM
14	NT 25906413	105/155MM
15	NT 25486378	105/155MM
16	NT 25906365	Declination Station Only
17	NT 25946378	Declination Station Only
18	NT 26136531	105/155MM
19	NT 26306573	105/155MM

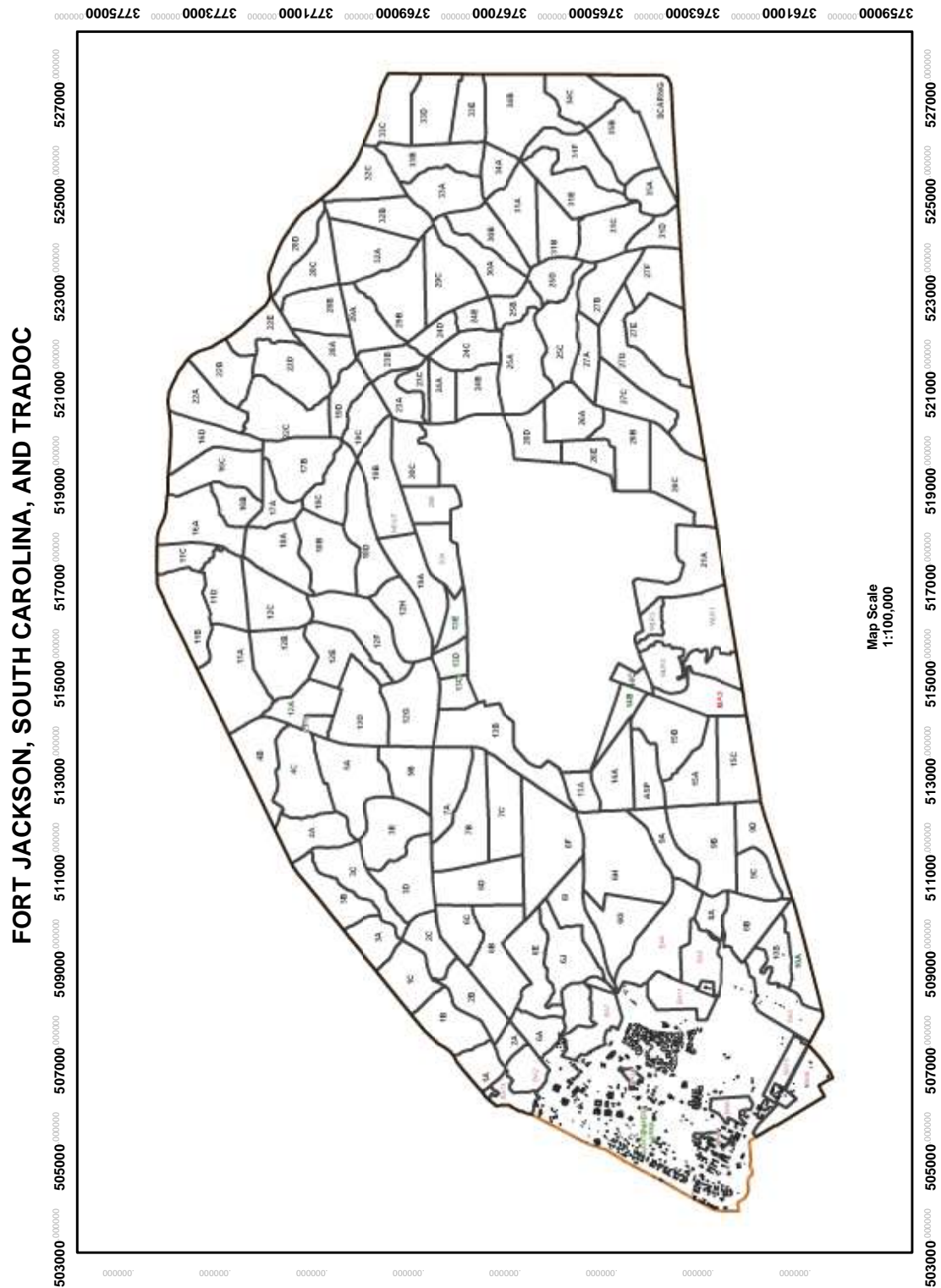
20	NT 26156602	105/155MM
20A	NT 26356596	105/155MM
21	NT 23426593	105/155MM
24	NT 23306950	105/155MM
25	NT 22866963	105/155MM
26	NT 19547116	105/155MM
27	NT 24696959	105/155MM
28	NT 24466973	105/155MM
29	NT 24816937	105/155MM
30	NT 27066649	105/155MM
31	NT 27056664	105/155MM
32	NT 27046709	105/155MM
33	NT 23786418	105/155MM
34	NT 23706432	105/155MM
35	NT 17147156	105/155MM
36	NT 16917176	105/155MM

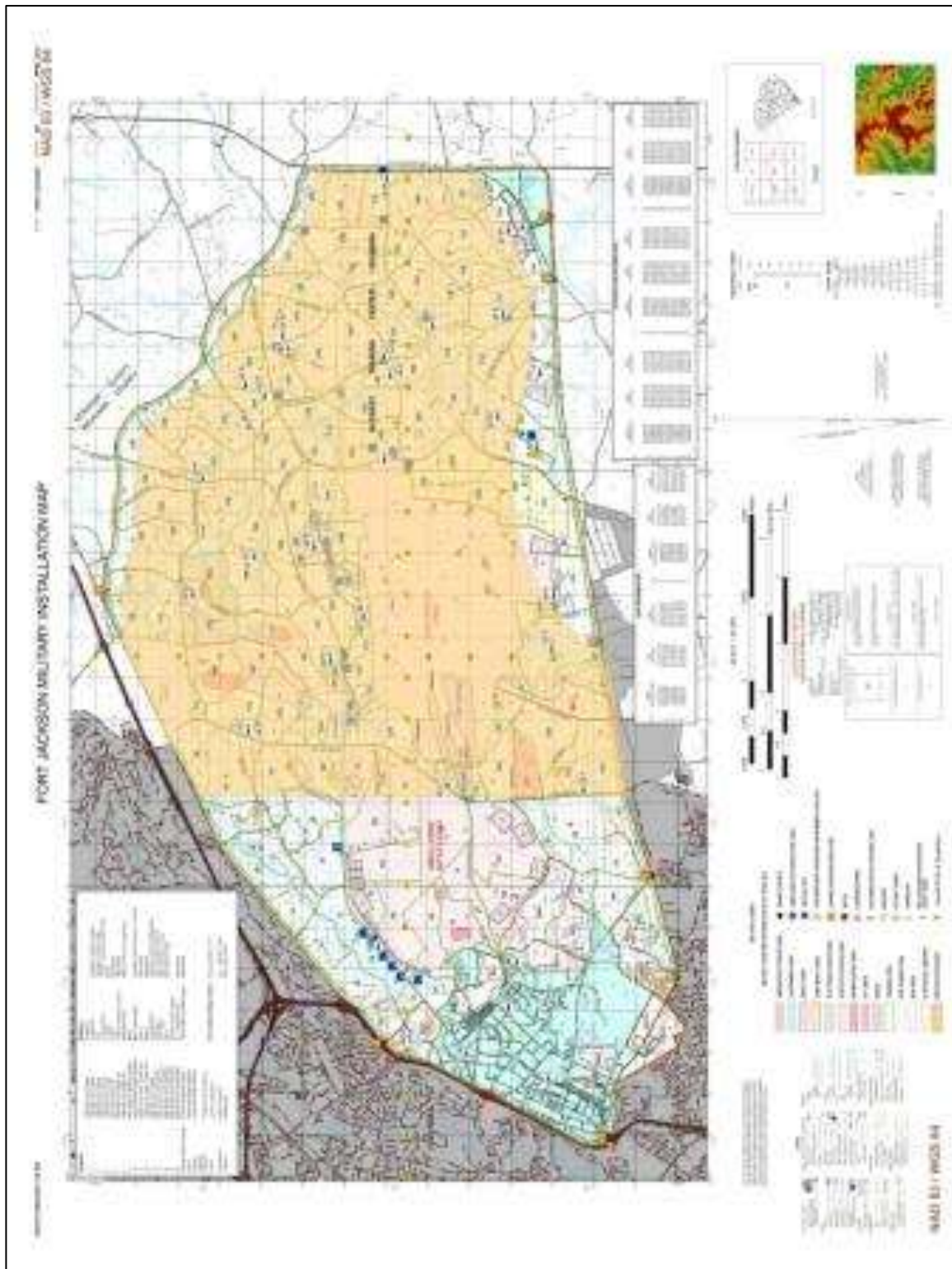
Table C- 2. Field Artillery Firing Point Coordinates

Note: If in the Army inventory: Artillery, 203mm can be fired from FPs 1, 3, 4, 5, 6, 7, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 33, 34, 35, and 36 IAW installation established and approved noise contour zones.

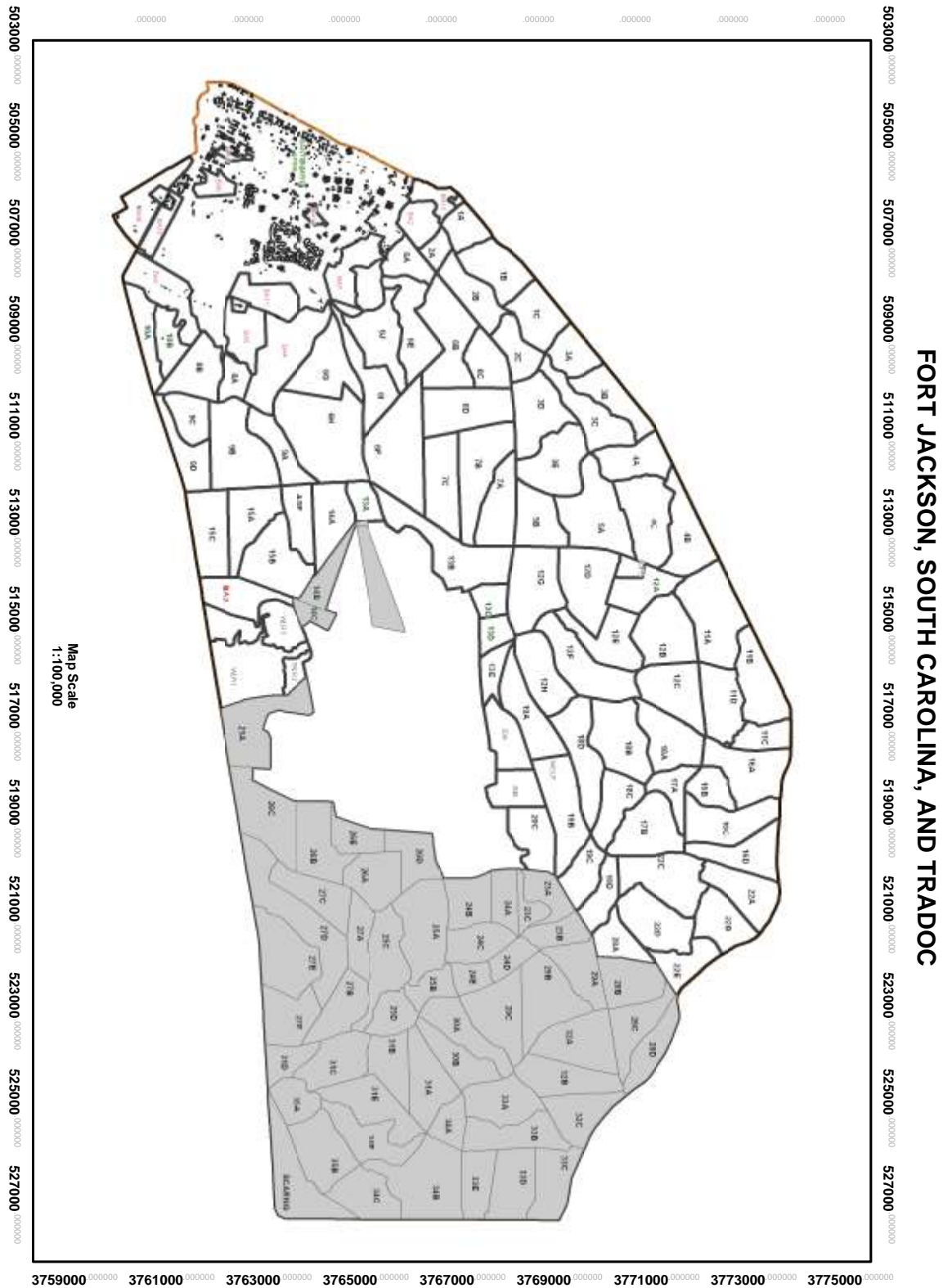
Appendix D – Miscellaneous.

D-1. Training Map.



D -1-1. Fort Jackson Training Area Map with Restricted Airspace Overlay.

D-2. SCARNG Licensed Area Map.



D-3. Chart 28, Wind Chill Chart.

See Fort Jackson Regulation 385-10

Wind Chill Temperature Table
Temperature it “feels like” when wind is blowing

Wind (mph) ▼	Temperature (°F)											
Calm	40	35	30	25	20	15	10	5	0	-5	-10	

FROST BITE TIMES

30 MINUTES

10 MINUTES

5 MINUTES

D-4. Cold Weather Training Guidelines.**See Fort Jackson Regulation 385-10
Cold-Weather****Casualties and Injuries**

Soldiers are responsible for preventing individual cold injuries such as:

- ☐ ☐ Chilblain
- ☐ ☐ Immersion foot (trench foot)
- ☐ ☐ Frostbite
- ☐ ☐ Hypothermia
- ☐ ☐ Dehydration
- ☐ ☐ Snow Blindness
- ☐ ☐ Carbon Monoxide Poisoning

Commanders and Unit NCOs are responsible for the health and safety of their troops by:

- ☐ ☐ Training Soldiers on the proper use of cold weather clothing.
- ☐ ☐ Remembering the acronym C-O-L-D when wearing clothing in cold weather (C: Keep it Clean; O: avoid Overheating; L: wear clothing Loose and in Layers; D: keep clothing Dry).
- ☐ ☐ Maintaining adequate hydration and ensuring nutritional requirements are met.

General Guidance for all Cold-Weather Training

Skin: Cover exposed skin because it is more likely to develop frostbite. Avoid wet skin (common around the nose and mouth). Inspect hands, feet, face and ears frequently for signs of frostbite.

Clothing: Change into dry clothing at least daily and whenever clothing becomes wet. Wash and dry feet and put on dry socks at Least twice daily.

Nutrition: Consume 4500 calories/day/Soldier. This is equivalent to three meal packets in Meal-Cold Weather (MCW) or three to four MREs.

Hydration: Consume 3 to 6 Liters of liquid (canteens)/day/Soldier. Warm, sweet drinks are useful for re-warming.

Camouflage: Consider not using camouflage below 32° F (not recommended below 10° F), because camouflage obscures detection of cold injuries.

These guidelines are generalized for worldwide use. Commanders of units with extensive extreme cold-weather training and specialized equipment may opt to use less conservative guidelines. Cold injury prevention is a command responsibility.

List of recommended preventive measures to decrease frostbite risk

Frostbite Risk (see Wind Chill Temperature Table on page 177)

Low

Freezing is possible below 32°, but unlikely

High

Freezing could occur in 30 minutes

Severe

Freezing could occur in 10 minutes

Extreme

Freezing could occur in 5 minutes

Preventive Measures

- Avoid sweating
- Cover exposed skin if possible
- Wear vapor barrier boots below 0° F
- Increase surveillance with self and buddy checks
- Wear appropriate layers and wind protection for the work intensity
- Wear ECWCS* or equivalent and wind protection including head, hands, feet and face
- Provide warming facilities
- Mandatory buddy checks every 20-30 minutes
- Work groups of no less than 2 personnel
- Stay active
- Mandatory buddy checks every 10 minutes
- Be ready to modify activities due to extreme risk
- Keep task duration as short as possible

* Extended cold weather clothing system

Note: Wet skin could significantly decrease the time for frostbite to occur Trench Foot can occur at any temperature - Always keep feet warm and dry.

D-5. FJ Ambulance Exchange Point (AXP) and Landing Zones (LZ's).

a. Ambulance Exchange Point (AXP) are pre-designated locations where training units may transfer injured Soldiers to EMS personnel, and are intended to expedite movement of casualties with severe injuries towards advanced medical support. It is not required to transport casualties to a check point unless the medical emergency (determined by Qualified Medic or Combat Lifesaver) dictates such a move.

b. All Cadre must know the location of each AXP.

c. AXP/LZ consideration will be included in the Risk Management process for each operation and training event and will be addressed in the Risk Assessment.

d. AXP Locations: (See page below)

e. Air Medical Evacuation (AIRMEDEVAC) Landing Zone Locations: (See page below)

f. Transport to AXP's/AIRMEDEVAC LZ's:

(1) Qualified medics or Combat Life Savers will make transportation determination. (It is not required to transport casualties to a check point unless the medical emergency dictates such a move).

(2) If required, injured personnel are moved to the nearest AXP/LZ and Range Operations notified of the move.

(3) Injured personnel **will not** be transported to a AXP/LZ if one of the following conditions exist:

(a) Any indication of cardiopulmonary related conditions.

(b) Any patient suspected to have multiple fractures or injuries.

(c) Gunshot wounds or other penetrating trauma.

(d) Motor vehicle accidents.

(e) Any injury suspected to have caused neck or spine trauma. Examples are neck or back pain; head injuries; falls of more than four feet; full or partial paralysis.

(4) If in a training area and unable to transport the injured person to the AXP, a unit guide will meet EMS personnel at a designated CP and lead them to the accident site.

g. Ground Evacuation Procedures.

(1) Individuals reporting an emergency will indicate type of emergency and if injuries, severity of injury.

(2) Primary means of evacuation will generally be by ground transportation.

(3) Head, spinal, and penetrating trauma injuries, as well as those injuries with the potential to cause a loss of life, limb, or eyesight, *will automatically generate* AIRMEDEVAC consideration.

(4) If such potential exists, E911 emergency dispatch will notify the AIRMEDEVAC service provider to prepare for flight operations.

(5) Once EMS personnel have determined that air medical evacuation is needed at the scene of an emergency, the Incident Commander will confirm the requirement for AIRMEDEVAC.

h. AIRMEDEVAC Procedures.

(1) Individuals reporting an emergency will indicate type of emergency and if injuries, severity of injury.

(2) Fire Department personnel, Paramedics and EMS personnel should consider calling for AIRMEDEVAC assistance in any of the following situations:

(a) Critical trauma or medical patients.

(b) Ground travel to trauma center in excess of 20 minutes.

(c) Extended extrication time.

(d) MASCAL situations with critical patients.

(e) Patients judged to be at high risk based on mechanism of injury.

(f) Critical patient is located east of Wildcat Road.

(g) Head, spinal, and penetrating trauma injuries, as well as those injuries with the potential to cause a loss of life, limb, or eyesight, *will automatically generate* AIRMEDEVAC consideration. If such potential exists, E911 emergency dispatcher will notify the AIR - MEDEVAC service provider to prepare for flight operations.

(3) Once EMS personnel have determined that air medical evacuation is needed at the scene of an emergency, the Incident Commander will confirm, EMS will provide dispatchers with the following information:

(a) Type of emergency.

(b) Number of patients.

(c) Condition of patients.

(d) Provide dispatcher with latitude and longitude grid coordinates or major cross street information. Dispatchers will notify Range Operations of emergency aircraft entering Fort Jackson air space.

(4) Establish fire ground channel as primary communication channel for LZ operations and relay the information to dispatch for the responding helicopter.

(5) Establish LZ command.

(6) Fort Jackson Emergency Response elements will assume LZ control upon their arrival at the accident site and will coordinate all further AIRMEDEVAC operations. In the event of the AIRMEDEVAC arrives on scene prior to emergency response personnel the following in order will assume LZ control and prepare LZ for AIRMEDEVAC, Range Operations then Affected Organization.

(7) AIRMEDEVAC Request.

(a) Initial AIRMEDEVAC notification will not be delayed for information accumulation. Accident location, number of patients, and severity of injury(s) will suffice for preliminary notification.

LINE 1: Location of Landing Zone (LZ)

LINE 2: Call sign/suffix of individual requesting AIREVAC and name of Unit

LINE 3: Number of patients by priority:

Urgent

Priority

Routine

LINE 4: Special equipment required

LINE 5: Patient(s) status (Litter or ambulatory)

LINE 6: Type/description of injuries

LINE 7: Method of marking the LZ (temporary marking means will not be used unless directed by FJFD or AIREVAC crew). Equipment to have on hand by Range Operations and all units in training of Fort Jackson are:

Panel Marker, NSN: 8345-001746865

Light, Marker, Distress, NSN: 6230-014488340

This equipment or any other temporary visual marking, will not be used unless requested by the Pilot in Charge (PIC).

LINE 8: Patient Nationality/Status

LINE 9: Description of LZ

(b) Communication between AIRMEDEVAC and LZ control will be established as soon as possible and will be maintained until the emergency has been resolved.

(c) The AIRMEDEVAC aircraft may require subsequent information to include: size of LZ, Obstacles (Wire, Vehicles, Antennas etc.), Wind direction, Slope of the LZ terrain.

(d) The senior Emergency Response Fire Officer on scene shall ensure that the following LZ requirements are met.

(e) That an area 100 ft x 100 ft free of trees, wires, vehicles and loose debris is designated as the landing zone.

(f) That the area chosen does not slope in excess of 5 degrees.

(g) Ensure if area is extremely dusty that the area be wet down, if possible.

(h) Ensure marking devices are secured to the ground (strobes, flares, lighting equipment).

(i) Ensure the landing zone is upwind and uphill of any hazardous materials (fuels, and chemical spills).

(j) For night landings, keep emergency vehicle rooftop lights illuminated. Utilize spotlights to identify landing site and adjacent hazards.

(k) Per local air evacuation services ensure no ground guide personnel are positioned in the LZ to direct aircraft during landings.

(8) Firefighters will stand by with fire apparatus and dress in full personnel protective equipment during take-off and landings.

(9) Safety Precautions for AIRMEDEVAC:

(a) IAW external agency AIRMEDEVAC procedures, ground signal personnel will not be used in the LZ to guide incoming aircraft.

(b) Smoke, strobe, or any other temporary visual marking, will not be used unless requested by the Pilot in Command (PIC).

(c) Day and night methods of marking LZ will be maintained in Range Operations vehicles, on ranges with designated LZs and with units training on Fort Jackson to ensure the ability to conduct emergency/alternate LZ operations during day and night. This equipment or any other temporary visual marking, will not be used unless requested by the Pilot in Charge (PIC). Equipment to have on hand by Range Operations and all units in training of Fort Jackson are:

Panel Marker, NSN: 8345-001746865

Light, Marker, Distress, NSN: 6230-014488340

(d) Vehicles and personnel will remain at Least 200 feet from the LZ.

(e) Patient(s) will be protected from blowing debris.

(f) Personnel will not approach the aircraft unless directed to do so by flight crewmember.

(g) Approach aircraft from the front at a 45-degree angle unless otherwise directed by flight crew.

(h) Stay clear of tail rotor.

(i) No smoking within 200 feet of aircraft.

(j) Do not attempt to open or close helicopter doors unless directed to do so by flight crew.

(k) Do not lift any item, such as IV poles, above head.

(l) Follow flight crew instructions at all times.

(m) Assist with patient loading only if asked.

(n) All personnel shall wear hearing protection and securely fastened helmets around aircraft.

(o) Headgear (other than properly secured helmets) will not be worn in or around LZ and should be removed and secured, along with any other items that could be picked up by rotor wash.

AXP INFORMATION							
AXP	MGRS COORDINATES	DMS LATITUDE	DMS LONGITUDE	AXP	MGRS COORDINATES	DMS LATITUDE	DMS LONGITUDE
1	0724560283	33°58'59.106"N	80°55'17.636"W	8	1690568726	34°3'32.833"N	80°49'50.547"W
2	0910363958	34°0'58.372"N	80°54'5.069"W	9	1969971565	34°5'4.822"N	80°47'11.313"W
3	1207065075	34°1'34.526"N	80°52'9.341"W	10	2020168903	34°3'38.364"N	80°46'51.944"W
4	1192468104	34°3'12.868"N	80°52'14.881"W	11	2300969720	34°4'4.692"N	80°45'2.321"W
5	1335768049	34°3'11.031"N	80°51'18.962"W	12	2331365979	34°2'3.186"N	80°44'50.841"W
6	1398871616	34°5'6.812"N	80°50'54.142"W	13	2699967200	34°2'42.519"N	80°42'26.959"W
7	1589062951	34°0'25.392"N	80°49'40.522"W	14	2600463474	34°0'41.62N	80°43'6.164"W

Table D-5-1. AXP Coordinates.

AIR MEDEVAC Landing Zone Information

LZ	Capability	Easting	Northing	Latitude	Longitude	MGRS
1	CH-53 / CH-47	05395	63091	34.003029N	-80.562966W	17S NT 0539563091
2	OH58 / CIV	06005	65046	34.013376N	-80.560581W	17S NT 0600665046
3	CH-53 / CH-47	07099	64039	34.010104N	-80.552318W	17S NT 0710064039
4	OH58 / CIV	07803	60980	33.592173N	-80.545584W	17S NT 0780360980
5	CH-53 / CH-47	08455	64117	34.005503N	-80.544103W	17S NT 0845564117
6	OH58 / CIV	08542	67200	34.024363N	-80.542680W	17S NT 0854367200
7	OH58 / CIV	10955	70008	34.041474N	-80.525257W	17S NT 1095570008
8	CH-53 / CH-47	12445	65524	34.014910N	-80.515465W	17S NT 1244665524
9	CH-53 / CH-47	12348	62250	34.000279N	-80.515862W	17S NT 1234862250
10	OH58 / CIV	13741	70320	34.042473N	-80.510385W	17S NT 1374270320
11	OH58 / CIV	15569	68339	34.031553N	-80.495265W	17S NT 1545568339
12	UH-60	15825	62936	34.002491N	-80.494304W	17S NT 1582562936
13	OH58 / CIV	16248	67717	34.025525N	-80.491587W	17S NT 1624867717
14	CH-53 / CH-47	17024	71659	34.050804N	-80.485566W	17S NT 1702571659
15	UH-60	17944	70174	34.041978N	-80.481987W	17S NT 1794570174
16	UH-60	17041	62973	34.002604N	-80.485562W	17S NT 1704162973
17	OH58 / CIV	18297	62743	34.001847N	-80.480668W	17S NT 1829762743
18	CH-53 / CH-47	18175	68739	34.033316N	-80.481097W	17S NT 1817668739
19	OH58 / CIV	19639	71510	34.050304N	-80.471362W	17S NT 1964071510
20	UH-60	20610	63379	34.003897N	0804636.42W	17S NT 2061163379
21	UH-60	20192	68890	34.023831N	-80.464875W	17S NT 2019268890
22	OH58 / CIV	21073	70303	34.042377N	-80.461777W	17S NT 2107470303
23	OH58 / CIV	21813	69949	34.041221N	-80.454895W	17S NT 2181369949
24	UH-60	22052	70405	34.042700N	-80.453956W	17S NT 2205370405
25	UH-60	21335	64323	34.010957N	-80.460809W	17S NT 2133564323
26	UNK	22422	63282	34.003572N	-80.452582W	17S NT 2242263282
27	CH-53 / CH-47	22312	66922	34.023389N	-80.452977W	17S NT 2231266922

28	UH-60	22763	67084	34.023912N	-80.451216W	17S NT 2276367084
29	OH58 / CIV	22934	69559	34.035947N	-80.450525W	17S NT 2293469559
30	OH58 / CIV	23269	69498	34.035746N	-80.445219W	17S NT 2326969498
31	OH58 / CIV	23423	65938	34.020186N	-80.444653W	17S NT 2342365938
32	UH-60	23779	64203	34.010551N	-80.443281W	17S NT 2377964203
33	OH58 / CIV	25819	64072	34.010106N	-80.431328W	17S NT 2581964072
34	CH-53 / CH-47	25881	63756	34.005079N	-80.431091W	17S NT 2588163756
35	UH-60	26951	64602	34.011816N	-80.422906W	17S NT 2695264602
36	OH58 / CIV	27051	67090	34.023893N	-80.422490W	17S NT 2705267090

Table D-5-2. AIR MEDEVAC Landing Zone Information

D-6. Training Accident/Incident Report (TAIR).

Training Accident/Incident Report (TAIR), DPTMS, Range Operations, FJSC, 29207; DSN 94-734-4732/7171					
REPORT #		DATE:			
1. Type of incident:	Range Safety Officer:	Range OIC:			
2. Notified By:	DTG:				
3. Unit:	Location:				
4. Injuries Involved:	Is Medical Assistance Required:?	Time of Incident:			
5. Soldier(s) Involved:	Last Name:	First Name:	MI:		
LAST 4 SSN:	Rank/Grade: NA	Gender:	Age: NA		
6. Weapon Involved: Type:	Serial Number:				
7. Ammunition Involved: Type:	DODIC:	Lot Number:			
8. Vehicle Involved: Type:					
9. Weather Condition:	Heat Cat.	WBG:	Temp:	(F) Fire Class:	
10. Witness to Incident:	Rank:	Last Name:			
11. Summary of Incident:					
12. Range Operations:					
13. Range Inspectors:					
14. Offices and Personnel Notified by Range Operations:					
	<u>ORGANIZATION</u>	<u>PHONE</u>	<u>INDIVIDUAL</u>	<u>TIME</u>	<u>COMMENT</u>
	IOC	751-5166/3983			
	Range Operations OIC	751-9752			
	Safety (M-F 0730-1630)	751-6004			
	Forestry (Range IA's and TA's)	751-4622			
	Fire Dept. 911 (Range Buildings)	911			
	Hospital/Ambulance/EMS(Injuries/Illness)	911			
	LEA (Weapons/Lost Soldiers/Vehicle Accident)	751-3113			
	Weapon Pool (Weapons Incident)	751-4614			
	ASP (Weapons/Ammo/Pyro/Simulators)	751-4017/5692/ 5472			
	Wildlife/Game Warden (Animals only)	751-7002			
	EOD (Low Order/Arty/Mortar/UXO/Pyro/Sim)	751-5126			
	All TAIRs: G3; Deputy GC; Chief, Collective Training				
	Mr. Obrien (After hours Post Safety)	803-429-0758 438-1834			
15. Comment(s):					

Table D-6-1. Sample TAIR.

D-7. MOUT Site Policy.

a. All units will coordinate with DPTMS Range Operations prior to occupation or use of the MOUT Site.

b. MOUT Site rules of use will be in effect during use.

D-8. Range Ring Down Procedures and Report. Ring Down Procedures and Range Down Status Report is under further review.

D-9. Deviations from Range Standards and Procedures.

- a. Reference AR 385-63, Range Safety, IAW any published changes.
- b. Submit all deviation requests to Commander, Basic Combat Training Center of Excellence, DPTMS, Installation Range Officer, ATTN: IMFJ-PLR (1-803-751-9650), Fort Jackson, SC 29207 with a copy to Fort Jackson Safety Center. Memorandum stating the who, what, when, where and why (5 Ws) and an attached safety fan, as applicable. The request will be acted upon with 30 days of receipt.
- c. The Installation Range Officer will ensure that all conditions, requirements, controls, and so forth in approved deviations are incorporated into range development plans at each 5-year range development plan meeting.

D-10. Range SOPs by Range Category (All SOPs will be published on final FJ 350-14 approval).

a. Reference AR 350-19, The Army Sustainable Range Program, dated 30 August 2005.

b. The following SOPs will be published by type within this appendix:

(1) For example, one copy will be attached for Zero Ranges 1 to 6; one SOP will cover LOMAH range 11 & 12; one SOP will be attached for Range 9 field fire; Range 7 SOP will cover Range 8. GS & CI range SOPs will be attached per individual range.

(2) Zero/MG/AWG range D-11-1; field fire range D-11-2; LOMAH Range D-11-3; Rifle Qualification/ARM 3 D-11-4; ARM2/4/ NBC/ night fire/BMS. VT, CS Chamber, Map, first aid, FTW, CoC, Corregidor, St. Lo, and BAC. Bastogne, Main Tank, Kasserine Pass, AJ, Casablanca, Anzio I and II, Chip Yong-Ni, Remagen, IED-D Lane, Wanat Convoy, UAC, MOUT Site, RVTT Site, Omaha Beach, and RST-4 EOD range.

D-11. Range Project Checklist.

RANGE NAME	REQUIREMENTS	GARRISON COMMANDER	MISSION TEAM	DPTMS	DRM	DPW	DPW ENVIRONMENTAL	DOC	DOL	NEC	SIA	Fort Jackson Safety Center	FIRE DEPARTMENT	SCARNG	CONTRACTOR	CONTRACT	WORK ORDER	PURCHASE REQUEST	SUPPLY SYSTEM	SUPER CREDIT CARD	AT/FP	IMCOM-SE	TRADOC
IDENTIFICATION OF NEW RANGE TYPE	MISSION REQUIREMENT		X													THESE COLUMNS ARE TO BE FILLED IN DEPENDENT ON RANGE NEEDS							
SITE LOCATION	GARRISON COMMANDER APPROVAL	X		X																			
SITE APPROVAL	GARRISON COMMANDER LETTER	X		X																			
FUNDING APROVAL	OMA/OPA/SAG121/SAG132 RECEIVED				X																	X	X
ENVIROMENTAL ASSESSMENT	US FISH AND WILDLIFE APPROVAL			X			X				X												
BIOLOGICAL ASSESSMENT	US FISH AND WILDLIFE APPROVAL			X			X				X												
ENDANGERED SPECIES	US FISH AND WILDLIFE APPROVAL			X			X				X												
WETLANDS	US FISH AND WILDLIFE APPROVAL			X			X				X												
RANGE OR SITE CONCEPT DESIGN	HUNTSVILLE/M ISSION		X	X																			
RANGE CONCEPT TIMELINE	HUNTSVILLE/M ISSION		X			X		X															
	SITE ORIENTATION		X	X		X																	
	STORM WATER PLAN					X	X	X			X					X							
	DESIGN PLAN FOR CONSTRUCTIO N			X	X	X	X	X	X	X						X					X		
	GRADING PLAN			X	X	X	X	X			X					X							
	ENVIRONMENT AL						X	X			X					X							
	RANGE TOWER		X	X	X			X			X	X	X			X							
	RANGE SHACK		X	X	X			X			X	X	X			X							
STORAGE BUILDINGS			X	X			X			X	X	X			X								

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[illegible]

[illegible]

LEGEND	
X	INDICATES THAT THE LISTED AGENCY HAS A REPOSIBILITY/ROLE TO IN ACCOMPLISHING THIS EVENT
G	INDICATES EVENT COMPLETED
A	INDICATED WORK STILL BEING DONE ON EVENT
R	INDICATES THAT NO WORK HAS BEEN DONE

Table D-11-1. Range Project Checklist.

D-12. Range Improvement Council (RIC).

a. See chapter 1, para 1-4b for details. The quarterly RIC is utilized to collectively share, with the Senior Commanders, BN/Co leaders and other interested parties, ideas, lessons learned, identify best practices, and determine the way ahead that maximizes the operations,

b. It is an important part of the Sustainable Range Program (SRP) training assessment review and collection venue. This is important in developing requirements from TRADOC, Safety, Range Operations and unit leaders.

c. The RIC is used to further focus on Identifying and Discussing the “Impacts” that revisions to BCT POI, BRM/ARM Strategy, and Warrior Tasks and Battle Drills will have on Fort Jackson Training Range Complex. Emerging doctrinal changes are ever evolving and necessary to adapt training resources quickly.

d. The RIC provides a venue and an opportunity to listen to and discuss potential projects for enhancing, improving, developing training capabilities within the Fort Jackson Range Complex.

D-13. Group Firing on Zero Ranges.

a. Effective 27 Oct 2011, Fort Jackson unit commanders have been approved, at their discretion, to either conduct standard zeroing as described in para 9-9e, or to conduct small groups of 5 or 10 firers firing on zero ranges (ranges 1 – 6). Commanders are responsible for cadre supervision of all firing and cadre conducting the training. All unit composite risk management (CRM) forms must be written for conducting small group zeroing is signed by the battalion commander, and available on the range subject to inspection by Range Operations during training. Units without correct CRM for this training will be asked to stop small group zeroing and revert to the standard zeroing procedures as described in para 9-9e.

b. Commanders must ensure an assistant safety officer is assigned for each group of 5 or 10 firers and small groups must be no less than 10 lanes apart. This is the only authorized separation allowed to comply with the range SDZ for small group firing. This provides direct cadre supervision of firers and allows more direct observation of the small group.

c. Commanders are responsible to ensure that the range safety officer briefs include specific details and safety procedures to be followed and adhered to while conducting small group zero firing.

d. The Range OIC is responsible to ensure that his RSO utilizes one of the following methods to identify small group zero firers left and right firing limits during range setup (see figure 1).

(1) Place a red and white stripe painted silhouette on a stake in the lane next to the left and right most firer of the group. Ensure the firers identify and understand what the silhouette represents and that they are not allowed to point their weapons past the limit markers not fire on the markers.

(2) Place a florescent yellow or orange safety cone in the lane next to the left and right most firer of the group. Ensure the firers identify and understand what the silhouette represents and that they are not allowed to point their weapons past the limit markers not fire on the markers.

(3) Any other methods of identifying the limit markers must be approved, in writing, by Range Operations prior to units conducting small group zero firing. It is the responsibility of the unit commander to decide whether to group in 5 or 10 firer groups. Group separation is 10 lanes and is not authorized to be reduced.

(4) When the M855A1 Enhanced Performance Round ammunition is available and issued on Fort Jackson, there will be a requirement for 27 lanes separation between firing groups.

D-13. Group Firing on Zero Ranges (continued).Table 13-1-1. Group Firing SDZ M588 Ammunition.

Weapon Type: SMALL ARMS
Weapon Caliber: 5.56mm:M855 Ball

Map Scale = 1:420



Range Manager Signature Authority:	Date: 3/20/2012		
Approving Authority: John Wood			
Created By: Kathryn Hajdu Butler	Date: 03/19/2012	Unit: DPTMS - ITAM	Phone: 803 751 6415
			Email: kathryn.m.butler5.ctr@mail.mil
SDZ Name: Range2_TEST_5.56mm_M855 Ball	Ground Target	Angle A: 30.0 deg	TP: 17SNT0813766505
Installation:	Distance X: 3,437.00 m	Angle P: 34.2 deg	
Range Name: None	Distance Y: 2,029.00 m	Angle Q: 25.2 deg	
Range Officer:	Distance W: 462.00 m	Vertical Hazard: 325.00 m	
Min Target Dist: 25.60 m	Area A: 100.00 m	FP: 17SNT0812066527	
Max Target Dist: 25.76 m	Dispersion Angle: 5.0 deg	FP: 17SNT0811566517	
Direct Fire	Ricochet Angle: 5.0 deg	TP: 17SNT0814366515	

D-13. Group firing on Zero Ranges (continued).

Weapon Type: SMALL ARMS**Weapon Caliber: 5.56mm:Enhanced Performance Round Ball M855A1 Clip**

Map Scale = 1:710



Range Manager Signature Authority:	Date: 3/19/12		
Approving Authority: John Wood	Date:		
Created By: Kathryn Butler	Date: 03/19/2012	Unit: DPTMS - ITAM	Phone: 803 751 6415
			Email: kathryn.m.butler5.ctr@mail.mil
SDZ Name: SmallArms_EPR	Ground Target	Angle A: 30.0 deg	FP: 17SNT0811566517
Installation:	Distance X: 3,630.00 m	Angle P: 60.0 deg	TP: 17SNT0814366515
Range Name: None	Distance Y: 3,200.00 m	Angle Q: 15.0 deg	TP: 17SNT0813766505
Range Officer:	Distance W: 420.00 m	Vertical Hazard: 305.00 m	
Min Target Dist: 25.60 m	Area A: 100.00 m	Actual Altitude: 1,000.00 ft	
Max Target Dist: 25.76 m	Dispersion Angle: 5.0 deg	Used Altitude: 1,000.00 ft	
Direct Fire	Ricochet Angle: 5.0 deg	FP: 17SNT0812066527	

Table 13-1-2. Group Firing SDZ M588A1 Ammunition.

D-14. Non Live-Fire Range OIC and RSO Requirements.

a. Effective 27 October 2011, as directed by the Fort Jackson Commanding General the following OIC/RSO requirements are in effect.

b. The ranges facilities listed in the figure 15-1 are authorized to indicate ranks for OIC/NCOIC and RSOs.

c. Ranges above the red line must have an OIC/NCOIC and an RSO on the range. Ranges below the red line can have one individual as OIC/NCOIC and the RSO for that range.

d. All live-fire ranges are required to have OIC/NCOICs and RSO by rank shown in para 2-4f.

UNCLASSIFIED		
Fort Jackson Range OIC/RSO Safety Briefing		
OIC/RSO Grade Requirements (Non Live-Fire Ranges)		
Range	OIC Rank	RSO/NCOIC Rank
Confidence Obstacle Crs	SSG(P) or Above	RSO--SSG or Above
Victory Tower	SSG(P) or Above (can be 4-10)	RSO--SSG or Above (can be 4-10)
WANAT (CCMCK)	SSG or Above (can be 4-10)	RSO--SSG or Above (can be 4-10)
Urban Assault Crs (CCMCK)	SSG or Above	NCOIC--SGT or Above
MOUT Site (CCMCK)	SSG or Above	NCOIC--SGT or Above
Hilton Field Family Day	SSG or Above	NCOIC -- SGT or Above
FOBs	SSG or Above	NCOIC--SGT or Above
STX Lanes	SSG or Above	NCOIC--SGT or Above
Land Navigation	SSG or Above	NCOIC--SGT or Above
Hand Grenade Assault Crs	SSG or Above	NCOIC--SSG or Above
Chip-Yong-Ni	SSG or Above	NCOIC--SGT or Above
Fit-To-Win	SSG or Above	NCOIC--SGT or Above
Urban Assault Crs	SSG or Above	NCOIC--SGT or Above
MOUT Site	SSG or Above	NCOIC--SGT or Above
TDC	SSG or Above	NCOIC--SGT or Above

Above the line:
Must have both and OIC/NCOIC and a RSO (2 Separate People)

Below the line:
Can have OIC/NCOIC and RSO "Dual Hatted" (1 Individual)

Effective: 27 Oct 11
By order of FJ CG

Notes: RSO must be at the facility and assigned no other duties. NCOIC must be at site but can train Soldiers or perform other duties.

Victory Starts Here

UNCLASSIFIED

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Figure 15-1. Non-live-fire range OIC/RSO requirements.

Table D -14-1. OIC/RSO Requirements – Non Live-Fire Ranges.

D-15. Lightning Protection and Assembly Areas.

Range Name	Facility #	LPA or LAA
Range 1		
Tower	E5887	LPA
Mess Shelter	E5883	LPA
Weapons Clearing Area	E5888	LPA
Bleachers w/ Cover	E5986	LPA
Cadre Bldg	E5889	LAA
Range 2		
Tower	F6032	LPA
Weapons Clearing Area	F6128	LPA
Mess Shelter	F6021	LPA
Bleachers w/ Cover	F6122	LAA
Range 3		
Tower	F6143	LPA
Weapons Cleaning Area	F6152	LPA
Mess Shelter	F6142	LPA
Bleachers w/ Cover	F6144	LPA
Range 4		
Tower	F6461	LPA
Weapons Clearing Area	F6368	LPA
Mess Shelter	F6361	LPA
Ammo Point	F6362	LAA
Bleachers w/ Cover	F6462	LPA
Range 5		
Tower	F6681	LPA
Weapons Cleaning Area	F6686	LPA
Mess Shelter	F6791	LPA
Bleachers w/ Cover	F6798	LPA
Bleachers w/ Cover	F6800	LPA
Range 6		
Tower	F7911	LPA
Bleacher w/ Cover	F7912	LPA
Mess Shelter	F7907	LAA
Bleacher w/ Cover	No #	LPA
Range 7		
Bleachers w/ Cover	G7012	LPA

Mess Shelter	G7024	LPA
Ammo Point	G7025	LPA
Tower	G7011	LPA
Range 8		
Bleachers w/ Cover	G7121	LPA
Weapons Clearing Area	G7137	LAA
Ammo Point	G7136	LPA
Tower	G7122	LPA
Cadre Building	G7131	LPA
Range 9		
Bleachers w/ Cover	G7552	LPA
Cadre Building	G7345	LPA
Mess Shelter	G7551	LPA
Mess Shelter	G7354	LPA
Weapons Clearing Area	G7356, G7355	LAA
Tower	G7347	LPA
Mess Shelter	G7566	LPA
Range 10		
Tower	G7552	LPA
Cadre Building	G7570	LPA
Bleachers w/ Cover	No #	LPA
Weapons Cleaning Area	G7579	LPA
Mess Shelter	G7578	LPA
Range 11		
Tower	H7374	LPA
Weapons Clearing Area	H7377	LAA
Bleachers w/ Cover	H7372	LAA
Mess Shelter	H7365	LPA
Range 12		
Tower	H7574	LPA
Mess Shelter	H7476	LPA
Weapons Cleaning Area	H7473	LAA
Bleacher Shelter	H7571	LPA
Cover Flam Matl	H7579	LAA
Range 13		
Bleachers w/ Cover	H7773	LPA
Overhead Shelter	H7779	LPA
Mess Shelter	H7778	LPA
Range 14		

Bleachers w/ Cover	J7907, J7905	LPA
Mess Shelter	J7908	LPA
Range 15		
Tower	J6070	LPA
Bleacher Shelter	J6060	LPA
Mess Shelter	J6030	LPA
Classroom	J6010	LPA
Ops Storage	J6020	LPA
Range 16		
	UNDER CONSTRUCTION	
Range 17		
Tower	I3777	LPA
Bleachers w/ Cover	No #	LPA
Mess Shelter	I3776	LPA
Ammo Point	I3783	LAA
Weapons Clearing Area	I3778	LAA
Range 18		
Tower	H4001	LPA
Ammo Point	H4008	LAA
Bleachers	No #	LPA
Cadre Building	H4002	LAA
Mess Shelter	H4006	LAA
Bleachers w/ Cover	H4012	LPA
Range 19		
Weapons Holding Area	No #	LPA
Range 20		
Tower	H2001	LPA
Bleacher w/ Cover	H2008	LPA
Mess Shelter	H2007	LPA
Weapons Clearing Point	H2013	LAA
Bastogne		
Tower	J5812	LPA
Mess Shelter	J5825, J5824	LPA
Cover for M240B/M249 Class	J5823	LPA
Bleachers w/ Cover	J5807	LPA
Ammo Point	J5805	LAA
Cover for AT-4 Class	J5814	LPA
Cover for M203 Class	J5821	LPA
Omaha Beach		

Bleachers w/ Cover	O7162, O7164	LPA
Mess Shelter	O7177, O7162	LPA
Main Briefing Building	O7151	LPA
Miles Building	O7152	LPA
Weapons Clearing Area	O7163	LAA
Remagen		
Bleachers w/ Cover	M6791, M7508	LAA
Cadre Shed	M7495	LPA
Mess Shelter	M7496	LPA
Live Grenade Main Qual Bldg	M7510	LPA
Anzio		
Bunker	L7267, L7269	LAA
Ammo Point	No #	LPA
Weapons Clearing Area	L7250	LAA
Mess Shelter	L7265	LPA
Bleachers w/ Cover	L7255, L7252	LPA
Tower	L7249, No #	LPA
Wanat Range		
Mess Shelter	No #	LPA
Weapons Clearing Area	N7653	LAA
Forward Aid Station	N7651	LPA
Weapons Cleaning Area	N7652, N7663, N7661	LPA
Bleachers w/ Cover	N7668	LPA
Cadre Shed	N7665	LPA
Chip-Yong-Ni		
Cadre Building	L7290	LPA
Ammo Point	L7281, L7283, L7087	LPA
Mess Shelter	L7277	LPA
Weapons Clearing Area	L7287	LPA
Bleachers w/ Cover	L7280	LPA
MOUT Site		
Covered Area	No #, No #	LPA
Building	O7181	LPA
NIC		
Ammo Point	No #	
Bleachers w/ Cover	P8664, P8662, No #	LPA
Main Tower	P8654	LPA

Building	P8652, P8651, P8653	LPA
Mess Shelter	No #, No #	LAA
Victory Tower		
Bleachers w/ Cover	I1494, I1497	LPA
Shed	I1489	LPA
Cadre Shed	I1490, I1493	LPA
Covered Area	I1496	LPA
Climbing Wall	I1495	LPA
Rappel Wall	I1492	LPA
First Aid Station	No #	LPA
Fit To Win I		
Lightning Protection Area	E7438	LPA
Shed	E7439	LPA
Cadre Building	E7436	LAA
Fit to Win II		
Range Office	I1008	LAA
Overhead Shelter	I1007	
Mess Shelter	I1005	
Urban Assault Course (UAC)		
		LPA
CBRN Range		
Mess Shelter	D5436	LAA
Open Shed	D5434, D5443, D5444, NO #	LAA
Confidence Course		
Mess Shelter	D5501	LAA
Cadre Building	D5500	LAA
Bleachers	D5502	LPA
193rd TTB		
	No #	2 LPAs
165th TTB		
	No #	5 LPAs
187th TTB		
	No #	7 LPAs

Table D-15-1. Lightning Protection and Assembly Areas.