

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY CYBER CENTER OF
EXCELLENCE AND FORT GORDON
506 CHAMBERLAIN AVENUE
FORT GORDON, GEORGIA 30905-5735

USACCoE&FG Regulation No. 350-19

Installation
Range and Training Area Operations

OFFICIAL:



NEIL S. HERSEY
Major General, USA
Commanding

Summary. This regulation provides procedures for the safe use of the ranges and training areas on Fort Gordon. This regulation supersedes FG Regulation 350-19, dated 15 February 2018. This regulation governs all activities located within the boundaries of Fort Gordon ranges and training areas (Training Complex).

Applicability. This regulation applies to any person, military, or civilian who uses the training areas and ranges on Fort Gordon. All units utilizing any range/training area facility must possess, read, understand, and comply with this regulation and familiarize themselves with Army Regulation (AR) series 385-63 and AR 350-19. Violations of the provisions regarding endangered species and historical preservation are punishable under the full range statutory and regulatory sanctions, both criminal and administrative.

Supplementation. Supplementation of this regulation is prohibited unless specifically approved by Commander, United States Army Cyber Center of Excellence and Fort Gordon (USACCoE&FG Reg 350-19), ATTN: IMGO-PLR. This local regulation will supplement AR 385-63, DA PAM 385-63, and AR 350-19.

Administrative Notes. The words "he" or "his" used in this publication are intended to include both the masculine and feminine genders.

Availability. This regulation is only available at the USACCoE&FG Regulation 350-19 publications website at <http://www.gordon.army.mil/doim/imc/Forms.htm>.

Suggested Improvements. The proponent of this regulation is the Directorate of Plans, Training, Mobilization, and Security (DPTMS). Users are invited to send comments and suggested improvements to the Range Control Officer on Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander USACCoE&FG Reg 350-19, ATTN: IMGO-PLR, Fort Gordon, Georgia, 30905-5735.

Waivers and Exceptions. All requests for waivers or exceptions to policies contained in this regulation will be forwarded to the Director of Emergency Services, 675 Rice Road, Bldg. 32422, Fort Gordon, GA 30905. The Garrison Commander will approve or disapprove requests for waivers or exceptions on a case-by-case basis after coordination with the Staff Judge Advocate, U.S. Army Cyber Center of Excellence and Fort Gordon. Blanket waivers or exceptions are not authorized.

SUMMARY of CHANGE

Regulation 350-19 Range and Training
Operations

Revision, 13 May 2021

- This is a major revision to ensure compliance with Army Regulations (AR) 385-63 series and AR 350-19. This Revision also aligns Fort Gordon Range Operations regulation to be more consistent with other Army Installations. Units are encouraged to read the entire regulation for changes and additions.
- Emphasizes Fort Gordon training philosophy to support unit commander training objectives through the use of non-standard range packets to “Train as you Fight” based on lessons learned from theaters of operations, as well as, operating in this era of persistent conflict.

SUPERSESSION. This regulation supersedes USACCoE&FG 350-19, 15 February 2018.

Chapter 1. Introduction

Purpose 1-1, page 1

References 1-2, page 1

Explanation of Abbreviations and Terms 1-3, page 1

Responsibilities 1-4, page 1

Possession and/or Consumption of Alcoholic Beverages in/on the Range Complex 1-5, page 4

Risk Management Overview 1-6, page 4

Armed Personnel with Live Ammunition for the Purpose of Force Protection 1-7, page 4

Other Fort Gordon Entities that Support Training Units 1-8, page 5

Access to Fort Gordon Training Complex for Recreational Activities, 1-9, page 5

Chapter 2. Administration

Ranges, Training Areas, and Facilities (RTAF) Scheduling 2-1, page 6

Airspace Management Restricted Areas (RAS) R3004A/B/C and Unmanned Aerial Systems (UAS) Operations 2-2, page 8

Facility Utilization 2-3, page 8

Range Supplies, Targets, and Equipment 2-4, page 9

Security and Safeguarding of Range Equipment 2-5, page 9

Latrines and Portable Water 2-6, page 10

Officer in Charge (OIC), Range Safety Officer (RSO), and Airspace Certification 2-7, page 10

Suspension of OIC/RSO and Airspace Certification Privileges 2-8, page 11

Chapter 3. Range Complex Communications

General 3-1, page 11

Fire Desk Frequencies and Phone Numbers 3-2, page 11

Cellular Phones 3-3, page 12

Live Fire Communications 3-4, page 12

Non-Live Fire Training Communications 3-5, page 12

Observation Point (OP) Communications 3-6, page 13

Radio Procedures 3-7, page 13

Unit Internal Frequencies 3-8, page 13

Emergency Communication 3-9, page 13

Fiber Optic Connections 3-10, page 13

Chapter 4. Medical Support

Requirements 4-1, page 13

Medical Evacuation (MEDEVAC) 4-2, page 14

Accident/Incident Report 4-3, page 15

Sick Call and Non-Emergency Medical Treatment 4-4, page 15

Cantonment Emergencies 4-5, page 15

Chapter 5. Range, Training Facility and Training Area Operations

General 5-1, page 15

Training Hours 5-2, page 15

Risk Management 5-3, page 15

Occupation Procedures 5-4, page 16

Publications and Paperwork 5-5, page 16

Actions before Training/Firing 5-6, page 16

Hot Time Procedures 5-7, page 16

Actions during Training/Firing 5-8, page 17

1st Round Procedures 5-9, page 17

Night Fire 5-10, page 17

Check Fire/Closing Time Procedures 5-11, page 17

Actions After Training/Firing 5-12, page 17
Clearance/Departure 5-13, page 18
Roads, Gates, and Barriers 5-14, page 18
Training Accidents/Incidents 5-15, page 19
Down Range and Impact Area Control 5-16, page 19
Off Limits Areas 5-17, page 19
Uniform 5-18, page 19
Personal Owned Weapons 5-19, page 20
Disposition of Misfires, Duds, and Unexploded Ordnance (UXO) 5-20, page 20
Demolition Training Exercises 5-21, page 20
Chemical, Biological, Radiological and Nuclear (CBRN) Training, Smoke Operations and Pyrotechnics 5-22, page 21
Vehicle Swimming/Fording Operations 5-23, page 22
Foot Marches 5-24, page 22
Bulk Fuel Operations 5-25, page 22
Fire Danger 5-26, page 22
Non-Standard Training 5-27, page 22
Digging/Staking/Grounding Rods 5-28, page 23
Media and Very Important Persons (VIP) 5-29, page 23
Training in Cantonment 5-30, page 23
Counter Improvised Explosive Device (C-IED) Training 5-31, page 23
Maneuver Damage 5-32, page 24
Land Navigation 5-33, page 24

Chapter 6. Training Accidents/Incidents

General 6-1, page 27
Accidents 6-2, page 27
Ammunition/Weapons Malfunctions 6-3, page 28
Negligent Discharge 6-4, page 28
Personnel Injuries and Illness 6-5, page 28
Fires 6-6, page 29
Erratic Round Procedures 6-7, page 29
Spills 6-8, page 29
Radiation 6-9, page 30
Missing Service Members/Persons in Fort Gordon Training Complex 6-10, page 30

Chapter 7. Ammunition

General 7-1, page 33
Fire Prevention, Protection, and Suppression 7-2, page 33
Storage, Handling, and Security 7-3, page 33
Positioning and Issuance 7-4, page 34
Transportation of Ammunition and explosives 7-5, page 34
Ammunition Restrictions 7-6, page 35
Missing Ammunition 7-7, page 35
Pyrotechnics 7-8, page 35
SIM-Munitions 7-9, page 35
Amnesty Boxes 7-10, page 35

Chapter 8. Indirect Fire Weapon Systems

General 8-1, page 35
Command Safety Certification 8-2, page 35
Indirect Fire Safety Briefing 8-3, page 35
Declination 8-4, page 36
Lay of the Unit 8-5, page 36
Boresight 8-6, page 36

Safety Diagrams 8-7, page 36
Ammunition 8-8, page 37
Erratic Round Procedures 8-9, page 37
Powder 8-10, page 37
Observation Post 8-11, page 38
MLRS/HIMARS Procedures 8-12, page 38

Chapter 9. Aircraft Operations

General 9-1, page 38
Certifications 9-2, page 38
Aerial MEDEVAC Support 9-3, page 38
Restrictions 9-4, page 38
Flight Advisory Requirements 9-5, page 38
Aircraft Communications 9-6, page 38
Utilization of Aircraft within Fort Gordon Training Areas 9-7, page 39
Aerial Live Fire Operations 9-8, page 39
Augusta regional Airport at Bush Field 9-9, page 39
TA37A Air Strip 9-10, page 39

Chapter 10. Laser and Radio Frequency Operations

General 10-1, page 40
Hazards 10-2, page 40
Safety Requirements 10-3, page 40
OIC 10-4, page 41
Laser Range Safety Officer (LRSO) 10-5, page 41
Off/On Range Travel 10-6, page 41
Operating Ranges 10-7, page 41
Airspace 10-8, page 42
Multiple Integrated Laser Engagement System (MILES) 10-9, page 42

Chapter 11. Airborne Operations

General and Certifications 11-1, page 42
Personnel and Container Drops 11-2, page 43
Medical Coverage 11-3, page 43
Air Assault Operations 11-4, page 43

Chapter 12. Vehicle Operations

General 12-1, page 43
Speed Limits 12-2, page 44
Parking 12-3, page 44
Ground Guides 12-4, page 44
Convoy Operations 12-5, page 45
Track Vehicle Operations 12-6, page 45
Breakdowns 12-7, page 45

Chapter 13. Environmental Protection and Conservation

General 13-1, page 46
Procedures 13-2, page 46
Land Rehabilitation and Maintenance (LRAM) Program 13-3, page 46
Environmental Factors 13-4, page 46

Natural Resources Management 13-5, page 48
Deer Hunting Season 13-6, page 49
Hazardous Substances Management 13-7, page 49
Environmental Spills 13-8, page 50
Fire Prevention 13-9, page 50
Transportation of Hazardous Materials 13-10, page 51

Chapter 14. Natural Safety Precautions

Electrical Storms 14-1, page 51
Heat Injuries 14-2, page 51
Cold Weather Injuries 14-3, page 53
Ticks 14-4, page 56
Hazardous Plants 14-5, page 56
Severe Weather/Tornadoes 14-6, page 56
Wildlife 14-7, page 56

Chapter 15. Range Sanitation Procedures

General 15-1, page 57
Recycling and Disposal of Waste Materials 15-2, page 57
Gray Water 15-3, page 59
Field Sanitation 15-4, page 59

Appendices

A – References, page 60
B – OIC/RSO Requirements, page 67
C – Ranges, Training Areas and Facilities, page 69
D – Range/Facilities Conflicts Matrix, page 71
E – Training/Range Contact Information, page 72
F – Endangered, Threatened, and Protected Species Training Guidelines, page 73

Glossary Abbreviations, page 78

Terms, page 81

Chapter 1

Introduction

1-1. Purpose

To establish uniform procedures for the use of range and training facilities, that ensure safety during training and special activities while aboard the Fort Gordon training complex. It is designed to facilitate combat realism in training, to maximize the availability of safe training areas and facilities, minimize safety hazards, and eliminate unsafe practices. This regulation defines responsibilities and prescribes policies and procedures for the Fort Gordon Range Complex to facilitate units achieving commanders' training objectives.

1-2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1-3. Explanation of Abbreviations and Terms

Abbreviations and terms used in this regulation are explained in the glossary.

1-4. Responsibilities

a. **Director, Directorate of Plans, Training, Mobilization and Security (DPTMS).** Provides direction, supervision, and resources required to operate and maintain the Range Complex and all training facilities in accordance with (IAW) Fort Gordon and DA Directives.

b. **Installation Range Officer;** hereafter referred to as Range Officer (RO). Responsible for overseeing the Sustainable Range Program (SRP) including the core programs of Range and Training Land Program (RTLTP) and the Integrated Training Area Management (ITAM) program for Fort Gordon. This oversight entails maximizing the capability, availability, and accessibility of ranges, training lands, and the airspace within the Range Complex to support training requirements. Responsible for the overall safe and efficient utilization of the Range Complex as well as the sustainment of ranges and training lands. Supervises internal operations of Range Control which includes: Range Operations, Range Safety, Range Maintenance, ITAM and the Range Control contracted workforce. Leads the Range Complex Master Plan (RCMP) Working Group in preparation of the RCMP and the Range Development Plan and supervises execution of sustainment and modernization projects in the Range Complex. Coordinates and provides range operations oversight of training activities in leased lands and lands made available through land use agreements.

(1) Range Operations. Supervises and coordinates the operation of the Range Complex consisting of Range Scheduling, Range Inspections, and the Fire Desk.

(a) Operates and maintains Range Facility Management Support System (RFMSS) to schedule transient buildings, ranges, training areas, restricted airspace, training facilities, and maintains range conflict list.

(b) Operates the Range Control Fire Desk to provide oversight of all scheduled Range Complex training activities and activities on other available lands.

(c) Inspects and clears all ranges and training facilities within the Range Complex.

(d) Manages Restricted Areas R3004A/B/C IAW AR 95-2, Air Traffic Control, Airfield/Heliport and Airspace Operations, Flight Activities, Air Traffic Control, and Navigational Aids, and Federal Aviation Administration (FAA) guidance.

(e) Maintains the Officer in Charge (OIC) and Range Safety Officer (RSO) Range Safety Certification and Training database.

(f) Provides outdoor recreation area closures for posting in iSportsman,

(g) Processes all unit standard and non-standard training requests.

(h) Ensures the Range Officer is fully briefed on Range Complex and Ranges, Training Areas, and Facilities (RTAF) operational status, incidents and accidents.

(i) Supervises execution of Unexploded Ordnance (UXO) clearance activities, sustainment and modernization projects.

(j) Receives, records, and forwards noise complaint information associated with training events to the DPTMS Training Division, Public Affairs Office (PAO), and the Directorate of Public Works (DPW) Environmental Division (ED).

(k) Receives and forwards incident/accident reports to the RO and other key leaders.

(2) Range Safety Specialist. (hereafter referred to as RSS). Responsible for establishing and maintaining a safe operating environment of units training in the Range Complex under the direction of the Range Officer.

(a) Establishes Surface Danger Zone (SDZ), Weapons Danger Zone (WDZ) and Laser Surface Danger Zone (LSDZ) for all applicable events.

(b) Inspects and certifies all live fire ranges to include indirect fire and laser operations.

(c) Investigates all Range Complex accidents, initiates safety report and submits to RO.

(d) Identifies the SDZ, WDZ, and LSDZ conflicts.

(e) Provides SDZ, WDZ, and LSDZ conflicts for all training events to RFMSS Functional Administrator (FA) and Fire Desk.

(f) Conducts routine safety inspections of training activities in the Range Complex.

(g) Identifies potential safety problems and recommends preventative actions.

(3) Range Maintenance. Responsible for the maintenance of the Range Complex ranges, training facilities, and operation of target systems and associated equipment.

(a) Operates automated and non-automated collective and other directed live fire ranges and is responsible for the maintenance and upkeep of all ranges and training facilities within the Range Complex.

(b) Ensures the Range Officer is fully briefed on the Range Complex maintenance status.

(c) Conducts special projects as directed by the Range Officer.

(4) ITAM. Provides the Range Officer with the capabilities to manage and maintain training lands to support mission readiness. Integrates the mission requirements with environmental requirements and management practices, establishes policies and procedures to achieve optimum, sustainable use of training lands by implementing a uniform land management program has oversight of internal ITAM programs as follows.

(a) Geographic Information Systems (GIS). Provides standard mapping and special analysis capabilities that support the SRP component programs.

(b) Land Rehabilitation and Maintenance (LRAM). Sustains realistic training conditions through land management techniques.

(c) Sustainable Range Awareness (SRA). Develops and distributes educational materials to reduce avoidable impacts on range and training land assets and to improve the understanding of land use constraints and training requirements for training land users and managers.

(5) Hours of operation. Range Control administrative offices are open during normal business hours, Monday-Sunday 0600-1700 hours. The Fire Desk is open during scheduled training on RTAF including restricted airspace.

(6) DPW. Provides construction, repair, and maintenance support for infrastructure and real property assets to support the military mission requirements and Range Control capabilities. DMO and Work Order (DA4283) support for customers/facilities. Develops and maintains GIS data on real property/infrastructure assets; manages and coordinates for solid, liquid, and hazardous waste disposal and recycling; provides pest management services; provides spill training to installation and customer staff; and manages natural, environmental, and cultural resources and associated compliance requirements for the installation. Provides training area and range wildland fire prevention and suppression. Works with the Range officer to determine priorities of work in the Range Complex.

(7) Directorate of Emergency Services (DES).

(a) Provides emergency services support through the Police and Fire and Emergency Services (F&ES) Divisions.

(b) Responds to petroleum or hazardous spills (over one gallon) within the Range Complex.

(c) Provides Incident Command and Management under the National Incident Management System (NIMS). The Incident Commander (IC) has **overall authority** and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site. Fort Gordon is considered a single jurisdiction and there is no jurisdictional or functional agency overlap and deploys the single incident commander or specific F&ES or Law Enforcement (LE) incidents. A Unified Command is deployed only on ASHER incidents, Wild Fires, search and rescue for missing persons/soldiers loss individuals, and when mutual aid partners or other federal agencies respond in support of the major incidents. The Senior Fire Official (SFO) will be the IC for all joint emergency responses by Installation emergency response forces for structural fires, aircraft incidents, UXO's, loss

individuals, mass casualty incidents (MCI), vehicle accidents with injuries, and hazardous material incidents (spills, and etc.). The Chief Fire Officers (CFO) who fill the role of SFO, are highly experienced, certified and receive progressive training in the Incident Command System (ICS).

(d) Perform fire investigations in coordination with the Criminal Investigation Division, Federal Bureau of Investigation as required by AR 420-1

(8) Army Enterprise Service Desk (AESD) (866) 335-2769 and Network Enterprise Center (NEC).

(a) Manages the electromagnetic spectrum. Advises units and Range Division on the use of the spectrum. De-conflicts spectrum with FAA, FCC, and other agencies as required.

(b) Provides support for phones, fiber and computer network connectivity IAW NETCOM C4ISM and any MILCON or SRM projects.

(9) Explosive Ordnance Disposal (EOD). Provides technical services for the destruction of unexploded ammunition at the request of the RO or the RSS. This capability is not resident on Fort Gordon. Training may be delayed while this capability is deployed to Fort Gordon from Fort Stewart, GA or Ft Campbell, KY.

(10) Logistics Readiness Center (LRC).

DPTMS Training Resource Scheduler at (706) 791-6105 to obtain assistance and guidance regarding Training Support Requests for National Guard, Reserve, Sister Service units. Units must establish an Installation Support Service Agreements (ISSA) with the Garrison Resource Management Office.

(a) Maintenance Division, Fort Gordon does not have direct support capabilities.

(b) Supplies and Services Division provides support for.

(1) Class I (Rations) – Food Service Manager, (706) 791-5680, Bldg. 14550.

(2) Class II, III, IV, and IX – LCI / Supply Support Activity, (706) 791-6681, Bldg. 11601. Must establish an account. Class VII Property Book, (706) 791-3443, Bldg. 2212.

(3) Class III (POL) – Central Fuel Operations, (706) 791-4153, Bldg. 1455, 15th ST and 105th Ave.

(4) Class V (Ammunition) – Ammunition Supply Point (ASP), (706) 791-2908, Bldg. 8250; Quality Assurance Specialist Ammunition Surveillance (QASAS), (706) 791-3938.

(c) Transportation Motor Pool (TMP) provides Non-Tactical Vehicle and Bus Support; contact TMP at (706) 791-3172, Bldg. 33720.

(d) Freight Office/Warehouse. 706-791-7419, 10th ST, Bldg. 1000

(11) Installation Safety Office (ISO).

(a) Provides oversight for range, training area, and training facility safety.

(b) Reviews risk management plans/worksheets with a high rating, or as requested.

(c) Conducts risk management training for units upon request.

(d) Maintains unit radioactive inventory list until completion of training.

(e) Assists Range Division in developing safety procedures.

(f) Investigates or ensures range accidents are investigated by the appropriate command level, and maintains records of accidents occurring within or originating from the Range Complex IAW AR 385-63, Range Safety.

(g) Ensures all Explosives Safety Site Plans are complete and valid; maintains files of all required plans.

(12) Unit Commanders.

(a) Plan, schedule, and conduct unit activities IAW the directives of this installation and higher headquarters.

(b) Practice proper utilization of installation ranges, equipment and facilities.

(c) Cancel requested support when it is determined the requested support is not and/or will not be needed.

(d) Conduct safety training; appoint and certify qualified RSOs and OICs, IAW AR 385-63. Rank requirements for OIC/RSO vary depending on weapon systems. For further information, refer to Appendix B.

(e) Protect all unit weapons and ammunition IAW physical security regulations.

(f) If scheduled for training areas or ranges report to Range Scheduling and complete coordination. Upon arrival provide a representative with decision making authority to attend coordination meetings conducted by Range Operations during heavy training densities/exercises.

(g) Submit a complete copy of Non-Standard Training Request (NSTR) (refer to para 5-27) to

Range Scheduling no later than (NLT) 45 days prior to all training activities. Earlier submission is preferable in order to eliminate conflicts to support all commanders' training objectives.

(h) Provide the ISO an inventory of all unit radioactive equipment intended for use at Fort Gordon in support of training, IAW AR 385-10, The Army Safety Program. Submit this inventory prior to arrival and include the item serial number, nomenclature, and stock number. Units may contact the ISO at (706) 791-0172 for further assistance.

(i) Ensure unit personnel are on hand to receive incoming equipment.

1-5. Possession and/or Consumption of Alcoholic Beverages in/on the Range Complex.

The US Army and Garrison Commander's policy forbids possession and/or consumption of alcoholic beverages and mind alerting prescription drugs of any kind are to be consumed by any training unit in/on any Fort Gordon training range, training facility, or training area. When a unit has a violation of this policy, the Garrison Commander will decide one of the following for the Unit.

a. Suspend field training, pending removal of unauthorized beverages and re-briefing of key unit leaders by DPTMS. Once accomplished, the unit resumes training.

b. Immediately vacate training facilities and report to a location designated by DPTMS.

Once the chain of command verifies the completion of a thorough search for alcoholic beverages and a briefing for all personnel on prohibitions, DPTMS may authorize the unit to resume training. The unit must remove all alcoholic beverages.

c. This para applies to all units and Service Members (SMs) training in or on any Fort Gordon training range or facility outside of the cantonment area.

1-6. Risk Management Overview

Due to the transient nature of most of the Fort Gordon training audience, risk management can involve more complex command relationships than found on installations that have a primarily, permanently stationed training audience.

a. Live fire training by its very nature generally entails more risk than other training because firing a live munition entails the potential for a catastrophic level of severity. Though units implement risk reduction measures that may reduce the frequency of a hazard to as low as unlikely, **the residual risk will be medium because the severity remains catastrophic**, except under extremely rare circumstances.

(1) Fort Gordon provides zero and qualification ranges from fixed firing points with known, predetermined SDZs as part of the range design. As long as the live fire training stays within the range design and does not entail fire and movement/maneuver, the residual risk authority for these ranges is medium and the Battalion Commander possessing company grade Article 15 authority over those who are training or who has been delegated the command relationship of Tactical Control (TACON) from a higher command of all training participants.

(2) For all other live fire training that entails fire and movement/maneuver as well as non-live fire training, the residual risk authority for medium is a Battalion Commander possessing summary court martial convening authority for those who are training or who has been delegated the command relationship of TACON from a higher command of all training participants.

(3) For any training event with a residual risk of high, the approval authority is a Brigade Commander who possesses special court-martial convening authority over those who are training or has been delegated the command relationship of TACON from a higher command of all training participants.

(4) Refer to the definition of TACON as an army command relationship in the Army Doctrine Reference Publication 5-0, The Operations Process.

1-7. Armed Personnel with Live Ammunition for the Purpose of Force Protection

Fort Gordon allows the arming of personnel training in the Range Complex for the purpose of force protection as long as the units meet the conditions below.

a. The higher headquarters (Service, Component, MACOM, etc.) authorizes the unit/personnel to carry service weapons with live ammunition for the purpose of force protection.

b. Units must follow their higher headquarters standard operating procedures (SOP) and guidance pertaining to arming personnel for the purpose of force protection. At a minimum, that SOP and guidance must specify the following.

(1) Armed personnel are qualified on the weapon system.

- (2) Armed personnel have received training on the Rules of the Use of Force.
- (3) Documentation that a Field Grade-Level Commander has authorized and certified that the unit/personnel have met the requirements to be armed for the purpose of force protection.
- c. Units must address armed personnel in the composite risk assessment specific to the training conducted in the Range Complex. In the event that a unit is conducting force on force training or any live fire training, the O-5 or higher commander must sign the risk assessment.
- d. Units/personnel must maintain and be able to provide upon request their higher headquarters SOP/ guidance and documentation of authorization and certification for armed personnel at all times while on the Range Complex.
- e. Unit/personnel must notify Range Operations if they intend to arm personnel for the purpose of force protection. This notification can occur at any time during the range scheduling process but must occur NLT occupation of training area/facilities.
- f. This policy addresses armed personnel for the purpose of force protection in the Range Complex only. This policy does not extend to the cantonment area. At this time, Fort Gordon prohibits the arming units/personnel with live ammunition in the cantonment area unless they are a tenant unit conducting Staff Duty Officer (SDO) or Non-Commissioned Officers (SDNCO) duties and responsibilities. Law enforcement personnel are not subject to this policy and will continue to carry weapon/live ammunition IAW existing Federal, State and FMRs.

1-8. Other Fort Gordon Entities that Support Training Units

Name	Phone #
Installation Operation Center (IOC) (24x7)	(706) 791-9748
Range Control Fires Desk	(706) 791-5005 / 5008
Range Control Ammunition Mgr	(706) 791-3639
Emergency Services (911)	911
Directorate of Public Works (DPW)	(706) 791-3225
DPW Environmental Division	(706) 791-6374
Ammunition Supply Point (ASP)	(706) 791-2908
Conservation Law Enforcement Officer*	(706) 791-4380 (MP Desk)
Natural Resources Branch (NRB)	(706) 791-9932, (706) 791-6135, (706) 791-9983, (706) 791-9209, (706) 791-9878, or (706) 791-9928
Environmental Office (REC Request/Approvals)	(706) 791-2403 / 9927 / 8245
TADSS	(706) 791-9378 / 9104
DPTMS Plans Branch	(706) 791-8264/5321
EST 2000	(706) 791-1791

***For Emergencies, DIAL 911**

1-9. Access to Fort Gordon Training Complex for Recreational Activities

Range Division is responsible for providing access to training areas for the purpose of recreational activities in order to facilitate safe operations and de-conflict recreational and training or other scheduled activities as appropriate. A list will be published in iSportsman of those areas open for recreational usage. Range Operations will update iSportsman as required to provide recreation opportunities for hunting, fishing, bicycling, hiking etc. Range Division reserves the right to rescind areas previously released for recreational purposes, and return them back for military training and maintenance related issues. The following rules apply when using the training complex for recreational purposes:

- a. Individuals and organizations participating in recreational activities in the Fort Gordon Training Complex must use the iSportsman system to determine if the areas are open for recreational usage this includes bicycle routes, training areas, lakes etc. All personnel will check in and out of those areas by using the iSportsman system. The purpose of using the iSportsman system is to enhance recreational

user awareness of the following: Scheduled Training; Areas closed for recreation, and Game Warden and Range Division verification that users logged into iSportsman have logged out and have safely exited the training complex. Running, jogging, foot marches, and walking on paved roads within the Training Complex is discouraged for the safety of those engaged in those activities, and motor vehicle operators within the training complex. Formation foot marches must be scheduled through Range Division, to allow confirmation of unit safety plans and deconflicting and registering intended routes for foot marches. When appropriate mass notification to Fort Gordon community will be sent advising motorists to exercise caution when travelling along the route during scheduled foot marches.

b. Personnel riding bicycles. Riders will wear approved DOT helmets. Other safety and protective gear such as lights / reflectors and reflective garments are optional.

c. Personnel driving privately owned vehicles (POV) through the training complex who remain on paved road surfaces without entering a training area or those utilizing the Leitner Lake Recreation Area are not required to check into iSportsman. No POV, motorcycles, dirt bikes, three/four wheel all-terrain vehicles, or other motorized off-road vehicles are authorized in any range, in any training area, or dirt roads except as outlined in chapter 14 and 5. POV's and cyclist are not authorized to pass over, around, or through a closed gate, cable, sign, earth berm, or other structure or device intended to prevent access to an area or roadway.

d. Military, DOD and non-DOD Civilians may access assigned duty stations located within the training complex and are not required to check in to iSportsman. Military, DOD, non-DOD Civilians or others granted permission by the Garrison Commander may use POV's to access work sites within training areas for official business and are not required to check in, after coordination with Range Control.

e. Access for special events, such as Marine Mud Run, Mammoth Sniper Challenge, etc. can be requested by individuals, organizations, or units to Range Control. This will require submission of documentation that training units submit per this regulation; refer to paragraph 5-27 for details of required documents.

Chapter 2

Administration

2-1. Ranges, Training Areas, and Facilities (RTAF) Scheduling

a. Units request RTAF by completing Fort Gordon Form 7649-R-E Training Support Request or request ranges and training facilities through the Range Facility Management Support System (RFMSS) NLT 45 days prior to the requested training date. Once submitted in RFMSS; RFMSS users can check on the status of all requested facilities. As Range Scheduling updates statuses RFMSS will generate email messages to account users. Units requesting RFMSS accounts will contact Range Scheduling at (706) 791-5005, to determine required user training and to create user accounts. Units will contact Range Scheduling 30 days prior to the training dates to confirm and or adjust scheduled training facilities; it is imperative for units to contact Range Scheduling and confirm scheduled times of use to ensure that Range Control can properly schedule appropriate range support personnel. Range Control will not accept a cancellation request by telephone for RTAF; units must send a cancellation notice through RFMSS for a cancellation greater than 7 days from the execution of the training event. For cancellations within 7 days, unit commanders must submit a memorandum to the Range Officer.

b. No Show Rules. Range and Training facilities are in high demand and we all must do our part to reduce wasted resources. Units who do not show up for scheduled training will be added to the monthly no show report. Units who do not notify Range Control of their arrival status and miss their reservation time by more than 4 hours will be considered a no show and their reservation will be canceled. The unit will also be added to the no show report.

c. Unless prior coordination and justification has been provided to Range Scheduling; Range Scheduling will delete the reservation in RFMSS entirely if required documents are not submitted at the 30 day mark and open that facility to other customers for reservation. See below table for scheduling timeline.

	Standard CONOP	NON-Standard CONOP
NLT 45	Event Scheduled in RFMSS	Event scheduled in RMFSS
45 Days	Unit submits a FTX Environmental Checklist to the Environmental Division	Unit provides primary POC & general overview of event. Unit submits a FTX Environmental Checklist to the Environmental Division.
30 Days		Suspense for Draft CONOPS & Risk Assessment submitted for review.
30 – 15 Days		Range Control request CONOPS & Risk Assessment if not submitted.
14 Days	Units submit CONOP & Risk Assessment.	If no submission received from Unit training assets cancelled in RFMSS.
NLT 5 Days	Suspense time for CONOP & Risk Assessment.	Range Operations return amended documents if required
3 Days	Range Operations returns amended documents if required.	Suspense for Final CONOP & Risk Assessment.
2 Days	If no CONOP & Risk Assessment submission 48 hours prior to event, the scheduled event will be cancelled.	
Work Day prior to Event	Unit OIC/RSO submits final versions of documents to include the final REC and present valid Range Safety Cards for drawing of Training Range/Areas.	Unit OIC/RSO submits final versions of documents to include the final REC and present valid Range Safety Cards for drawing of Training Range/Areas.

d. Units must submit and receive special site approval for any of the following activities within the range complex: laundry and bath operations, field dining operations, petroleum, oil, and lubricant (POL) distribution, fuel farms, water purification, vehicle decontamination, smoke generation, timber cutting, abatis operations, and any digging or ground disturbance, to include but not limited to: mechanical digging, trenching, tent stakes, or grounding rods. Submit required documentation to the Environmental Division NLT 45 days prior to the training event. All these activities must be documented on the FTX environmental checklist for approval.

e. Units must submit Non Standard Training Request (NSTR) for specific RTAF for an intended use not included in the facility design, such as using a multi-purpose machine gun range for a fire and maneuver exercise. Refer to Appendix C, Ranges, Training Areas and Facilities, to determine which training facilities require NSTR submission. Refer to para 5-27 for NSTR instructions. Units should not consider RTAF as scheduled unless Range Scheduling has approved their NSTR.

f. Range Scheduling conducts a training coordination meeting every Friday at 0900 in Range Control Conference room. Units should send a representative (SGT or above) for whom the unit commander has delegated specific decision making authority. The primary purpose of this training coordination meeting is to confirm unit scheduled activities, assist units coordinating cooperative utilization (co-use) of training facilities, discuss/clarify any environmental concerns and ensure there are no training or surface danger zone conflicts between units 72 hours in the future.

g. The RO may direct co-use of facilities by units during high density periods. Units may also desire to share facilities through co-use. Range Scheduling must approve any co-use; submit all co-use requests through Range Scheduling.

h. Units must send a representative (SGT or above) to Range Scheduling to obtain specific range instruction packets prior to occupation. Range Scheduling personnel will brief any changes to range procedures at that time.

i. Units desiring to reconnoiter any facility will report to the Fire Desk to seek permission.

2-2. Airspace Management of Restricted Areas 3004 A/B/C and Unmanned Aerial Systems (UAS) / Drone Operations

a. All OIC's, RSO's, pilots, and ground terminal guidance personnel conducting training or flight operations involving airspace must view the Fort Gordon Airspace Safety Briefing and read the Fort Gordon Restricted Airspace Operations SOP. O-5 Commander certification of personnel is a pre-requisite for using the restricted airspace. See para. 2-7 OIC, RSO, and Airspace certification process. All airspace operations must comply with AR 95-23 Unmanned Aircraft System Flight Operations and Fort Gordon Restricted Airspace SOP.

b. Range Control treats R3004 A/B/C like other RTAF which require scheduling IAW para 2-1. Fort Gordon Restricted Airspace Operations SOP is located in the RFMSS library or may be obtained by contacting Range Scheduling. Army Airfields (including runways) and helicopter landing pads inside the cantonment area require scheduling. When aircraft enter R3004 A/B/C, the pilots must contact the Fire Desk for clearance and active range, firing point, firing area, Restricted Operations Areas (ROA), and drop zone information. The Air Mission Commander (AMC) must plan routes around active ranges, firing positions and training areas, ROA, and drop zones.

(1) Small Arms Range Safety Area (SARSA). When restricted airspace is not available, ranges will operate under a SARSA.

(2) When the range is operating under a SARSA, the OIC and RSO will ensure compliance with special instructions in the range packet.

(3) Any violation to SARSA instructions will result in discontinued operations of the range.

(4) When operating under a SARSA, the OIC is responsible for the surveillance of the airspace within the SARSA. Air guards must monitor the airspace inclusive of a border extending up to five miles from the boundaries of the SDZ. Air guards must maintain positive communication with the OIC to report any aircraft that enter into the designated range area. The OIC will immediately order a cease fire if aircraft enter the extended boundaries of the SDZ and report the issue to the Fire Desk. Refer to the range packet for more detailed SARSA instructions and requirements.

c. Unmanned Aerial Systems (UAS) / Drones - Army Regulation 190-13 defines an unmanned aircraft (UA) is defined as an aircraft operated without the possibility of direct human intervention from within, or on, the aircraft. An UAS is defined as a UA with associated elements, to include communication links and components that control the UA. UAS include remote controlled aircraft capable of sustained flight in the atmosphere, including multirotor, drones, helicopters, fixed-wing aircraft, and other model aircraft.

(1) DoD agencies and affiliated contractor used Commercial-Off-the-Shelf (COTS) UAS within or on Fort Gordon is prohibited without a waiver endorsed by first General Officer or Senior Executive Service (SES) civilian in the requestor's chain of command. Requestor must notify the Senior Commander of a submitted waiver request. Use of any UAS for recreational / hobby purposes is not permitted anywhere on Fort Gordon.

1.a. Waivers will be submitted to the Army authorizing officials, which are co-defined as the Army Acquisition Executive (AAE) and Army Chief Information Officer (CIO/G-6). Both will review each request on a case-by-case basis, track waivers, and certify that all specified mitigation procedures required are agreed to by the requestor.

1.b. Submissions will be considered on a case-by-case basis for the following six (6) activities:

1.b.1. (U/FOUO) Critical operations with no alternative solution.

1.b.2. (U/FOUO) Counter-UAS surrogate testing/training.

1.b.3. (U/FOUO) Intelligence and information warfare testing, analysis, and training.

1.b.4. (U/FOUO) Analysis, and training.

1.b.5. (U/FOUO) Research and Development (R&D).

1.b.6. (U/FOUO) Demonstrations for COTS UAS.

(2) Unauthorized use of UAS within or on Fort Gordon may result in the loss of installation access privileges; potential forfeiture of any unauthorized recordings, photographs, or videos; adverse personnel action; and possible criminal prosecution under Federal or State law, as appropriate.

(3) DES will refer incidents involving unauthorized UAS flights controlled outside of the installation to local law enforcement.

2-3. Facility Utilization

a. Range Scheduling maintains statistics reflecting actual utilization of scheduled RTAF. To be

credited for use of a facility, the scheduled unit must open and close the facility IAW the procedures in para 5-4 and 5-8.

b. Scheduled units must appear on the completed daily communications log to be given credit for use of scheduled facilities. DPTMS may report units who do not utilize scheduled Range Complex facilities to their respective MACOM. The RO may revoke RFMSS passwords of unit representatives for repeated failures to use scheduled facilities.

c. Units must notify Range Scheduling or the Fire Desk immediately if they are not going to be on time. If units fail to occupy facilities or ranges within 4 hours of their scheduled occupation time, Range Operations may cancel the reservation and report the unit to their respective MACOM. Units that schedule and then fail to use a scheduled facility are not meeting the standard regarding stewardship of Army resources.

d. After clearing RTAF, please fill out the Interactive Customer Evaluation (ICE) form which is available from the Range Inspector to provide feedback to the RO about RTAF and customer service.

2-4. Range Supplies, Targets, and Equipment

a. Any unit desiring non-standard equipment or radio controlled targets must submit a request in writing to Range Scheduling at least 45 days prior training execution.

b. Target Repair.

(1) Prior to a unit utilizing a range; range personnel make every effort to ensure that targets and target frames are in good repair. This includes preventive maintenance, repairs to noted problems, and pre-checks. However, unforeseen problems do occur. Units should notify Range Maintenance through the Fire Desk of any issue with the range.

(2) The RO only authorizes Range Maintenance personnel to repair and set up mechanical targets, radios, and public address systems. Units should contact the Fire Desk with repair requests; the Fire Desk will contact Range Maintenance. Range Maintenance personnel will repair or replace the malfunctioning item as soon as possible. Units attempting to repair an item mentioned above may become liable for the cost of any damage and subject to suspension of use of Fort Gordon facilities.

(3) Targets and target materials are available for use on the Range Complex only. If units desire to use paper targets on canvas backing, the unit is responsible to paste new targets before returning the materials to the target shed at the completion of firing. Unit personnel must leave targets and target materials in range target sheds. Range Maintenance DOES NOT supply targets or target materials for a unit's home station or other installation use. Units must set unserviceable target boards aside for removal by Range Maintenance personnel.

c. Units are responsible for supplying scorecards, staple guns, staples, all applicable manuals to support training and any other materials which might be needed to conduct training.

d. Units should report any problems with a facility to the Range Inspector, so that Range Maintenance personnel can complete repairs before another unit arrives.

e. IAW TC 3.20.40; ALT C qualification should only be used if automated ranges are NOT available. ALT C qualification targets are not available for issue. ALT C qualification must be approved by the Garrison Commander.

2-5. Security and Safeguarding of Range Equipment

a. Units must safeguard, secure, and account for range equipment IAW AR 190-11 (Physical Security of Arms, Ammunition, and Explosives).

b. The hand receipt holder is responsible for turning in statements for all lost or damaged range equipment. The Range Maintenance Supply Technician will then initiate a Financial Liability Investigation of Property Loss (FLIPL) if required.

c. Units should immediately notify the Fire Desk if there is evidence of illegal entry into a range facility. To prevent removal, destruction, movement, or concealment of potential evidence the unit must safeguard the scene until the arrival of DES police. All personnel involved in the discovery will remain on site until released by DES law enforcement.

d. Units may be held financially liable for excessive damage to furniture located in range and training facilities.

e. After range inspectors clear a unit from a range or facility the unit will lock and secure all facilities

unless otherwise directed by range inspectors.

2-6. Latrines and Potable Water

a. Latrine facilities are available at many of the ranges and training facilities. It is the responsibility of the unit to request portable latrines and hand wash stations for RTAF that do not have permanent latrines. Submit requests for portable latrines on Fort Gordon Form 7469-R-E.

b. If the unit has funding or mission constraints that prevent portable latrine rental, contact Range Scheduling either in person at B-81200 (12th St & N Range RD) or by phone (706) 791-5005 to complete a site request NLT 45 days prior to training event in order to establish field latrines IAW environmental overlay map. Units must follow guidance IAW ATP 4-25.12.

c. Potable water points are available on TA26, 17S LS 85550 93987; TA25, 17S LS 85087 93598; TA21, 17S LS 86884 89800; TA 30, 17S LS 93271 95559.

d. Units are responsible for and must have hand-washing facilities available at all latrine sites.

2-7. Officer in Charge (OIC), Range Safety Officer (RSO) and Airspace Certification

a. All OICs, safety officers, and pilots require authorization by DPTMS Range Operations and certification by the unit commander prior to signing for and utilizing any Range Complex facility.

b. OIC and RSO certification is a three step process.

(1) The first step is to complete the online Range Officer Professional Development (ROPD) Course Phase 4A. This course is located in the Army Learning Management System (ALMS). Units should allow 5-6 hours for completion. The ROPD course has been developed by the Sustainable Range Program and instructs Range OIC/RSO in their duties and responsibilities. Use the search feature and search for "ROPD Phase 4A". Units can accomplish this task from any CAC enabled computer.

(2) The second step consists of the unit commander (O-5) submitting a signed memo (contact Range Scheduling for example MFR) of those individuals who graduated ROPD 4A along with the weapon systems the commander authorizes those individuals to perform OIC/RSO duties. Range Scheduling will return request to unit if not signed and a copy of the completion certificates are not provided/attached.

(3) The last step is for the individual to review the Fort Gordon Range Orientation briefing located at Range Operations. This orientation briefing is by power point presentation and takes the individual about 15-30 minutes to complete. Once completed Range Scheduling will enter each individual into the RFMSS OIC/RSO data base. (Range Certification Cards are no longer issued). Commanders may request to conduct the Range Orientation briefing at home station, contact Range Scheduling for instructions on completion steps and requirements.

(a) For military organizations, refer to Appendix B for OIC and RSO grade requirements for the type of weapon system used. For non-live fire low risk training events the OIC must be in the grade of E6 or higher.

(b) Civilian agencies may have personnel certified as OIC and RSO. For live fire ranges, civilian agencies will have a National Rifle Association or equivalent certified firearms instructor attest in writing that the individual receiving the certification is at least 21 years of age and qualified to conduct the type training desired. The firearms instructor will forward a copy of the certification to Range Scheduling.

(c) Airspace certification is a two-step process.

(4) All OICs, pilots, and ground terminal guidance personnel conducting training or flight operations involving airspace must view the Fort Gordon Airspace Safety Briefing and read the Fort Gordon Restricted Airspace SOP.

(5) After complying with step one, the unit commander will submit a memorandum in the same format as Range OIC/RSOs, certifying the personnel have completed the process in step one. Range Scheduling will complete this process by entering the names in RFMSS with "airspace" as the qualification.

(6) In addition, the RSO for the ground element providing terminal guidance must go through the three step process described in para 2-7b, for RSO certification.

c. Units can conduct the Fort Gordon Airspace Safety Briefing at home station or at Range Scheduling. Units may also contact Range Scheduling to obtain digital versions of the Fort Gordon Airspace Safety Briefing.

d. Units will complete a Prior Permission Request (PPR) when requesting to conduct flights or related airspace training. Units must submit their CONOPS and DRAW and will provide tail numbers and

pilot details 24 hours prior to training event.

2-8. Suspension of OIC/RSO and Airspace Certification Privileges

- a. The RO may suspend privileges of personnel for violating safety, security or environmental regulations.
- b. Suspension of privileges consists of removal from the active qualified standing list of OIC, RSO, and airspace certification for a period of not less than 60 days.
- c. The Range Officer may reinstate privileges after the Range Officer receives a written certification by the individual's commander (O-5 or above) that the individual has undergone retraining to fix the deficiency leading to suspension.
- d. Basis for revocation of privileges includes, but is not limited to the following.
 - (1) Firing on ranges without the Fire Desk wet status approval.
 - (2) Failure to monitor and respond to the Fire Desk communications calls.
 - (3) Failure to adhere to special instructions of the training facility.
 - (4) Continuing to fire during the Fire Desk initiated cease-fire or continuing to fire when loss of communications with the Fire Desk occurs.
 - (5) Failure to report a fire downrange.
 - (6) Failure to provide adequate protection for equipment and ammunition on the Range Complex.
 - (7) Failure to heed a warning of noncompliance with safety regulations by a Range Control representative.
 - (8) Failure to submit required reports.
 - (9) Failure to report accidents and incidents outlined in this publication.
 - (10) Failure to perform OIC and RSO duties listed in this publication.
 - (11) Failure to comply with Fort Gordon airspace policies.
 - (12) Removal of any weapon which cannot be properly cleared IAW the weapon systems technical manual (TM) from the designated range firing line.
 - (13) Failure to meet requirements of special instructions associated with an approved special site request or.
 - (14) Failure to reasonably protect natural, environmental, and cultural resources within the training complex as outlined in this or other FMRs.

Chapter 3

Range Complex Communications

3-1. General

- a. The Fire Desk constitutes the control portion of Range Operations located at B-81200 12th Street & N Range Road.
- b. Units using the Range Complex will establish and maintain FM communications with the Fire Desk for the duration of range, training facility, airspace, or training area utilization. Range Control will issue LMR radios on a first come first serve basis, however units should not plan or depend on Range Control to fulfill communication requirements. Units must provide their own FM radios for all ranges and facilities. All units training outside the cantonment area may need to utilize RC-292/OE-254 antennas when using Singular Channel Ground and Airborne Radio System (SINCGARS) radios to maintain contact with the Fire Desk.
- c. The Fire Desk is the Net Control Station and all stations on the net will follow Fire Desk directions. The Fire Desk frequencies are for the Fire Desk communications only. Units will not attempt to use these frequencies for unit internal communications including convoy operations to and from Fort Gordon.
- d. Units must use internal radio frequencies to make communication pre-checks and not on Fire Desk frequencies. If a unit experiences a radio failure, immediately initiate a cease fire/cease training status until the unit successfully makes FM contact with the Fire Desk.

3-2. Fire Desk Frequency and Phone Numbers

- a. FM. Primary: 42.00 MHz GROUND (Non-secure)
- b. VHF: 123.45

- c. Phone. (706) 791-5005/5008

3-3. Cellular Phones

Units will not use cellular phones as primary or secondary means of communication with the Fire Desk. If all other communications are out, cell phone is permissible under emergency conditions. LMR radios are provided to all live fire ranges, all other facilities are dependent on availability.

3-4. Live Fire Communications

a. Units conducting live fire training will establish and maintain two forms of communications with the Fire Desk.

- (1) IAW Army Regulations FM radio is the primary means of communications.
- (2) Units should use the tower phones or tower LMR as the secondary means of communications. If a tower phone or LMR are not available, units must use two FM radios.

b. Units desiring to control firing as part of a Combined Arms Live Fire Exercise (CALFEX), artillery exercise or other live fire training event with subordinate elements on multiple RTAF, must include this request in the non-standard RTAF packet submitted as far out as possible but certainly not less than 45 days prior to execution of the event to Range Scheduling. If the RO or his designated representative grants permission, a battalion Fire Direction Center (FDC) for artillery or a battalion or higher Tactical Operations Center (TOC) can open, close, and obtain wet/dry times for the firing points and ranges within the approved non-standard RTAF package. The FDC or TOC must have two means of communication with the firing units (one means may be digital). The FDC or TOC is responsible for maintaining communication with the Fire Desk. The FDC or TOC must maintain a DA Form 1594 (Daily Staff Journal or Duty Officer's Log) annotating hourly radio checks with subordinate units and must demonstrate the two means of communication to Range Inspectors upon request.

c. For artillery firing, the OIC has the responsibility for maintaining communication with all firing platforms. If communication is lost with a platform, that firing platform must immediately cease-fire and go to a safe status until resuming FM communication.

d. For maneuver live fire using multiple RTAF, the TOC must maintain communication with each OIC of each separate range. If the TOC also desires to control the tactical execution as it would in actual operations, it must have the communications infrastructure and manning available to control both the tactical (blue) and administrative (white to the Fire Desk) execution separately.

e. The Fire Desk will initiate communication checks on an irregular hourly basis (i.e. not exactly on the hour).

(1) If a unit misses a check, the Fire Desk will place the unit in a cease fire/cease training status until the unit makes a successful communication check.

(2) If a unit misses a second communications check, the RO or designated representative may de-certify the OIC and RSO and place the unit into a cease fire/cease training status until the unit produces another OIC and/or RSO already registered in RFMSS.

3-5. Non-Live Fire Training Communications

a. FM radio is the primary means of communication. Units are responsible for providing FM radio capability. Range Control will not provide FM radios. Units occupying a training area, training facility, or specific cantonment areas will establish and maintain communication with the Fire Desk.

b. For exercises. The exercise command and control node may assume the role of net control station for the units training under its purview. The exercise command and control node must follow the same stipulations outlined for the FDC/TOC listed in para 3-4b except that only one means of FM communication is necessary rather than two.

c. Communications Wire. Units lay communications wire on the ground and bury it 12 inches when crossing roads/trails. Prior to digging, driving stakes or grounding rods, units must obtain ground disturbance approval through the FTX Environmental Checklist process through the Environmental Division. Ground disturbance of any amount cannot occur without Environmental Division approval. When overhead communications wire is necessary, units will run wire a minimum of 20 feet above the road/trail and mark the wire with 12-inch strips of engineer tape, four feet apart. Units will tag and mark wire crossing roads/trails with date and unit name. Range Control prohibits placement of wire on poles that support electric distribution lines. Units must retrieve all communications wire as part of RTAF clearance. Do not place communications wire in trash dumpsters. Usable communication wire can go to Disposition

Services (DLA) 2184 South K Street for turn in with an appointment; unusable communication wire can go to the transfer/recycling center 2218 Recycle Road.

3-6. Observation Point (OP) Communications

OPs will establish and maintain FM communications with the Fire Desk. Occupied OPs are the primary elements responsible for reporting unsafe acts in and around the impact area.

3-7. Radio Procedures

- a. Call signs.
 - (1) The call sign for the Fort Gordon Range Control is "Fire Desk".
 - (2) The call sign for units utilizing RTAF is the facility name and number; for example, Range 33, Rappel Tower, Compass Course 2, Training Area C-8, etc. Units will not use tactical call signs when communicating with the Fire Desk.
- b. Approved calls on the Fire Desk net include the following.
 - (1) Occupying range complex areas.
 - (2) Requesting wet/dry/closing times.
 - (3) Requests for medical assistance.
 - (4) Reporting accident/incident reports.
 - (5) Conducting official Range Control business.

3-8. Unit Internal Frequencies

Units desiring internal frequencies can request a set of frequencies through the NEC.

3-9. Emergency Communication

Units may utilize any of the means in para 3-2 to call the Fire Desk in an emergency. During an emergency, all units will monitor the Fire Desk net and not initiate communications, except for an emergency, until the Fire Desk informs the net to resume normal communication. The Fire Desk may place units not involved in the emergency in a cease fire status depending on the nature and location of the emergency as well as the type of Medical Evacuation (MEDEVAC). **UNITS MAY USE CELLULAR PHONES TO CONTACT THE FIRE DESK IN AN EMERGENCY ONLY IF ALL OTHER MEANS FAIL.** If 911 is dialed via cellular phone, this system will connect the caller to the Richmond County Emergency Services Dispatcher; notify the dispatcher that the call originates on Fort Gordon.

3-10. Fiber Optic Connections

No Fiber optic connections are available in the Range Complex at this time.

Chapter 4

Medical Support

4-1. Requirements

- a. Units conducting training on any range, facility, or training area will have the following readily available a transport vehicle. A transport vehicle is any covered wheeled vehicle capable of carrying a litter patient. The transport vehicle must have the following.
 - (1) Ammo and equipment removed prior to transporting patient.
 - (2) A map to the Dwight David Eisenhower Medical Clinic (DDEAMC). All ranges have strip maps in the Range SOP.
 - (4) A military and/or civilian litter. A field expedient litter is not acceptable.
 - (5) A military first aid bag or combat lifesaver bag.
 - (6) A designated primary and alternate licensed driver and vehicle commander.
- b. The OIC will designate a helicopter Landing Zone (LZ) for MEDEVAC aircraft on fixed ranges and training sites. The size of the LZ should be level and at a minimum 100 feet by 100 feet. When conducting mobile operations, unit leadership will determine a helicopter landing site as needed.
- c. Commanders will provide whatever medical personnel they determine necessary, based on the risk analysis, type of exercise, and unit's state of training unless otherwise specified in the range packet or AR 385-63.

d. Units will provide and have a means to mark a MEDEVAC LZ day and night, as applicable; i.e., aircraft panel markers, smoke, red star cluster, strobe light, vehicle headlights. Units must ensure the items are present for all day or night training. Units can forecast and draw pyrotechnic items from the ASP.

4-2. Medical Evacuation (MEDEVAC)

In regards to an Aero MEDEVAC for the potential loss of life, limb, or eyesight, the OIC has the authority to have medics (68W certified) or combat life savers conduct patient treatment/triage, and patient transfer to the MEDEVAC or Med Flight helicopter. As part of the OIC's responsibility, specified tasks include.

- a. Choose and properly mark the HLZ.
- b. Inspect the medic bag to ensure the on-hand supply of Class VIII is adequate for the mission.
- c. Ensure the MEDEVAC vehicle has an FM radio programmed to communicate directly with Range Operations Fire Desk and that the vehicle is adequate for loading a litter with the space required for a medic to continue providing patient care.
- d. Conduct a rehearsal to the HLZ.
- e. Address all these specified tasks in the deliberate risk assessment worksheet signed by the appropriate level commander for the training event.
- f. Notify the Fire Desk IMMEDIATELY; The Fire Desk will coordinate the MEDEVAC. Units will maintain communications with the Fire Desk throughout all emergencies.
- g. Provide the Fire Desk with the following information. (MEDEVAC Instructions are also in Soldier Field Card)

Line 1. Location of Pick-Up Site (eight to ten digit grid).

Line 2. Radio Frequency, Call Sign and Suffix (frequency of radio at pick up site).

Line 3. Number of Patients by Precedence.

A = URGENT

B = URGENT – SURG

C = PRIORITY

D = ROUTINE

E = CONVENIENCE

Line 4. Special Equipment Required.

A = None

B = Hoist

C = Extraction equipment

D = Ventilator

Line 5. Number of Patients by Type: L + # of patients – Litter A + # of patients – Ambulatory (sitting)

Line 6. Number and Type of Wound, Injury or Illness (peacetime). (Report serious bleeding, along with patient's blood type if known)

Line 7. Method of Marking Pick-up Site.

A = Panels

B = Pyrotechnic signal

C = Smoke signal

D = None E = Other

Line 8. Patient Nationality and Status.

A = U.S. Military

B = U.S. Civilian

C = Non – U.S. Military

D = Non- U.S. Civilian

E = Enemy Prisoner of War

Line 9. Terrain Description (peacetime).

h. Keep the Fire Desk informed of actions taken by the unit. **(UNITS SHOULD NOT MOVE INJURED PERSONNEL, UNLESS TO AVOID FURTHER INJURY, UNTIL MEDICAL PERSONNEL ARRIVE).** The OIC should also take the following actions during an accident or a serious incident.

- (1) Assist the injured.
- (2) Isolate and secure the accident scene, segregate witnesses, and prevent indiscriminate entry into the accident site.

- i. The Fire Desk will then assist the unit OIC to determine whether to use ground or air evacuation. The Fire Desk will notify Fort Gordon DES, who will dispatch emergency crews to the site. When emergency personnel (police, fire) arrive, they will be in charge of the emergency operations. The OIC/Safety and Range Control personnel will provide assistance as required by emergency personnel.
- j. Air-MEDEVAC. The unit will provide the Fire Desk how they have marked the LZ when utilizing air MEDEVAC support.

4-3. Accident/Incident Report

Following all MEDEVACs, the unit OIC will fill out a 5W report and submit to the Range Control, B-81200, 12th Street and N Range Road, within four hours after completion of the MEDEVAC.

4-4. Sick Call and Non-Emergency Medical Treatment

Units will utilize the DDEMAC, for injuries and illnesses requiring medical attention.

- a. The DDEAMC is normally open Monday - Friday from 0700 – 1600.
- b. The Emergency room at DDEAMC is open 24/7.

4-5. Cantonment Emergencies

Units training in Cantonment will dial 911 for emergencies, unless under the Fire Desk auspices.

Note. Cellular phones may or may not connect with Fort Gordon emergency services. Ensure the 911 Operator knows you are on Fort Gordon.

CHAPTER 5

Range, Training Facility and Training Area Operations

5-1. General

- a. Fort Gordon ranges closely follow range designs in TC 25-8 Training Ranges. Units that desire to use a range for a purpose for which it was not specifically designed must submit a NSTR through Range Scheduling, refer to paragraph 5-27 for NSTR instructions.
- b. The OIC of each site is responsible for all activities involving his/her site.
- c. Units occupying training areas must maintain a 350-meter safe distance from all active artillery/mortar firing positions.
- d. During training, Range Control personnel will conduct training inspections using a checklist. Copies of this checklist are available on the Fort Gordon RFMSS Library, in all range packets, or by request from Range Scheduling.
- e. Units should submit all required documentation within the stipulated timelines or risk delays or significant modification to training plans and scenarios.
- f. Unit representative, SGT or above, must pick up RTAF packets at Range Scheduling office.

5-2. Training Hours

- a. Units may occupy and fire as reflected in RFMSS. Range Control schedules range support personnel based on the information in RFMSS. Please do not schedule RTAF beyond what the unit requires to achieve commanders' training objectives. For example, it is a waste of RTAF and worker pay to schedule a range for multiple days when one will suffice or a range all night long when two hours will suffice. Range Scheduling will change RTAF scheduling status to 'pending' when discrepancies are noticed between RTAF requested time and the number of personnel to train. Range Scheduling will request justification from the unit before reserving RTAF.
- b. Occasionally, the Fire Desk will announce scheduled cease-fires over the radio. Range Scheduling will also disseminate this information in the coordination meeting with units so the units have advanced notification.

5-3. Risk Management

- a. Risk management is the process of identifying and controlling hazards to mitigate risk. This paragraph adds a bit more detail to the overview in para 1-6.
- b. All military units will have a signed and approved Deliberate Risk Assessment Worksheet, DD

Form 2977.

c. Non-military units may use equivalent form signed by an individual who has disciplinary authority over training personnel.

d. The Fire Desk will ask the OIC to confirm an approved DD Form 2977 for that specific live fire event is on site prior to granting a wet status.

e. Unit commanders should ensure vehicle crew evaluators and observer-controller/trainers are weapon system certified to reduce live fire risk. If they are not weapons system certified, commanders must address this risk in their DD Form 2977.

5-4. Occupation Procedures

a. All units must request permission to occupy RTAF from the Fire Desk via FM radio or other designated communication system.

b. When requesting the occupation time, units will submit the required information contained in the range packet.

c. The Fire Desk will then issue the unit an occupation time, instructions, and provide his/her initials.

d. Units authorized pyrotechnics in training areas will inform the Fire Desk during occupation and 30 minutes prior to execution.

e. The fire hazard level may restrict the use of pyrotechnics IAW paragraph 13-9.

f. Units will immediately inform the Fire Desk of any discrepancies discovered on the RTAF site.

Range Inspectors will verify the discrepancy. If the unit does not notify the Fire Desk of a discrepancy, the Range Inspector will hold the unit accountable during the clearance inspection.

5-5. Publications and Paperwork

The OIC will ensure the following items are on hand for training.

a. Fort Gordon Map.

b. This regulation (Digital Copy is accepted).

c. Copy of the approved CONOP and or DD Form 2977 signed by the unit commander.

d. Appropriate FM and TM documents associated with the scheduled training.

e. NSTR, Safety diagram, and Special Site approvals, if applicable.

f. Maps with routes to medical facilities on the medical transport vehicle.

g. Copy of the signed Record of Environmental Consideration (REC) and FTX environmental checklist submittal.

5-6. Actions Before Training/Firing

The OIC will do the following.

a. Establish FM radio communications with the Fire Desk.

b. Verify fire danger level with Fire Desk prior to using pyrotechnics.

c. Display the red flag (day) or flashing red light (night) on live fire ranges.

d. Post all necessary guards and/or barriers per the range packet SOP or NSTR.

e. Have approved and signed DD Form 2977 on site and conduct safety briefings.

f. Ensure limit markers are in place and visible day and night.

g. Check all ammunition. If the unit discovers mixed blank/live rounds, STOP CEASE FIRE and refer to para 7-6 (b) (1-2).

h. Ensure leaders confirm that all firing personnel perform a functions check on all weapons and clear each barrel of obstructions.

i. Inspect the medical evacuation vehicle and correct deficiencies.

j. When applicable, have a copy of the approved NSTR, REC, and DRAW.

k. Ensure vehicles conducting gunnery display vehicle status flags or lights for night.

l. Identify a suitable landing zone for potential MEDEVAC situations and ensure LZ markers and marking smoke are available.

m. Have certified RSO on site.

n. Designate a dispersal area in case of lightning.

5-7. HOT Time Procedures

a. All units conducting live fire will request a HOT time from the Fire Desk via FM before firing.

- b. When requesting a HOT time, the unit must submit the required information per the range packet.
- c. The Fire Desk will then issue the firing facility a HOT time, instructions, and provide his/ her initials. The instructions will include any limitations on tracer ammunition or pyrotechnics due to the current fire danger.
- d. Range Operations will lock all SDZ gates pertaining to that weapons system.
- e. Due to required daily maintenance, the Fire Desk will not normally grant a HOT status between the hours of 0600-0800. Additionally, there may be a one/two hour downtime in the evening (actual time will fluctuate based necessity and on hours of sunlight) to prepare for night fire.
- f. The RSO and OIC, as reported to the Fire Desk, must remain onsite at all times during HOT status. Units may change the RSO and OIC only with the explicit permission of the Fire Desk via FM radio.

5-8. Actions during Training/Firing

The OIC will do the following.

- a. Maintain FM communication with the Fire Desk.
- b. Post air guards to watch for stray aircraft if under SARSA.
- c. Report all range complex fires immediately to the Fire Desk.
- d. Ensure all personnel remain in the proper uniform with the necessary safety equipment.
- e. Monitor training for safety violations and take corrective actions.
- f. Report all accidents and/or incidents to include spills to the Fire Desk immediately.
- g. Ensure the unit executes either a standard, approved NSTR or an approved training scenario.
- h. Ensure units conducting vehicle mounted gunnery display weapons status flags on vehicles.
- i. Use the range target system computer for range support only. Do not use the computer for internet searches or other activity not pertaining directly to operation of the range.
- k. Ensure positive muzzle control of weapons at all times. ALWAYS treat a weapon as if a round is in the chamber.
- l. Ensure unit personnel are using a properly fitted blank firing adapter when using blanks. Do not allow unit personnel to use foreign matter, such as twigs or gravel, in lieu of a blank adapter.
- m. Remain onsite at all times during wet status along with the RSO.
- n. Allow Fort Gordon government or contract personnel to access sites to conduct daily mission requirements supporting training such as pumping of portable latrines, picking up garbage, etc.

5-9. First Round Procedures

All ranges and Artillery/Mortar firing points will report the first round observed safe for each firing point or firing area. Observers must continue to observe but not report all subsequent rounds. If the guns/tubes move to another firing point, the observers must report the first round. If the observer does not observe the first round as safe, then immediately cease fire and follow procedures in para 6-7.

5-10. Night Fire

- a. Units may conduct night fire on any range, unless prohibited in the range packet. To do so, units must meet the following criteria.
 - (1) The firers, lane safeties, RSO and OIC must clearly see the right and left limit markers.
 - (2) Ensure the red flashing light on the range flag pole is visible from the entry to the range.
 - (3) To ensure proper orientation of weapons, the RO may require the OIC/RSO and other safety or Observer Controller Trainer (OCT) personnel to wear night vision goggles.
- b. The fire danger may preclude the use of tracers.
- c. If the required lighting is not currently on the range or not functioning, the unit must request Fire Desk to install or fix the necessary lighting (e.g., chem-light, flashlight)

5-11. Check Fire/Closing Time Procedures

- a. Units will request a dry/closing time from the Fire Desk at the conclusion of training.
- b. When requesting a permanent dry/closing time, the unit reports the required information to the Fire Desk per the range packet. If the range was a co-use range, the OIC must report numbers from all units.
- c. Units requesting an administrative check fire, lasting more than 30 minutes, will notify the Fire

Desk via FM radio. Unit must request wet status to resume firing.

5-12. Actions after Training/Firing

The OIC will ensure the following are accomplished.

- a. Lower range flag and/or turn off red light.
- b. Recall all guards and remove barriers.
- c. Ensure personnel clear all weapons IAW with applicable TM and pick up and turn-in brass and ammunition.
- d. Return range equipment before departure from the Range Complex.
- e. Lock and secure all range facilities unless otherwise directed by Range Inspectors when departing the site. Close vaulted latrine toilet lids.
- f. Ensure all facilities or training areas are free of garbage, debris, and training materials such as concertina or communication wire. Units will not leave garbage piled near dumpsters if provided on site. Units must throw away excess garbage in dumpsters or transport it to the waste transfer station or a dumpster within the cantonment area.
- g. Complete all training area remediation as stated within REC and site request if applicable (ie., excavations filled in completely, berms leveled).

5-13. Clearance/Departure

- a. Units will contact the Fire Desk to schedule RTAF clearance time.
- b. Once a unit makes a clearance request, range inspectors will arrive as soon as they can. The time the inspector arrives depends on the number of requests for clearance underway and the distance between locations.
- c. Unprepared units or facilities that have major discrepancies may drop to the bottom of the clearance priorities.
- d. Range inspectors will clear units conducting night fire on ranges without flood lighting the next morning no earlier than 0700 or when light enough to conduct a thorough inspection.
- e. Units should schedule clearance of the training site after completing training. Range Control will not pre-clear units prior to the conclusion of training. Units may request a pre-inspection during the training density to ensure that all personnel responsible for the clearance understand the standard to clear. However, the inspector will conduct a full inspection of the RTAF at the conclusion of training. For units using RTAF for multiple days without intending to remain on site 24/7, request a departure time from the Fire Desk before departing the facility at any time. The Fire Desk will ask the unit if training for the density is complete or only for the day before granting permission for the unit to depart. Sometimes units change the training objective after receiving permission from the Fire Desk to depart for the day and have no intention of re-occupying a facility; the unit remains responsible to prepare for and schedule a clearance from the Fire Desk. Units that depart Fort Gordon without clearing RTAF may find difficulty scheduling RTAF to support future training.
- f. After a range inspector completes an inspection and clears a unit from an RTAF site, the unit must maintain FM communication with the Fire Desk until the unit makes a request to the Fire Desk to depart the range and the Fire Desk grants permission to depart.
- g. The unit must police all range areas, sweep the buildings and empty trashcans before the range inspector commences the clearance inspection. The unit must secure all building doors and windows as well as turn off all radios once the range inspector clears the range.
- h. After the unit clears RTAF, Range Control requests that the unit fill out the ICE form provided by a range inspector. This ICE form is not mandatory to fill out; however, this is a feedback mechanism used to help Fort Gordon better serve units and customers; we welcome ideas and suggestions to improve our training platform and customer service.

5-14. Roads, Gates, and Barriers

- a. Units must not close or block range roads and tank trails without written permission from Range Control and coordinated with DPW and DES.
- b. Units desiring to close part of a range road or tank trail must submit a NSTR. The request must arrive at Range Scheduling NLT 45 days prior to the desired execution date. Normally, the Range Officer prohibits closing hard surface roads for more than 15 minutes. Units should plan training injects away from primary roads to prevent traffic congestion. Units will not plan nor execute injects on the range road

and any improved surface that resembles a road (i.e gravel).

c. Range service roads and firebreaks (downrange areas) are off-limits. The scheduling and assignment of a training area does not include the exclusive use of service roads or established tank trails within the area unless the unit makes a specific request that Range Control approves.

d. Gates.

(1) The OIC is responsible for securing all gates on his or her range before live fire training commences. Range Entrance gates will be closed when actual live-fire training is being conducted.

(2) Permission from the Fire Desk is necessary to bypass closed gates.

e. Barriers.

(1) Units are responsible for placing barriers/guards as stated in an approved NSTR and range SOP.

(2) Units will not cut live vegetation/trees to use as barriers.

(3) Units will ensure all barriers are visible during the day and night.

(4) Post guards at wire barriers.

(5) Units must be able to quickly move a barrier impeding the movement of emergency vehicles.

(6) Units must immediately remove barriers after completion of training.

5-15. Training Accidents/Incidents

a. Training accidents/incidents include the following, but are not limited to the following.

(1) Ammunition/weapon malfunctions resulting in injury or damage.

(2) All personal injuries, including heat and cold injuries.

(3) Range Complex fires.

(4) Erratic rounds.

(5) Leaks from or loss of equipment containing radiation.

(6) Manned or unmanned aircraft incidents or mishaps such as a crash or lost link.

(7) Fuel or other hazardous material spills.

(8) Vehicle/traffic accidents and/or damage to property/equipment.

b. For more information on training accidents/incidents, refer to Chapter 6.

c. Failure to report accidents and incidents could result in de-certification of OIC and RSO.

5-16. Down Range and Impact Area Control

a. Range Control prohibits personnel from proceeding downrange past established target frames on zero ranges or past firing lines on standard ranges without Fire Desk approval. For fire and maneuver ranges, an approved NSTR must cover downrange access.

b. The Range Control Officer is the approval authority for personnel to proceed into any Impact Areas, this includes both AIA and the SAIA. Entry into an impact area is strictly prohibited.

5-17. Off Limits Areas

a. RTAF are off limits without Range Control approval.

b. AIA is a duded impact area and the SAIA is a non-duded impact area, with the exception of the three small areas noted on all maps. All portions of AIA are off limits without explicit approval from the Range Officer. Refer to the Fort Gordon Military Installation Map (MIM) available through Range Scheduling. The Range Officer grants units access to the firing lines on standard ranges located in the SAIA and approves access into the SAIA on fire and maneuver ranges through the NSTR process. Signs marked DANGER IMPACT AREA clearly delineate both impact areas.

c. There is a prohibition against travel off existing roads and trails, to include sensitive areas due to protected cultural sites, TES habitat areas, and near lakes, streams, wetlands, and the land within 50 meters of these shores by vehicles, unless specifically stated as a training requirement and approved as an NSTR or FM Form 341 by the RO. This requirement should be included on the submitted FTX environmental checklist and approved on the signed REC prior to the training.

d. There is a prohibition against personnel by-passing locked gates.

5-18. Uniform Requirements

a. The unit commander determines all uniform items, however at a minimum all live fire participants are required to wear approved hearing protection.

b. All personnel will wear helmets in tactical vehicles in the training areas.

5-19. Personal Owned Weapons. Personal owned weapons are prohibited from being used on the Range Complex, except for the following situations.

- a. Civilian law enforcement personnel on scheduled ranges.
- b. Hunters in authorized hunting areas firing at game species only. No target or practice shooting is authorized.
- c. Exceptions approved by the Senior / Garrison Commander through the RO.
- d. Authorized personal firing weapons on the Fort Gordon Directorate of Family, Morale, Welfare and Recreation (DFMWR) Recreation Range (Range 14). For details, contact DFMWR.
- e. NRB personnel authorized by DES to conduct nuisance wildlife control.

5-20. Disposition of Misfires, Duds and Unexploded Ordnance (UXO)

a. Misfires.

(1) Follow all appropriate misfire procedures for the weapon system. In the event misfires present a hazard to personnel, the OIC will report this information to the Fire Desk. Unless otherwise directed by the Fire Desk, the unit must remove the misfired ammunition from the weapon, repackage it in the original container, mark the container with the word "misfire," and return it to the ASP as unserviceable ammunition.

(2) **Units that are unable to properly clear a weapon IAW the weapon system TM will NOT remove the weapon from the firing line.** OIC will contact the Fire Desk and the Fire Desk will assist the range OIC with further actions and coordination needed to safely remove the weapon from the range.

b. Duds.

(1) A dud is any explosive munition that has been fired or otherwise activated and has failed to detonate on a range. The unit using the range has fired the round and recognized that it failed to detonate. **UNITS MUST INFORM ALL PERSONNEL NOT TO PICK UP, HANDLE OR IN ANY WAY DISTURB ARTILLERY OR MORTAR PROJECTILES, ROCKETS, FLARES, GRENADES, PYROTECHNICS DEVICES, OR ANY OTHER EXPLOSIVE AMMUNITION THAT HAS BEEN FIRED AND FAILED TO DETONATE.**

(2) Report all duds to the fire desk. Units will not disturb duds but must clearly mark the immediate area no closer than ten meters and post a guard on the area. The guard will remain until released by the Fire Desk or EOD. When personnel locate duds, they must immediately submit the following information to the Fire Desk.

- (a) Coordinates of dud;
- (b) Number of duds;
- (c) Type of duds, if known, and a description;
- (d) How marked;
- (e) Name, rank, and unit of person reporting dud.

c. UXO.

(1) An UXO is any explosive munition that is found by a unit that did not fire the round and cannot confirm whether the round went off or not.

(2) Unit will report suspected UXO to the Fire Desk and maintain a presence 25 meters from the suspected UXO until a Range Inspector arrives on site.

(3) The Fire Desk will send a representative to the site to determine further required actions. If it is confirmed UXO, the Fire Desk representative will do the following.

(a) Clearly mark the site with yellow warning tape with red lettering **"DANGER KEEP OUT UNEXPLODED MUNITIONS/UXO KEEP OUT"** marking tape.

(b) Place tape no closer than 10 meters and in a manner to ensure no one can enter area without seeing the warning tape.

(c) Range Control will call the appropriate agency to dispose of UXO as required.

(d) Range Control will complete the UXO report and ensure incident is recorded in RFMSS, entered on to the UXO GIS layer map maintained by GIS and Range Safety, and maintain the hard copy report indefinitely.

5-21. Demolition Training and Exercises

a. Fort Gordon currently has no designated demolition range, however units may request to conduct light demolitions (less than 50lbs NEW) training using the NSTR process. Units will submit a "Shot Sheet" as part of the NSTR that includes DODIC (of all explosives), number of shots and net

explosive weight of each shot to Range Scheduling.

b. Units must prime charges just prior to use at the demolition site. Unit personnel must transport blasting caps in one vehicle and charges in a separate vehicle to the priming site.

c. The power source for detonating charges is secured by locking. The person doing the priming will keep the key in his/her possession. When using a portable power source, the person doing the priming must also maintain possession of the blasting machine or its activating device. Units must take precautions to reduce possible premature ignition of electrical blasting caps. Keep all wires shunted until primed and ready for ignition.

d. The OIC must cease demolition exercises during electrical storms or during dust, sand, or snowstorms of severity great enough to limit the line of sight to the demolition site.

e. Notify the Fire Desk of intent to detonate and size of detonation five minutes prior to detonation.

f. Immediately following detonation, notify the Fire Desk that detonation has occurred.

g. The Fire Desk Operator will dispatch an inspector to investigate if the unit does not contact the Fire Desk within five minutes of an announced detonation time.

h. All personnel will remain outside the safety danger zone during live fire and blasting operations.

i. No standing trees will be used or damaged during demolition training without prior approval from Range Control who will coordinate the request with NRB prior to the training

5-22. Chemical, Biological, Radiological and Nuclear (CBRN) Training, Smoke Operations and Pyrotechnics.

a. Units must submit a special site request (CONOP and Maps) to Range Scheduling for use of smoke generators NLT 45 days prior to training execution. The request must include a 1:50,000 overlay and date/time frame the unit will employ the generator. Hasty and deliberate decon sites must be requested using a special site request. This requirement should be included on the submitted FTX environmental checklist and must be approved on the signed REC prior to the training.

b. CBRN Training. Units will only use C10H5CIN2 (CS) capsules in CS chambers. The use of CS grenades in the RTAF requires units to submit an NSTR. Personnel must not wear contact lenses during chemical defense training. A qualified CBRN individual must be present during employment of CS grenades. CS grenades will not be employed under the following conditions.

(1) Closer than 500 meters from public traffic routes.

(2) Closer than 1000 meters from installation boundary.

(3) Within confined spaces.

c. Smoke Operations. Only qualified Nuclear Biological Chemical (NBC) personnel can supervise smoke generator operations as defined by AR 350-1, chapter 11, Army Training and Leader Development.

(1) Units will not employ smoke.

(2) Within 500 meters of the installation boundary.

(3) Within 1000 meters of the following.

(a) The family housing area.

(b) Leitner lake Campground.

(4) Within 500 meter of any road.

(5) Of other units training and not involved in the exercise.

(6) Anytime units employ smoke in the vicinity of a maneuver trail (not asphalt, chip-sealed or gravel), the unit must provide road guards and/or temporary barriers (if approved by Range Control) at a distance of not less than 350 meters outside of the smoke curtain.

(7) All expended smoke canisters and residue will be policed and returned to the ASP.

(8) All personnel must carry protective masks at all times during smoke operations.

(9) Refer to DA PAM 385-63 for requirements to use M8 white smoke grenades, smoke pots or metallic powder obscurants.

d. Pyrotechnics.

(1) Do not employ simulators within 15 meters of personnel or vehicles.

(2) Do not employ unauthorized or commercial devices as boobytraps.

(3) Remove all booby traps and trip flares prior to departing the area.

(4) The Fire Desk approves all pyrotechnics use IAW Fire Danger Restrictions per para 13-9.

(5) Unit will prevent personnel from approaching within two meters of the emplaced trip flares.

(6) Do not "cook off" left over pyrotechnics; turn in left over pyrotechnics and residue to the ASP.

(7) Constantly monitor IED simulators; do not leave unattended. Clearly mark as a training device.

(8) This requirement should be included on the submitted FTX environmental checklist and must be approved on the signed REC prior to the training.

5-23. Vehicle Swimming/Fording Operations

Vehicle fording training is not currently available at Fort Gordon.

5-24. Foot Marches

Units may conduct foot marches and ambushes in the tactical training areas and other areas within the Range Complex. The training complex starts at North Range road and 12th Street intersection and West of Range road and Carter road. Submit requests to conduct road marches and ambushes with an overlay for a 1:50,000 Fort Gordon map to Range Scheduling for approval NLT 45 days prior to scheduled use. The overlay must include the desired route of the march, check points, and grid coordinates of the ambush sites. For foot marches in the cantonment area units should contact the IOC and abide by regulation USACCOE&FG 210-3. Units will adhere to the following requirements and restrictions:

- a. Units will maintain FM communications with the Fire Desk at all times and call in the times for the start, checkpoints, and then once all participants finish.
- b. Units will not foot march directly on paved roads, however is safety permits may use the shoulder.
- c. Units conducting ambushes or other training that utilize pyrotechnics and smoke will provide an eight digit grid of the site and indicate on an overlay the intended date and time of use in support of training.
- d. Units will have a lead and trail vehicle with four way flashers active when marching along any road.
- e. Units will use road guards in the front and rear of the formations when marching along any road.

5-25. Bulk Fuel Operations

Contact Range Scheduling to complete a special site request to establish fueling operational sites. Units must submit the request NLT 90 days prior to establishing a fuel farm/bulk POL distribution point. Due to fire and safety considerations, units cannot establish POL bulk storage and distribution points within the cantonment area. Units must choose a site that is relatively clear and nearly level to prevent excessive vegetation clearing. Units must construct berms around the bladders to contain major spills and prevent shifting of the fuel bladders. For additional guidance to ensure proper freeboard, size, and dimensions of the berms, refer to ATP 4-43. Secondary containment systems for all POL distributions systems are mandatory. Secondary containment systems are a unit responsibility. It is prohibited to conduct refueling and fuel storage in areas of shallow water table (within 2.3 feet of the soil surface) within well head protection zones or within 100 feet of a potable drinking well. This requirement should be included on the submitted FTX environmental checklist and must be approved on the signed REC prior to the training.

5-26. Fire Danger

- a. The Fire Desk checks the daily fire danger classification from the Fort Gordon Fire Weather Station which is available on the Georgia Forestry Commission's Fire Weather website. Any special fire weather warning/updates will be provided by NRB to Range Control as needed,
- b. The fire danger classification and meanings are included in para 13-9.

5-27. Non-Standard Training

- a. Non-standard events are any events not listed as a standard event for a range, training area, or training facility in Appendix C. The OIC must have a copy of the NSTR packet on the training site during training.
- b. Submit NSTR packets through Range Scheduling at least 45 days prior to training execution. The NSTR packet must include a FTX environmental checklist and a signed REC. Once Range Control approves an NSTR packet, units may not make modifications affecting troop limits, Danger areas, restricted areas, roadblocks, firing areas, safety limits, weapons, or physical changes to facilities without explicit approval from Range Control.
- c. After a unit submits a complete NSTR, Range Scheduling will enter RTAF requiring an NSTR into RFMSS as pending until Range Control approves the NSTR packet. While the pending status acts as a

temporary reservation for RTAF, it does not prevent other units from scheduling other RTAF that may generate SDZ conflicts. If the unit delays the submission of a complete NSTR packet to Range Scheduling, the unit may have to modify the NSTR scenario due to SDZ conflicts generated by other units which submitted complete packets first. A complete NSTR packet submission must include details of the operation, safety plan, target scenario, firing positions, weapons, ammunition DODICs, instructions on how to contact the scenario planner and a completed risk assessment with the overall residual risk level checked and signed by the appropriate level commander as discussed in para 1-6. Contact Range Scheduling to answer questions about NSTR documentation requirements.

5-28. Digging and Ground Disturbance

Units will obtain Environmental Division and DPW permission prior to any ground disturbance occurring to include digging and staking or conducting any digging or placement of stakes, grounding rods, or similar ground penetrating operations. Fort Gordon has underground utilities running through many training areas and ranges, as well as areas where digging is prohibited or restricted due to known UXO, environmental, cultural, or other issues. Failure to follow this process can result in injury or death to personnel, damage to Fort Gordon infrastructure, violation of federal and state laws, liability for damages, uniform code of military justice actions, and suspension of OIC/RSO certifications.

5-29. Media and Very Important Persons (VIP)

a. Submit requests for media and/or VIPs on RTAF through Range Scheduling to the PAO NLT 30 days prior to requested event.

b. The OIC is responsible for controlling spectators at training events. The OIC will ensure that all spectators receive a range safety briefing, are kept clear of hazardous areas, and are wearing the proper hearing protection and any other protective devices required to observe the training. Civilian spectators will not be allowed to fire any weapons.

c. Transportation of personnel is the responsibility of the commander of the requesting unit. Privately owned vehicles (POV) are not authorized on ranges, training areas, or training facilities that are scheduled for military training purposes. Refer to para 12-3 regarding POVs.

5-30. Training In Cantonment Area

a. Tactical Training in the cantonment area is prohibited, except in Garrison Training Areas (GTAs) is to be and will be coordinated through Range Scheduling using RFMSS. Conducting tactical training in the cantonment area creates potential safety and environmental hazards and could significantly impact surface and subsurface utilities such as natural gas, power, water, and sewage.

b. Exceptions may be made in a case-by-case basis. Commanders should request exceptions through the DPW and provide a courtesy copy of their request to Range Scheduling, not less than 45 days in advance of the training. The memorandum must contain information regarding the commander's training objective, blank ammunition, pyrotechnics, location of concertina wire, location of communication wire and/or antennas, affected roads and buildings, a completed DD Form 2977, a safety plan, and a concept of operations with graphics.

c. Any unit conducting tactical training without proper authorization, within either the cantonment area or GTA, will be required to move and contact Range Control for scheduling. Any Commander violating this policy may be subject to financial responsibility for necessary repairs from damage to utility systems or grounds.

5-31. Counter-Improvised Explosive Device (C-IED) Training

a. Units may conduct C-IED training and ambushes in the tactical training areas and other areas within the Range Complex. Submit requests to conduct C-IED training and ambushes with a 1:50,000 operational overlay to Range Scheduling for NLT 45 days prior to training execution. Annotate on the overlay the desired route, check points, and grid coordinates of the ambush or IED sites.

b. The following are additional requirements for all C-IED training and ambushes.

(1) Units will maintain FM communications with the Fire Desk at all times and call in the times for the start, check, and end points.

(2) Clearly mark all C-IED training devices as training aids. Units must try to avoid contact with civilian personnel and minimize their delay.

(3) Do not conduct C-IED training in the cantonment area.

- (4) Retrieve C-IED training devices when training is complete.

5-32. Maneuver Damage

Refer to para 13-4 d. for more information.

5-33. Land Navigation

a. Fort Gordon Commanding General for the U.S. Army Cyber Center of Excellence is the approving authority for all extremely high - risk operations. This includes Land Navigation and the first O6 commander in the chain of command is the approving authority for high - risk operations; the Garrison Commander will sign if no O6 Command Select List O6 commander is authorized. The first O5 commander (or equivalent) in the chain of command is the approving authority for medium - risk operations and all Live Fire ranges/exercises. The Company Commander is the approving authority for low - risk operations.

b. The Army's overarching framework for exercising mission command is the operations process the major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation. Commanders and staffs use several integrating processes and continuing activities to do this. RM is an integrating process. Step 4 of the Risk Management in the operations process is "Implement Controls" it occurs within the preparing and executing activities. Step 5 "Supervise and Evaluate" occurs during executing with some continuing emphasis in planning. The assessment activity of the operations process is continuous. The processes are cyclical, fluid, and dynamic. Activities and steps can overlap and need to be revisited again on the day of operation and during any operation. DD Form 2977, Decisive Risk Management Worksheet will be submitted NLT the 5 working days prior to scheduled training for review and acceptance from Range Officer. On the day prior to training, when units sign for ranges/facilities/training areas a revised RM Worksheet will be submitted with all required changes based on current assessment and any directed changes from Range Officer. See ATP 5-19 as well as US Army Combat Readiness Safety Center web. The digital Ground Risk Assessment Tool (GRAT) that aids in Decisive Risk Management Worksheet preparation. Link is https://grat.safety.army.mil/ako_auth/grat/default.aspx The Range Officer has the authority to delay or cancel any training without proper RM and CONOP's for training events.

c. Administrative: A Concept of Operations (CONOPs) will be submitted for all Land Navigation Courses. The CONOPs will be signed by the Battalion Commander. At a minimum, the CONOPs will include Land Navigation course route, number of lanes, communications plan/signal plan. The communications plan explains how cell phones, whistles, FM radios / freqs., or commercially purchase radios or equipment are used. The CONOP / DRAW should also address the following:

- (1) L-Hour; this is the time the last soldier is planned to return to the finish point.
- (2) Missing soldier / Person Search Plan.
- (3) Accountability Plan.
- (4) Map with nearest helicopter landing zones and ambulance exchange points.
- (5) Rally Points and Boundaries.
- (6) Panic Azimuth(s).
- (7) Names of soldiers with prior Hot Weather and Cold Weather Injuries.
- (8) Night Land Navigation Plan.
- (9) Training in Hot/Cold Weather Guide

d. Units will not conduct Physical Readiness Training or Testing on same day of Land Navigation training.

e. There are three Basic Land Navigation Courses located in the Fort Gordon training complex. Courses are: TA 26; TA 21; and a combined course in TA 37B, 37A, and 34. Range control will provide information and answer keys required to perform Basic Land Navigation Courses. The Basic Land Navigation Course answer key and maps of course will be given to the OIC/RSO the day prior of the training event.

f. Units are responsible to coordinate portable latrines at non-designated sites. Latrines will be removed NLT next working day after event is completed.

g. The unit is required to provide all equipment such as compasses, maps, protractors, pencils, etc. Tracking devices, such as PASS, once available will be issued by Training Support Center, Training Aids, Devices, Simulators, and Simulations (TADDS) Branch located in building 81101. When/if tracking

devices are available units will be required to get train the trainer instructions as well as training participants on use/operations of technology available. At minimum units will issue all personnel on the Land Navigation course a whistle and if phones are allowed by Unit leadership will record cell phone numbers and service providers of individuals on course.

h. Units are required to have and monitor a Wetbulb machine from May through September. Unit OIC/RSO will notify Range Division that they have a Wetbulb device upon drawing of Training Area the day prior to event. Monitoring should be part of the RM and how execution changes by higher Wetbulb categories.

i. Buddy Team Land Navigation is mandatory for all units at Heat Category 5. Any Unit requesting deviation, based on MACOM training requirements, will submit an approved CRM with no lower than a High RM. Thus requiring the BDE Commanders approval on RM. Unit leadership must take measures to reduce risk. RM requires addressing additional steps to be taken such as additional lane safeties; water points; tracking devices (SMART Pass); shorten course lengths; and have communication device at each point and have participants report arrival at point and route, azimuth, and point next encountering.

j. Units will have the appropriate level of lane safeties for the course and outlined in the CONOPs.

k. A safety briefing must be provided to all persons participating in the Land Navigation Course prior to the initiation of training each day.

l. Prior to beginning the Land Navigation course, Commanders or their designated representatives will walk-down the course to identify hazards such as fallen trees, missing points, washouts (holes), or down power lines.

m. NIGHT OPERATIONS: OIC'S/RSO's are responsible for ensuring all soldiers have successfully completed the land navigation course during day light hours prior to night operations.

n. Land navigation night operations will be outlined separately in the unit commander risk assessment.

o. Night operations will be conducted in buddy teams unless training warrior task standards/POI direct individual completion. Same requirements for no lower than High Risk assessment as stated above.

p. MEDICAL: Medical personnel and equipment on site per Chapter 4-11 in FGGA Regulation 350-19. Additional medical assets may be added per unit POI or risk management worksheet risk level for the training conducted. MEDVAC will be IAW FG Regulation 350-19. If medical evacuation is required, the training unit will notify Range Control. The unit will have an escort vehicle to escort their internal ambulance to nearest Ambulance Personnel Exchange (APX) Point. The APX for each land navigation course are TA 26 is APX 1; TA 21 is APX 8; and TA 37A/B, 34 is APX 3. If an escort is not possible, a guide will meet the ambulance on the nearest main road closest to the accident site. That grid coordinate will be sent to Range Control/IOC on LMR. The unit will complete DA Form 285 and turn in a copy to Range Control prior to clearing the facility and send a copy to the Installation Safety Officer IAW DA Pamphlet 385-40 and USACCoE&FG Regulation 385-10.

q. Communications: CThe OIC/RSO will be issued a hand held radio and required to maintain communication with Range Control or Installation Operations Center (IOC) when Range staff turns over Net Control Station (NCS) to IOC.

r. Radio checks are required hourly at the top of the hour (on the hour). All radio checks and announcements will be acknowledged by each Training site OIC/RSO. nits will have an internal communications method within their own operations. Additional forms of communication will be annotated in the CONOPs. Important immediate reporting: Lost, missing or unaccounted person; Fires; Injured or medical evacuated; and UXO's.

s. Course design and information: The FGGA Land Navigation Courses are designed for use as a compass course to meet the dead reckoning test requirement of Task: Navigate from One Point on the Ground to another while dismounted.

(1) Terrain Association: The course is located on distinctive terrain and is suitable for teaching terrain association. However, because of the limited area of the course, it is not adequate for testing the terrain association portion of the "navigate from one point to another" task.

(2) The grid zone designation is 17S. The 100,000-meter grid square identifier for the Fort Gordon Land Navigation Courses is "LS".

(3) TA 26 Course: TA-26 has 60 points identified by 4" x 4", 4 ft tall light blue poles with the

point number painted on the top of the pole. Examples of Compass Course signage:



t. Course Survey: The points on the course have been surveyed to an accuracy of less than one meter for horizontal control and one foot for vertical control.

u. Medical: The using unit will position a vehicle which may be used for emergency evacuation in the start point area prior to beginning training on the land navigation course.

v. Land Navigation Equipment: The using unit is responsible for providing compasses and protractors for its soldiers. Range Operations will provide map extracts of the area for soldiers when the using unit signs for the range book.

w. Safety: A Safety Briefing: Prior to sending personnel out on the course, the OIC/RSO will give a safety briefing. Below is an example safety briefing, it is not all inclusive and units must adapt it to their particular needs.

(1) Medical Emergencies: Personnel who require emergency medical evacuation will be transported to DDEAMC. Units should contact Range Control by LMR, the 911 center monitors that Net. Range or IOC will call immediately to 911 and assist in guiding emergency services to training site. In case of life threatening emergency and Unit's call 911, be advised that some cell phones may connect to local County 911 centers and not Fort Gordon's 911. The units need to ensure that all personnel participating and support training know to ask for the Fort Gordon 911 because depending on your location throughout Training Complex local County 911 may not be able to find your locations. That's why you need to make sure that the unit gets the Fort Gordon 911. They can also call the Fort Gordon MP station and dispatch at 706-791-4380.

(2) Emergency Signals: Because of the possibility of injury, we recommend that all personnel negotiating the course carry with them some sort of noise device (e.g. Whistle, air horn). The universal emergency signal is three load rapid burst from a whistle or air horn that someone need assistance. They need to locate to report back to the OIC and then assists in locating that person. All units ensure emergency signals are in your safety briefing.

(3) Units will ensure they observe heat category precautions. When heat category reaches 4 and above, units will utilize buddy teams for all participants.

(4) Heat is the biggest problem for safety in our Training Complex is dehydration. In addition to being a severe problem in its own right, dehydration is often a contributing factor in accidents. Therefore, drink water before you begin and at every point. Additional water is available in the start point area. We recommend you insure your people drink their first canteens completely and refill them prior to beginning the course.

(5) In Case of Injury: Remain calm and stay where you are. Make noise (at this time cover what your emergency signals are) to alert someone that you have a problem. That person will return to the start point area where an emergency vehicle is located and get help. If you hear three load rapid burst from a whistle or air horn that someone need assistance. They need to locate that person and report back to the OIC for assistance.

(6) In case you become disoriented and don't know how to continue the panic azimuth for the Land Navigation course. Once the service member comes to a surfaced road they wait for assistance.

(7) Smoking: No smoking permitted on the course. The closest smoking areas are to be located at start/finish point.

(8) Course Boundaries: The chain link fences, which define the Reservation boundaries, are the boundaries for the Land Navigation Course. Do not cross any chain link fences. Do not cross any

paved road.

(9) Plants and Animals: Do not disturb any of the plants or animals you may see on the course. Some of them may be poisonous. Is there anyone who is allergic to bee stings? If there is, insure that they have their bee sting kit. From time to time we do have some beehives on and around the course. If bees attack you, run away as fast and you can and keep running until you are away from them. If you are bitten by a snake: Note the Snake's Appearance. Be ready to describe the snake to emergency staff and take the following actions:

- Keep affected area below the heart.
- Keep calm to keep venom from spreading.
- Cover the wound with loose, sterile bandage.
- Do NOT allow the person to become over-exerted. If necessary, carry the person to safety.
- Do NOT Cut a bite wound
- Do NOT Attempt to suck out venom
- Do NOT Apply tourniquet, ice, or water
- Do NOT Give the person alcohol or caffeinated drinks
- Do NOT give the person stimulants or pain medications unless a doctor tells you to do so.
- Do NOT give the person anything by mouth.
- Do NOT raise the site of the bite above the level of the person's heart.

Chapter 6

Training Accidents/Incidents

6-1. General

Although Range Control and units take precautions, accidents and incidents may still occur. This chapter addresses the areas of ammunition/weapon malfunctions, personnel injuries and illnesses, fires, vehicle accidents, erratic round procedures, environmental spills, and radiation. Some incidents may involve one or more of these areas. Failure to report accidents and incidents will likely result in de-certification of OIC and RSO and slow MEDEVAC procedures.

6-2. Accidents

a. Reporting.

(1) Prompt reporting is essential to accident investigation and prevention efforts.

(a) Different types of accidents have different reporting timelines even if the accident outcome is not severe.

(b) Prompt reporting permits timely investigation before the compromise of evidence to determine the root cause.

(c) Leaders can implement measures learned during the course of the investigation to prevent additional mishaps throughout the force.

(2) Accidents are classified according to the degree of injury suffered or the monetary value of the equipment or facility damaged. A partial definition of accident classes is listed below.

(a) Class A accident - accident that results in the loss of life or a permanent total disability.

(b) Class B accident - accident that results in a partial disability.

(c) Class C accident - accident results in a lost time injury.

(d) Class D accident - accident results in a non-fatal injury or illness resulting in restricted work, transfer to another job and medical treatment greater than first aid.

(3) When notified of an accident, ISO will determine a preliminary classification and will base accident responses below in para 6-2b (2) (4).

(a) Procedures.

(1) Either ISO or higher headquarters will formally investigate Class A or B accidents.

(2) Commanders of units training at Fort Gordon, or their designated representative, will investigate unit accidents and prepare a DA Form 285-AB, U.S. Army Abbreviated Ground Accident Report (AGAR), for each Class C and D accident involving injury to Service Members or damage to material or facilities. Submit the AGAR to the Fort Gordon ISO within one working day of the accident.

(3) Commanders and supervisors of Service Members assigned to Fort Gordon or other

activities will report accidents involving unit and organizational personnel using the DA Form 285-AB.

(4) Emergency Services personnel will secure the scene of Class A and B accidents until released by Fort Gordon Safety Office to ensure evidence needed by the accident investigation board remains undisturbed. Evacuate accident victims to receive further medical treatment as necessary. In the case of Class C and D accidents, the unit will secure the scene and protect the evidence until ISO or DES personnel release them.

(5) When requested, ISO will assist units conducting an investigation, report accidents through the appropriate chain of command, and ensure that FM Form 354 accurately describes the sequence of events, accident cause, and corrective measures.

(b) Units must take the following actions in case of accident.

(1) Step 1. Assist the injured. Call 911.

(2) Step 2. Isolate and secure the accident scene, prevent indiscriminate entry by casual on-lookers, control traffic.

(3) Step 3. Notify the Fire Desk of the accident. Request DES/MEDEVAC assistance as needed.

6-3. Ammunition/Weapon Malfunctions

QASAS, ASP, and/or Range Safety will investigate ammo malfunctions for all firing weapons.

a. Unit personnel must not remove a loaded weapon from the firing line.

b. The OIC will perform the tasks below.

(1) When malfunctions or accidents involving weapons or munitions occur, the OIC actions are.

(a) Places the range in a cease fire status.

(b) Reports the incident, location and actions taken to the Fire Desk.

(c) Requests medical support, if necessary. **DO NOT MOVE INJURED PERSONNEL UNTIL MEDICAL ASSISTANCE ARRIVES EXCEPT TO PREVENT FURTHER INJURY.** Certified Combat Medics, 68W, are valid medical assistance to provide point of injury care, just as they would do in combat.

(d) Requests other agencies, if necessary (e.g., Fire Department, EOD).

(e) Secures and preserves the scene. Renders weapons and ammunition safe without unnecessary tampering. Keeps personnel out of the immediate scene.

(f) Completes an Accident/Incident Report, FM Form 354 at the Fire Desk.

(1) For incidents caused by a malfunctioning ammunition item, the OIC will complete DA Form 4379, Ammunition Malfunction Report, or DA Form 4379-1, Missile and Rocket Malfunction Report, for missiles. Units can obtain a formatted, blank report from the ASP.

(2) For ammunition malfunctions that result in damage to weapons or injury to personnel, treat the injured and secure and preserve the accident scene. An investigation team consisting of representatives from the ISO, QASAS or ASP will assume control of the accident site upon arrival.

(3) All personnel who witnessed the event, if not injured, will remain in place until Fort Gordon Safety personnel arrive. These include, but are not limited to, the OIC, RSO, NCOIC, and Assistant Safety Officers.

c. A Training Accident Incident Report (TAIR) or 5-W accident report will be completed by the OIC at the Fire Desk and must include the following.

(1) Weapon system/ammunition.

(2) Lot/serial numbers involved.

(3) Charge if applicable.

(4) Quadrant elevation if applicable.

(5) Time setting for fuses.

(6) Corrective action taken by unit.

6-4. Negligent Discharge

a. Definitions. The discharge of a weapon caused by failure to observe basic safety rules, lack of reasonable precaution and/or loss of situational awareness.

b. Cease training immediately on that facility and report all negligent discharges to the Fire Desk. Range Control will dispatch the Installation Range Safety specialist to investigate the incident. The Range Safety specialist will forward their findings report to the RO and ISO.

6-5. Personnel Injuries and Illness

Units will report any injury or illness requiring MEDEVAC to the Fire Desk IAW Chapter 4.

6-6. Fires

a. When fires start on the Range Complex, the OIC will report the fire to the Fire Desk immediately. This report should include the following details.

- (1) Location of the fire.
- (2) Extent of the fire.
- (3) Actions taken by the unit.

b. The OIC takes further instructions from the Fire Desk.

c. Fires started on Ranges and down range will be reported immediately to Fire Desk. No one will go down range to control fires until a cease fire has been declared on all applicable ranges and a clearance has been given by Range Control. Under no circumstances will anyone go into a known UXO area to fight fires without the proper authorization.

6-7. Erratic Round Procedures

a. Definition. Any projectile that lands outside the safety limits of the firing unit. Erratic rounds are normally from artillery or mortars, but can occur with any weapon.

b. Anyone observing an erratic round must report the incident to the Fire Desk with the following information.

- (1) Name, grade, and unit of person reporting.
- (2) Location of the observer.
- (3) Injury to personnel or equipment, if any.
- (4) Date/time the erratic round was observed.
- (5) Number of rounds observed.
- (6) If artillery/mortars, location of burst. Was the burst ground or air? If air, what was the height of burst?
- (7) Origin of erratic round, if known.

c. After getting an erratic round report, the Fire Desk will announce **CEASE FIRE FREEZE, CEASE FIRE FREEZE, THIS IS THE FORT Gordon FIRE DESK, CEASE FIRE FREEZE**. All units must acknowledge the call with the firing facility number and initials of the person receiving the call.

d. All units must immediately implement a cease-fire. Do not touch or adjust any weapons and equipment except to render them safe. Move all personnel to the rear of their weapons. Artillery/mortar units must report any rounds in hot tubes to the Fire Desk. The Fire Desk will then determine what the unit can do.

e. The Fire Desk will then allow selected ranges to resume firing based on the erratic round report.

f. The FDC will prepare and send the following information when requested by the Fire Desk.

- (1) Time of last round fired.
- (2) Azimuth of firing.
- (3) Deflection fired.
- (4) Charge used.
- (5) Caliber and type of weapon fired.
- (6) Type of fuse fired.
- (7) Time set on time fuses.
- (8) Target location.

g. The Fire Desk must make contact with the battalion commander of the responsible unit. The battalion commander should initiate an investigation. The Range Officer will determine further actions.

6-8. Spills

If a POL or other hazardous material enters surface waters (waterway, drains) and causes a sheen/film, regardless of the amount, or any spill directly onto the ground/soil, immediately do the following:

- a. Report to the Fire Desk or if in Cantonment report to DES call 911.
 - (1) The estimated size/volume of the spill.
 - (2) The location.
 - (3) The type of material spilled.
 - (4) Time of the spill.

- b. Take immediate action to control, contain, and clean up the spill, if safety permits. The Fire Desk will notify the fire department and the DPW ED. These organizations will come to the site and direct the unit on what steps to take for the spill.
- c. Units will remain at the spill site until cleared by the DPW ED, Fort Gordon Fire Department, or the Fire Desk.
- d. The OIC completes the 5W report and turns it into the Fire Desk. For hazardous material spills of less than one gallon on land, units will take the following steps.
 - (1) Notify the Fire Desk of spill per para 6-8 a(1) above.
 - (2) Wipe off vehicle or equipment surfaces to remove spill fluids.
 - (3) Any soils contaminated by the spill should be dug up and placed in a double lined plastic bag.
 - (4) Double bag any contaminated disposable materials used to help clean up the spill.
 - (5) Dispose of contaminated rags /disposable materials at the Hazardous Materials Collection Point (HMCP), Bldg. 10604. Any drums or other disposal containers needed must be provided by the unit.

6-9. Radiation

- a. Due to the Army's NBC equipment, artillery collimators, and other items containing radiation sources, there is a requirement to report radiation incidents. Whenever one of these items is missing or broken, the unit must contact the Fire Desk.
- b. Units using equipment containing radioactive material will provide Fort Gordon Fire Department, DPW ED, and Radiation Protection Officer, located at the ISO, copies of Safety Data Sheets (SDS) (formerly known as Material Safety Data Sheets (MSDS)) in advance of training. The Radiation Protection Officer at (706) 791-0172 is the lead person in these instances.

6-10. Missing Service Members/Person in Fort Gordon Training Complex.

PURPOSE. To outline procedures to be followed when Service Members/Persons become lost or missing during training.

- a. Accountability of Service Members/persons is a primary task of all leaders and the responsibility of the chain of command. Maintaining accurate accountability and control of Service Members/persons will minimize the possibility of lost Service Members in all field training environments to include Live Fire Ranges. Land Navigation exercises, Situational Training Exercises (STX), MEDWARS, MWR events, individual/team movements and night tactical training are examples of training with increased risk of lost Service Members. For this reason, all leaders must be familiar with Missing/Lost Soldier procedures.
- b. Prior to every military exercise an L hour will be designated. L hour is defined as the designated time that Service Members are scheduled to return from the exercise. In tactical events, units may have multiple L-Hours sequenced by phases of operation or by normal accountability within their OPLAN. Designated OICs associated with MWR or other non-military events within the Fort Gordon Range and Training Land Complex, will provide a basic missing person plan prior to the scheduled event in their CONOPs and will be briefed during event safety briefing and documented on DD Form 2977.
- c. Once someone is determined to be missing the OIC/RSO or alternate safety personnel will immediately cease training. Missing is defined as personnel who have not returned to the designated point(s) by L-Hour.
- d. The OIC/RSO on site will notify Range Control or Installation Operations Center (IOC), whichever one is the Net Control Station (NCS) on the Range LMR channel, immediately when someone is missing, lost, or unaccounted for. The OIC/RSO, Range Control, or IOC will notify DES immediately via 911.
- e. The OIC will use all resource on hand to start the search for the missing person. The support personnel and training Service Members will start the search in buddy teams.
- f. Range Control Officer will make determination if other Live-Fire ranges or adjacent training needs to be suspended. These decisions will depend on the last known location of the lost/missing soldier or person.
- g. Range Control will notify the IOC and request on-hand assets from DES Conservation Law Enforcement Officers (CLEO), DPW Natural Resource Branch, and Range personnel to assist with search as well as aid Unit with all terrain vehicles. If Range Control is off duty, the IOC will notify Range Officer to recall available personnel. The IOC will notify 911 and request DES response.
- h. DES will respond with a liaison initially and join a unified command structure with the unit and

Range Division. DES will be prepared to expand support as needed.

i. Units will have a plan, prior to training, on internal procedures such as assigned safety in area of operations, search zones, etc. Lost Soldier procedures will be included in the risk management worksheet for all training where the possibility of a lost Soldier exists. Example: during Land Navigation course, units will assign safety personnel at designated points or key roads to monitor personnel during training. Each Training exercise requires a CONOPS plan and Units' will develop a basic search plan with an increased risk of "Lost Service Members" ICW their CONOPS. The search plan will be developed prior to initiating training, and will include the following information.

- (1) Identify boundaries of the exercise area.
- (2) Unit Communication plan/network will be established.
- (3) Develop a signal plan. The Fort Gordon universal emergency signal is three loud rapid burst from a whistle or air horn that someone need assistance. This emergency signal plan will be used by all Units within Fort Gordon Training Complex. They need to locate to report back to the OIC and then assists in locating that person. All units ensure emergency signals are in your safety briefing.
- (4) Establish accountability procedures.
- (5) Construct a "Search Plan" sketch.
- (6) Develop a decision timeline.
- (7) All Service Members will be briefed on exercise boundaries, panic azimuths or rally points, the signal plan, and decision timeline that will be used and individual actions to take if they become lost. The leadership on site will be familiar with accountability procedures, the standard search plan and the L hour sequence.

j. IC will notify Range Control/OIC on any updates every 15 minutes.

k. Unit "L Hour Sequence" for a Lost Service Member/Student during a Land Navigation/Terrain Association, Field Training Exercise (FTX), Situational Training Exercise (STX), and Live-Fire Ranges.

l. Every exercise will be given an L-hour. L-hour is defined as the designated time that the last Service Members/students was scheduled to return from the mission exercise. The designated return time will be given to all Service Members/students prior to the initialization of the mission/exercise (the "drop dead time").

m. "L" Hour activities will include.

(1) The OIC or RSO will get an accurate count of all Service Members/students present, determine the names of the late/lost Service Members/students, and move the remainder of the Service Members/students to a controlled area. Each unit will have at least one Safety to rove the boundary roads and the trail network inside the boundaries. Additional Unit assets will search for late/lost Service Members/students controlled by OIC/RSO.

(2) The Unit OIC/RSO will notify Range Control immediately then notify the BN and BDE chain of Command of the lost Service Members/students.

(3) The Unit OIC/RSO will determine the route taken by the Service Members/students by examining any sign-in sheets, pre-plotted points and routes or azimuths. It is recommended that Units have land navigation participants provide their planned course of action on points assigned before starting course.

n. Steps to be taken NLT L + 15 min.

- (1) Conduct by-name accountability of all Service Members who completed the course.
- (2) Initiate vehicle search for stragglers making their way in from the course.
- (3) Ensure communication between the site OIC/RSO and the search vehicle.

o. Range Control will immediately notify the following agencies.

(1) Installation Operations Center, 706-791-9747/9748. The IOC will coordinate Installation support and activation of the Emergency Operations Center to support the onsite Unified Incident Command Post (UICP) ICW the Incident Commander. EOC will be prepared to (BPT) request DES/CID Cell Phone trace support, RCSD divers, RCSD K9, FLIR aircraft support from Georgia State Patrol (GSP) if required by the Incident Commander. Installation Operation Center initiates SIR procedures IAW SOPs. The EOC OIC activates applicable EOC LNOs and issues a BPT order to the Installation Support Detachment potential support missions (lights, water and meal delivery, etc.)

(2) Directorate of Emergency Services, 911. The DES will dispatch LE to the incident site and establish incident command. The IC will request or pass RFA to the DES or the EOC if activated, to request RCSD K9 team(s), divers and GSP FLIR aircraft to assist in the search and DES/CID for cell phone trace and / or FBI support. The initial DES, DPW and Range Division responders and the unit will

establish a unified command structure as soon as loss recovery actions are implemented.

(3) DPW - requesting Environmental and Forestry personnel and vehicles to assist with the initial search and support.

p. Steps to be taken NLT L+1.

(1) Search the following. Vehicles on site, buses, latrines, bleacher areas, wood line, and the entire immediate area. Utilize the soldier participants and chain of command to help accomplish this.

(2) Have remaining Service Members/students on site stay in one general area. Keep the Service Members/student chain of command informed of your actions. Ask the Service Members/students if anyone has seen the missing person and if so where and what time.

(3) Organize ground search teams (comprised of a minimum three Service Members with cadre). The IC (Search OIC) will give the groups a safety briefing including what to do if lost Soldier is injured. The search teams will be given maps and communication equipment. (i.e. handheld radios or cell phone numbers).

(4) Notify the Unit's Chain of Command of all information pertaining to the lost Soldier.

(5) IC sends report (5-W's) to Range Control/IOC and continues reporting every 15 minutes until Soldier is found.

(6) The OIC assumes control of search efforts until Unit Chain of Command establishes a BN/BDE Command Center.

(7) Continue vehicular search of the affected area.

(8) Brief Service Members/student chain of command on ground search procedures.

(9) Unit will conduct Intelligence Preparation of the Battlefield (IPB) based on lost Soldier's projected route. The chain of command will attempt to determine hazards or roads the lost Soldier may follow or cross in order to focus initial search effort.

(10) Be prepared to expand vehicular search in anticipation of lost Soldier trying to walk the roads to safety.

(11) Expanding ground / air search procedures. The Incident Commander (IC) will give ground / air search teams an updated mission briefing which will include the lost Soldier's name, general description, search efforts to date, timeline for future search efforts (helicopter and dog teams), and a designated stop time and coordination point for the search. The ground search teams will receive an azimuth and distance to travel from a designated start point and check all the streams and low ground along their route. Vehicle searches will augment buddy team searches initiated. Vehicle searches will be incorporated into the developing search plan by the UICP and will commence along applicable training area(s) interior and boundary trails and roads. Plans will be initiated for water searches as applicable. If a ground search team finds the lost Soldier, they are to administer first aid and move immediately to the nearest road or trail. This briefing will be repeated as often as necessary as new capabilities and forces arrive.

(12) DES, DPTMS, DPW and the units will BPT to expand responder support to the escalating incident. Continue to refine the Unified Command structure with the applicable stakeholders.

q. Actions to be taken NLT L + 2.

(1) Continue the above listed efforts.

(2) Continue to provide SITREPs to IOC and Chain of Command, and Range Control every 15 minutes.

(3) Request any other additional search assets if available from Installation, Local community, or State agencies.

r. Actions to be taken NLT L + 3.

(1) Continue the above listed efforts.

(2) Continue to provide SITREPs to IOC and Chain of Command, and Range Control every 15 minutes.

(3) Request any other additional search assets if available from Installation, Local community, or State agencies.

s. Actions after Missing Person is Found.

(1) Search team who finds missing person reports location and initial assessment of individual. Report is to Range Control/IOC if before L+1 or Incident Command Post once established.

(2) Administers first aid as necessary.

(3) Request required support assets, MEDEVAC, Recovery equipment and Transport vehicles.

(4) Report updated status of found person.

- (5) Net Call to Halt all search operations, instruct all search teams to hold in place until required assets can get to incident site, if required.
- (6) ICP dispatches required assets to found location as required.
- (7) Search team evacuate person to nearest transport site, if location is inaccessible to MEDVAC vehicle.
- (8) Once MEDVAC or required transport arrives and clear of Training area start calling back all search teams to Assemble Area.
- (9) All personnel, except accounted MEDVAC, will remain in Assemble area.
- (10) IOC TOC will report to IOC so leadership can be notified.
- (11) 100% accountability of personnel and equipment will be conducted and reported to ICP.
- (12) After full accountability IC Chief and Senior Leader from Unit will release search assets not required after conduct of the Incident De-escalation briefing with the Garrison Commander.
- (13) Unit Commander will submit SIR to IOC and any other required reports such as appropriate accident reports based on type incident, and will direct logs and other documents be retained for investigation.

Chapter 7

Ammunition

7-1. General

- a. Fort Gordon prohibits the alteration or modification of any explosive item or ammunition including delinking tracers from ball ammunition without authorization IAW AR 385-63, Chapter 2, para 2-3.
- b. Units must report to the Fire Desk any unusual conditions not covered by this regulation or when unit personnel believe Ammunition and explosives (AMMUNITION AND EXPLOSIVE) are dangerous to handle or store. Units should suspend operations and evacuate personnel from the dangerous area.
- c. Units must train personnel about AMMUNITION AND EXPLOSIVE to include potential hazards, standards, procedures, and precautions that apply.

7-2. Fire Prevention, Protection, and Suppression

- a. No smoking within 50 feet of any ammunition. The unit must provide at least one fire extinguisher with a 1A or greater rating at each ammunition storage/transfer site.
- b. Post a "No Smoking" sign 50 feet from each entrance to an explosive storage area.
- c. AMMUNITION AND EXPLOSIVE placed on the ground will have a five foot (minimum) area cleared of all combustible materials. Units must provide at least two serviceable fire extinguishers for AMMUNITION AND EXPLOSIVE on the ground.
- d. Conduct vehicle refueling at least 100 feet from any AMMUNITION AND EXPLOSIVE location. Park fuel service vehicles no closer than 100 feet from any AMMUNITION AND EXPLOSIVE location or operation.
- e. Do not park vehicles closer than 100 feet of class I and II AMMUNITION AND EXPLOSIVE.
- f. Separate empty boxes, dunnage, and combustible packing material a minimum of 25 feet from AMMUNITION AND EXPLOSIVE.
- g. Do not refuel AMMUNITION AND EXPLOSIVE laden vehicles until the engine has cooled for at least 10 minutes.

7-3. Storage, Handling, And Security

- a. Units must store, handle and secure ammunition IAW AR 190-11, AR 385-63, DA Pam 385-63, DA Pam 385-64, Ammunition and explosives Safety Standards, Fort Gordon ASP SOP, this regulation, and the appropriate FM/TM for each weapon system.
- b. Do not leave ammunition unattended. At minimum, units will post an armed guard on ammunition. For CAT I and II ammunition, units must post an armed guard who has qualified with his/her assigned weapon within the previous twelve months and has received the training outlined in para 1-7. CAT I and II ammunition consists of items such as AT-4s, Javelins, Tube launched, optically tracked, Wire-guided (TOW), fragmentation grenades, and most demolition items. A complete list is found in the LRC-SOP-E- 002, Ammunition Supply Point.

c. Units will occupy a site within the Range Complex NLT two hours after ammunition draw. Once units draw ammunition and explosives from the ASP, they are responsible for protecting those assets IAW all applicable regulations. Store ammunition & explosives prior, during, and after training IAW DA Pam 385-64 and this regulation. Units may store ammunition and explosives outside the ASP when the following conditions exist.

(1) At the range or training facility reserved in RFMSS with at least two personnel, one of which must be a Non-Commissioned Officer, E-6 or above. Units will not schedule ranges to use as overnight ammo holding sites.

(2) At a properly sited and licensed explosive storage location. The Installation Safety Office (ISO), (706) 791-0172, issues temporary explosive site licenses at Fort Gordon. Range Safety/Scheduling determines what range(s) are acceptable for units to store ammunition & explosives in a field environment. The following information is required by ISO to process a request for field storage of ammunition & explosives.

(a) Memorandum of request signed by the Commander which includes an eight digit grid coordinate of the proposed ammunition and explosives storage (the location must already be approved through Range Safety and range Scheduling), the dates of ammunition will be stored, type(s) of ammunition by DODIC, and quantities of DODIC.

(b) Risk assessment signed by Commander for ammunition and explosives operations.

(c) Units will notify the Fire Desk of storage location and type of ammunition and explosives and maintain FM communication with the Fire Desk.

(d) If storing ammunition on the ground, ensure the space is level and drains well. Store the ammunition on top of dunnage so there is at least three inches of air space between the ground and ammunition and explosive. Cover ammunition and explosive stacks with a waterproof fire resistant tarp.

(e) Do not expose ammunition to direct sunlight.

(f) Units may choose to store ammunition in the unit's vehicles or trailers. Do not allow personnel to sleep within interline distance from ammunition and explosive laden vehicles or ammunition and explosives stored on the ground. This distance will vary according to quantity distance (QD) tables listed in DA Pam 385-64 but never less than 50 feet. Do not unpack any more ammunition and explosive than necessary for immediate mission requirements. Save all packing material, so that unit personnel can repack the remaining Ammunition and explosives prior to return to the ASP. The ASP may credit the ammunition as unserviceable if the unit attempts to return ammunition not packaged in the proper packing material.

(g) Maintain ammunition lot integrity at all times.

7-4. Positioning and Issuance

All ammunition is to remain outside of back-blast areas. Store ammunition in the ammunition breakdown buildings on ranges equipped with one. Ammunition breakdown building are for Hazard class 1.4 only.

a. Issue ammunition to firing personnel immediately before the conduct of live-firing exercises. At no time will unit safety personnel allow personnel with ammunition and weapon behind the firing line.

b. Units should only unpack enough ammunition to support the training event.

7-5. Transportation of Ammunition and Explosives

a. Before transporting ammunition on Fort Gordon, unit personnel must attend the Hazardous Materials (HAZMAT) Safety Course given by the Fort Gordon TMP or other recognized course. LRC-SOP-E-002, <https://www.us.army.mil/suite/doc/48987740> lists additional HAZMAT requirements.

b. Handle containers carefully. Do not drop or throw them around.

c. Block and brace ammunition during all phases of transportation.

d. Do not transport trash or other extraneous materials with ammunition.

e. ASP personnel inspect vehicles and issue a DD Form 626 (Motor Vehicle Inspection Transporting Hazardous Material) for vehicles meeting the safety requirements.

f. Emplace and maintain warning sign placards on vehicles while ammunition & explosives

g. Fort Gordon has an ammunition/hazardous cargo route. The ASP has copies of a map with the approved route. All transportation of ammunition & explosives on Fort Gordon must use this route.

EXPLOSIVE-LADEN VEHICLES ARE PROHIBITED IN THE CANTONMENT AREA.

h. Units must not transport ammunition, pyrotechnics, explosives or weapons by POV.

i. Do not allow personnel to ride in the beds of vehicles transporting ammunition.

7-6. Ammunition Restrictions

- a. Fort Gordon prohibits the use of Improved Conventional Munitions (ICM).
- b. Do not fire blank ammunition at personnel closer than 5 meters. Units must use blank firing adapters to fire blank ammunition. Units must inspect ammunition to ensure there is no mix of blank and live rounds. If live rounds are found during a training event Units must do the following.
 - (1) Unit will immediately stop training and initiate a rigorous inspection (shake-down) of all weapons, magazines and ammunition storage areas containing unit ammunition.
 - (2) OIC will immediately report incident to the Fire Desk. The Fire Desk will notify both RSS and QASAS.
 - (3) Only the Range Officer or his direct representative will authorize the unit to resume training.
 - (a) Do not store blank ammunition in same location with tactical (non-blank) ammunition.
 - (b) Units must not pull tracer rounds from functionally linked ammunition.
 - (c) Always check the fire danger which may preclude the use of tracers depending on the fire danger classification.

7-7. Missing Ammunition

If units discover that ammunition or weapons are missing, they must notify the Fire Desk immediately. The Fire Desk will notify DES, the Range Officer, and the Director, DPTMS.

7-8. Pyrotechnics

Units must train all personnel that use pyrotechnics in their use and handling procedures. Leaders must supervise the use of pyrotechnics at all times.

7-9. SIM-Munitions

Units who wish to use sim-munitions within the facilities and training areas in Appendix C must submit a NSTR through Range Scheduling IAW para 5-27 of this regulation. Even with sim-munitions, units must obtain a HOT time from the Fire Desk prior to firing.

7-10. Amnesty Boxes

In compliance with the Fort Gordon Amnesty Program, Range Control provides one amnesty box location for small arms ammunition, .50 Cal and smaller. Amnesty Box is located next to Range Control at building 81200. The Fort Gordon Amnesty Program is not a substitute for normal turn-in procedures.

Chapter 8

Indirect Fire Weapon Systems

8-1. General

Indirect Fire is not common to Fort Gordon, and because of this it requires the submission of an NSTR. Refer to para 5-27 for and non- standard training request process.

8-2. Command Safety Certification

- a. IAW AR 385-63, Field Artillery Battalion/Squadron Commanders will establish a safety certification training program to train and certify personnel in safety procedures for their specific area of responsibility. Do not assign personnel who have not completed the Commander's safety certification training responsibility for any area of the overall safety procedures.
- b. Unit Commanders will ensure personnel appointed as OIC or RSO are in compliance with AR 385-63 and this publication.
- c. Prior to HOT status, Range Control will collect Indirect Fire OIC/Safety Officer Checklist from the OIC and ensure that the unit posted the Indirect Fire Safety Diagram (IFSD) worksheet with the control number on site. A copy of the checklist will be given to the unit once the NSTR is approved.

8-3. Indirect Fire Safety Briefing

In addition to the standard safety briefing, the OIC/RSO will cover the following topics.

- a. Prevention, to include road guard requirements, of non-participating units from entering within

350 meters of Area E as well as maintaining a minimum safe distance of 350 meters from firing artillery.
Note. In regards to approved firing areas, Range Control will close the training complex to public activities such as hunting, fishing, berry-picking, etc.

- (1) Steps to take in the event of an ammunition mishap.
- (2) Dangers of ammunition tampering.
- (3) Minimum uniform requirements around firing weapon systems.
- (4) Procedures when receiving the command "CEASE FIRE FREEZE."
- (5) Handling and firing ammunition.
- (6) Proper ammunition storage.
- (7) Designated smoking area.

8-4. Declination

- a. Units will declinate aiming circles and M2 compasses within the 48 hours prior to the first date of occupation before firing. Units will declinate this equipment again when requirements dictate.
- b. The Fort Gordon Target Listing, maintained by Range Scheduling.
- c. The Range Officer will de-certify the OIC and RSO for failing to use declinated equipment.

8-5. Lay of the Unit

- a. Units will use two independent means to lay and verify lay. Units will lay with Digital Fire Control System, Gun Laying and Positioning System/Aiming Circle on surveyed data or with declinated aiming circle.
- b. Units using the Digital Fire Control System will verify lay with one of the following.
 - (1) M2 Compass.
 - (2) Declinated Aiming Circle.
 - (3) GLPS.
 - (4) Independent DAGR.
- c. Units not using Digital Fire Control System will verify lay with one of the following.
 - (1) Declinated Aiming Circle.
 - (2) GLPS.
 - (3) Independent DAGR.
- d. Units must set up the safety circle a minimum of 10 meters from the primary means of lay.
- e. When the lay circle is a M67 GLPS (Precision Lightweight GPS Receiver aided) or M2 Aiming Circle using surveyed data, the safety circle is set up magnetically. The lay of the safety circle must check within +/- 10 mils of the lay circle deflection.
- f. The tolerance between safety circle and gun/tube must be within +/- two mils.
- g. Units must use a properly declinated compass to verify the azimuth of fire for each howitzer/tube.
- h. Range Control will not issue a HOT status to any unit not using two different methods. The Range Officer will de-certify the OIC and RSO of any unit firing without two different methods for lay and verification of lay. Unit commander must correct the issue and assign a new OIC and RSO before Range Control re-issues a HOT status.
- i. Units desiring to utilize another means of lay to fire will submit an exception to policy request with supporting documentation to Range Scheduling NLT 30 days prior to the date of training.

8-6. Boresight

- a. Units will boresight according to the FMs/TMs for the weapon system.
- b. Units will not manually fire guns/tubes that they were unable to boresight.
- c. Units will revert back to manual lay if digital capability is lost.

8-7. Safety Diagrams

Installation Range Safety will generate safety cards based off information provided by unit on the IFSD.

- a. Units requesting firing areas will submit the IFSD worksheet along with an NSTR to Range Scheduling NLT 45 days prior to training event; refer to para 5-27 for NSTR requirements.
- b. Units will need the following information to fill out the IFSD worksheet.

- (1) Unit designation.
- (2) Type weapon system.
- (3) Type ammunition by nomenclature and Department of Defense Identification Code (DODIC).
- (4) Fuse, powder, and charge.
- (5) Grid for battery/platoon center.
- (6) Diagram.
- (7) Maximum and minimum ranges to include doglegs.
- (8) Left and right azimuths to include doglegs.
- (9) Maximum ordinate in feet.
- (10) Azimuth of fire.

(a) Range Control will review the IFSD worksheet and NSTR. If approved, Range Control will assign a control number. Range Scheduling will send approval with control number back to the unit and post this number in RFMSS in the event column.

(b) OIC will post approved safety diagrams (standard and non-standard) on the unit's safety chart for manual computing and/or the operations map for computer operations.

8-8. Ammunition

a. Unit commanders will adhere to directives in AR 385-63, DA Pam 385-63, ATP 3-09.50, Field Artillery Cannon Battery, TM 43-0001-28, Army Ammunition Data Sheets Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40mm Grenade Launchers (Federal Supply Class 1310, 1315, 1320, 1390), FM 3-21.90, and the appropriate weapons operator's manual and ensure appointed OICs enforce these directives.

b. Unit commanders and appointed OICs will ensure the following Fort Gordon directives are enforced.

- (1) Unless approved by the RO, units will only fire artillery ammunition approved for overhead fire.
- (2) Units will not fire a round without a fuse.
- (3) Units will store ammunition IAW unit SOP and in a manner that meets the minimum requirements in chapter 7.
- (4) Seat fuses with the correct fuse wrench or fusing device only.
- (5) Do not leave ammunition and/or residue powder increments unattended nor pre-cut charges.
- (6) Do not pre-set time fuses unless the ASP issues time fuses in lieu of point detonating (PD) fuses. Commanders may then authorize crews to pre-set time fuses to PD.

c. Ammunition Restrictions.

- (1) Fort Gordon prohibits the use of white phosphorus ammunition.
- (2) Fort Gordon prohibits use of ICM.
- (3) All parts of illumination rounds must impact in the impact area.

d. Refer to chapter 7 for more information.

8-9. Erratic Round Procedures

Refer to para 6-7 for erratic round procedures.

8-10. Powder

OIC will enforce the following directives.

- a. Store and mark excess powder increments distinctively to prevent accidental igniting of the powder.
- b. Burn excess powder IAW ATP 3-09.50/MCWP 3-1.6.23 on the firing point in an area cleared of all flammable material. Do not transport excess powder.
- c. Request permission from Fire Desk to burn powder when the fire restriction is moderate or high.
- d. Assign a NCO and a minimum of one other individual to the burn detail.
- e. Assigned personnel must have at least two fire extinguishers and shovels before igniting the powder.
- f. Assigned detail personnel must not use gasoline, kerosene, or other fuels to aid either the ignition or burning of powder.
- g. Notify the Fire Desk when the crew completes burning all the powder and has extinguished all flammable material.

8-11. Observation Point

- a. Unit commander will ensure the OIC is E-6 or above. If the personnel will employ lasers, provide an LRSO (E-6 or above) on site during laser operations.
- b. The OIC will post the approved IFSD worksheet for Range Control inspection and plot the safety diagram on the forward observer's (FO) map. OIC will ensure all targets fall within the safety diagram target box.
- c. OIC will maintain communications with Fire Desk and firing point/position area at all times. If clear communication is lost, the OIC must cease firing until he/she reestablishes clear communication with the Fire Desk.
- d. The FO must observe impact of all indirect rounds within the safety diagram target box. The OIC must report status of the first round impact. If the FO does not observe the first round as safe, the OIC will immediately cease fires and notify the Fire Desk. The Fire Desk will then decide whether to initiate erratic round procedures.
- e. During inclement weather in which the FO cannot observe rounds, the OIC must declare a check fire or employ Fire Finding Radar to continue training.
- f. Range Control has established a restricted fire area for 300 meters on either side of the roads that are running through the AIA.

8-12. MLRS/HIMARS Procedures

No MLRS/HIMARS live fire training at Fort Gordon, however units may conduct crew and other non-live fire related training in any training area within the range complex.

Chapter 9 Aircraft Operations

9-1. General

Conduct all aerial operations IAW AR 95-1, Flight Regulations, Fort Gordon Restricted Airspace Operations SOP, FAA Regulations and para 2-2 and 2-7.

9-2. Certifications

O-5 Commanders must certify all OICs, RSOs, and pilots of manned or unmanned systems prior to conducting any training or flight operations involving Fort Gordon airspace. See para 2-2 and 2-7 for specific certification instructions. IAW TC 1-600, Unmanned Aircraft System Commander's Guide and Aircrew Training Manual, all UAS Readiness Level 1 (RL 1) crewmembers must conduct a Local Area Orientation (LAO) flight before conducting flight operations at Fort Gordon. Unit commanders will submit a memorandum for record (MFR) to Range Scheduling listing those crewmembers who have completed their LAO. Refer to the RFMSS library for a template and example.

9-3. Aerial Medevac Support

All units desiring to provide aerial MEDEVAC support will contact Range Operations at (706) 791-5005.

9-4. Restrictions

- a. The Fort Gordon Aviation Special Map depicts "no fly" areas.
- b. For flight corridor altitudes/directions and restrictions see Fort Gordon Restricted Airspace Operations SOP.
- c. Do not leave rotary winged aircraft unattended on the cantonment area helipads except those performing the Fort Gordon MEDEVAC mission.

9-5. Flight Advisory Requirements

- a. All aerial gunnery live fire requests require the submission of a NSTR; refer to para 5-27.
- b. Aircraft must flight advise with the Fire Desk or Bush Airfield Tower when operating in Restricted Airspace R3004A/B/C. Refer to the Fort Gordon Restricted Airspace Operations for details.

9-6. Aircraft Communications

- a. Refer to chapter 3 and the Fort Gordon Restricted Airspace Operations SOP for details.
- b. Bush Airfield.
 - (1) 118.7 VHF (tower control) talk with aircraft on runway and in the air.
 - (2) 121.9 VHF (ground control) talk with aircraft on taxiway and runway.

9-7. Utilization of Aircraft within Fort Gordon Training Areas

- a. Unit Aviation Safety Officer must survey and authorize LZs IAW AR 95-1 prior to reserving the LZ in RFMSS. Units must submit the requests to establish landing zones no later than 45 days prior to requested date of use.
- b. Units must schedule all flight operations within the Fort Gordon restricted airspace through Range Scheduling even if barely penetrating the restricted airspace. Please refer to the Fort Gordon Restricted Airspace Operations SOP for further instructions and requirements.
- c. Aircraft operating within the Fort Gordon Cantonment Area must file flight plans with appropriate authorities and obtain a weather briefing.
- d. Aircraft operating within the Fort Gordon training areas should contact Bush Air Traffic Control Tower whenever a flight enters the Class D area.
- e. Units must fly under visual flight rules (VFR) conditions for tactical aircraft operations within the Fort Gordon boundary.
- f. Units will not fly under instrument flight rules (IFR) conditions during tactical aircraft operations except special visual flight rules (SVFR) within the Augusta Regional at Bush Field Class D surface area.

9-8. Aerial Live Fire Operations

- a. Units desiring to conduct fixed wing live fire operations on Fort Gordon must submit a NSTR along with an initial WDZ. Refer to the Fort Gordon Restricted Airspace Operations SOP for a listing of the NIA targets.
- b. Door Gunnery and limited rotary live fire is conducted in the AIA.
- c. Tactical weapons range procedures.
 - (1) Fixed wing aircraft can only enter and deliver ordnance into Restricted Area 3004A/B/C with a Forward Air Controller (FAC) (air or ground) as terminal control.
 - (2) All aircraft must remain outside the R3004A/B/C airspace until the Fire Desk permits entry.
 - (3) Emergency procedures. In the event a pilot inadvertently releases a weapon's pod or accidentally fires outside the specified target area, terminate all weapons delivery and notify the Fire Desk with coordinates, type of weapons involved, and type and quantity of ordnance.
- d. The Fort Gordon Restricted Airspace Operations SOP contains Range FAC instructions and can be obtained by contacting Range Scheduling, and will be presented to the unit at request.

9-9. Augusta Regional Airport at Bush Field

- a. Augusta Airport has two runways.
 - (1) Runway 17-35, overall 8001 feet x 150 feet.
 - (2) Runway 8-26, overall 6002 feet x 75 feet.
- b. Point of contact number for Airfield Operations is (706) 796-7206

9-10. TA37A Airstrip

- a. The air assault strip has one runway. The runway is 4,110 feet long and 90 feet wide overruns at each end.
- b. Runway weight limitation is unknown. The surface consists of compressed aggregate and sand. Fixed wing aviation units must ensure Combat Control Team (CCT) or other USAF approved control personnel inspect runway prior to aircraft landing and are present to control the landing. CCT will inspect the runway and taxiways before and after use and provide a serviceability update to the Fire Desk.
- c. The strip is off limits to all vehicles.
- d. The strip and adjacent berms are off limits to tactical fighting positions (vehicle and individual).
- e. Units must request use of the airstrip through Range Scheduling.
- f. If units conduct multiple landings, request through Range Scheduling to re-surface the runway.
- g. Emergency Procedures. Notify the Fire Desk with type aircraft, nature of emergency, number of

crew, type of weapons on board, and etc. The Fire Desk will notify DES 911 Center with emergency information for Fire and Emergency Services to respond.

Chapter 10

Laser and Radio Frequency Operations

10-1. General

- a. Treat laser systems like direct-fire, line-of-sight weapons. The commander must certify the OIC and RSO on the laser systems the unit intends to employ.
- b. The Range Officer only allows the use of lasers listed in TB Med 524, Occupational and Environmental Health: Control of Hazards to Health from Laser Radiation, series for use on Fort Gordon. The Range Officer may approve other lasers if there is a military published TM. If this is the case, submit an NSTR through Range Scheduling.
- c. Units must have a laser operations SOP and DD Form 2977 signed by the appropriate commander at the training site.
- d. Units must list type by nomenclature, class for all lasers for training, whether the unit will use filters on the laser, designated laser targets and the date/time of use. Units with Class 3R, 3B and 4 lasers must also delineate the nominal ocular hazard distance (NOHD) for each of these lasers. Unit commanders must address Class 1M, 2, 2M, 3R, 3B and 4 lasers in the DD Form 2977 due to the potential severity to the eyes receiving catastrophic trauma. Request for the use of MILES equipment only needs to state that the training personnel will use MILES.
- e. Laser training with classification of 3B and above will require a NSTR.
- f. Radio Frequency (RF). Brigade and higher command posts, field artillery radar units and signal units must provide the following details.
 - (1) A list of all RF hazard generating systems and frequencies used that exceed the maximum permissible exposure (MPE).
 - (2) The frequencies relative power density level in the main beam when outside the reactive near field boundary.
 - (3) The far field distance.
 - (4) Orders for the unit Radiation Safety Officer.
 - (5) Dates and times for use and locations.
 - (6) Specific implementation measures to protect personnel whether in the training area or cantonment.
- g. Units will include radiation and laser hazards in their DD Form 2977 and have it available on site. The DD Form 2977 signed by the appropriate level Commander must be part of a non-standard packet for all Class 3B and 4 laser usage as well as any RF system that generates a relative power density level in the main beam in excess of the MPE.

10-2. Hazards

- a. Lasers that are not eye safe can severely injure the unprotected eyes of individuals who view the laser beam directly or a beam that has been reflected off a flat mirror-like surface.
- b. Optical Devices.
 - (1) The Range Officer will not allow the use of optical devices to observe the target during laser operations unless the unit emplaces safety filters in the optical system. Utilizing optical devices with laser safety devices should be kept to a minimum.
 - (2) Mark all eyewear and filters with the optical density at the specifically designed wavelength.
 - (3) Select eyewear and filters IAW TB Med 524 tailored to the specific laser system.
 - (4) Units should inspect eyewear and filters for scratches, chips and cracks, maintain the equipment in a clean condition, and replace the equipment when no longer serviceable.

10-3. Safety Requirements

- a. Beam Termination. During laser operations, no portion of the laser beam can extend beyond the controlled target area or out of the impact area. Horizontal and vertical buffer zones ensure the laser

beam terminates in the controlled target area. Units should plan to use targets with a geographical backstop such as a hill unless the NOHD is within a controlled area.

b. Buffer Zones.

(1) Horizontal buffer zones extend to the right and left of the target and normally coincide with the right and left limits of the range.

(2) Vertical buffer zones extend down from the horizon. Establish vertical buffer zones IAW AR 385-63, Chapter 16. In those cases where an adequate vertical buffer zone does not exist but the NOHD stays within the impact area, the vertical buffer is the top of any approved target falling within the right and left limits of the range.

c. Training filters reduce the NOHD and greatly improve system safety to reduce but not always eliminate the hazard.

d. Do not operate or experiment with laser devices removed from the vehicle, unless the appropriate maintenance manual specifically authorizes it.

10-4. OIC

Each laser range must have an OIC (E-6 or above depending on other weapons systems used) responsible for all aspects of operations on the range. The unit commander must certify the OIC for laser safety.

10-5. LRSO

a. Each range utilizing lasers must have a LRSO (grade dependent on weapons being used per Appendix B), responsible for all aspects of laser safety on the range. The unit commander must certify the LRSO for laser safety. The LRSO may perform RSO duties.

b. The LRSO.

(1) Must be on the range at all times during laser operations and during all live fire training if dual-hatted as RSO.

(2) Conducts a safety briefing for all personnel on the range, both active participants and other personnel. This briefing includes, but is not limited to, an explanation of laser related safety hazards, safety devices, safety procedures and what to do if injured.

(3) Ensures operators use only designated targets that diffuse the laser beam (deleted reflectors) and that the operators do not exceed vertical buffer zones.

(4) Ensures operators do not engage flat specular (mirror-like) surfaces, such as target vehicle windshields or water filled craters.

(5) Allows no one forward of a laser once an operator uncovers the laser exit point.

(6) Ensures that lasers are not fired or experimented with outside the range area, the laser exit port is covered with an opaque dust cover, and the laser is disabled IAW the appropriate TM/FM governing the weapons system when not in use.

(7) Ensures personnel only use approved eyewear. LRSO must report immediately any case of suspected exposure of the eye to laser radiation. The Tri-Service Laser Injury Hotline at (800) 473-3549 or (937) 938-3764 provides expeditious medical guidance.

10-6. Off/On Range Travel

a. When traveling off range on tank trails or training areas, close and lock laser ports on vehicles so equipped. Close ballistic doors/covers on all other vehicles. Do not use lasers anywhere but on a range with an approved NSTR.

b. Once a vehicle or laser system arrives at an approved laser range, laser ports remain covered and the power off until the vehicle arrives at the firing line. Units may remove eye safe devices once the vehicle arrives at the range; however, keep the laser switch safety shield in place, the ballistic doors closed, and the power off until the vehicle arrives at the firing line. At the completion of firing, cover laser ports prior to leaving the firing line.

10-7. Operating Ranges

a. When opening a range where lasing is to take place, report the type of laser, name of LRSO and the other required opening information to the Fire Desk.

b. The LRSO and RSO may be the same individual; however, the unit commander must certify this person both for the laser and the weapon system.

- c. Do not fire the laser when standing water or reflective material is within 30 meters of the target area.
- d. Prior to lasing.
 - (1) The OIC must check with the Fire Desk to ensure there are no restrictions to lasing.
 - (2) The OIC/LRSO must check to ensure there are no personnel in the LSDZ.
 - (3) The OIC/LRSO must have a copy of the approved NSTR for Class 3B and above.
- e. During lasing.
 - (1) Maintain communications with the lasing section/vehicle at all times.
 - (2) Cease lasing immediately whenever any laser beam control measure is lost.
 - (3) Do not lase at any surface at a range of 20 meters or less, the only exception to this is the use of aiming pointers such as PEQ-2 or PEQ-15 for close quarter combat training.
 - (4) Fire lasers only at targets that are diffuse reflectors.
 - (5) Anyone observing an unsafe act or situation must immediately call for a cease-fire. Do not resume lasing until the LRSO has investigated the situation and declared it safe to lase.
 - (6) No one is permitted down range.
 - (7) Inclement weather and night operations require no additional safety requirements.
 - (8) Do not lase wildlife.
- f. After completion of lasing operations. Turn off the power to the laser and re-install the covers before leaving the firing line. LRSO will inspect and verify.

10-8. Airspace

While conducting laser operations, units must ensure that neither the laser beam nor the reflected beam approach an aircraft. Units must maintain situational awareness of all stray aircraft and cease firing weapons and lasers immediately when an aircraft approaches possible hazardous areas.

10-9. Multiple Integrated Laser Engagement System (MILES)

The MILES laser system is different from the other laser systems listed in this chapter. Units may employ MILES in any training area on Fort Gordon. The system is not eye safe within the safety distance or the NOHD as listed in figure 10-1.

Type	NOHD W/O Optics	NOHD W/ Magnified Optics
M4, M240, M249, .50 Cal	10 M	40 M
TOW Missile	12 M	75 M
Controller Gun, Tank Main Gun with filter	0 M	5 M

Figure 10-1

The MILES system is not subject to the procedures outlined in this chapter; however, units should follow all safety precautions prescribed in the appropriate FM/TM; i.e., personnel must not carry armed anti-tank weapons effects signature simulator (ATWESS) cartridges in vehicles, etc.

Chapter 11 Airborne Operations

11-1. General and Certifications

Units must conduct airborne operations IAW AR 95-1, Fort Gordon Restricted Airspace Operations SOP and FAA regulations.

- a. O-5 or higher commanders must certify OICs and pilots IAW para 2-2 and 2-7.
- b. All OICs and pilots conducting training or flight operations involving airspace must read and

comply with Fort Gordon Restricted Airspace Operations SOP. Contact Range Scheduling for copies.

11-2. Personnel and Container Drops

- a. For Drop Zone (DZ) surveys, refer to information in RFMSS.
- b. Units must provide a Drop Zone Safety Officer (DZSO) and the remainder of the DZSO party who meet qualifications in FM 3-21.220.
- c. DZSO will the following.
 - (1) Establish FM communications with the Fire Desk.
 - (2) Lead the DZSO party consisting of the DZSO, the Drop Zone Support Team Leader, the medical team described in para 11-3, and the Parachute Malfunction Officer.
 - (3) Have a current DZ survey on site during all airborne operations; coordinate with Range Scheduling to obtain a copy of the survey.
 - (4) Clear all non-aligned vehicles and aircraft from the DZ 10 minutes prior to drop time.
 - (5) Coordinate directly with all units providing the DZSO party.
 - (6) Coordinate with the airborne commander and all units jumping. The DZSO must receive a complete briefing from the commander concerning type of jumps, jump (aircraft) sequence, and number of passes, post drop operations, and parachute/heavy equipment recovery procedures.
 - (7) Ensure all personnel and equipment in the DZSO party are present and operational on the DZ at least one hour prior to the first scheduled drop time.
 - (8) Recon the DZ before each drop to ensure there are no safety hazards. He/she should conduct a daylight reconnaissance prior to night jumps. Safety hazards do not include heavy equipment, container delivery system Container Delivery System, and stationary vehicles.
 - (9) Ensure all personnel on the DZ wear helmets.
 - (10) Lock and/or emplace gates and barriers entering the DZ.
 - (11) Close the DZ only after completion of the entire operation and submit the final report to the Fire Desk only if units are conducting personnel drops.

11-3. Medical Coverage

- a. Responsibilities. Airborne operations require unique and/or additional medical support on site. Ensure medical personnel are current on airborne regulations and doctrine.
- b. The senior medic will have his own radio. Units Senior Medic must have primary Military Occupation Specialty (MOS) of 68W or 18D. The senior medic is responsible to the DZSO for direction and conduct of medical activities on the DZ.

11-4. Air Assault Operations

Refer to the Fort Gordon Restricted Airspace Operations SOP.

Chapter 12

Vehicle Operations

12-1. General

- a. All lakes, streams, wetlands, and the land within 50 meters of their shores are off-limits to vehicles unless specifically stated as a training requirement and approved in writing by Range Operations.
- b. Do not drive or park POVs on ranges.
- c. Units should minimize damage to terrain and vegetation.
- d. Units are responsible to clear off the dirt and mud left on any hard top road caused by a military vehicle crossing.
- e. Do not sleep directly in front of, behind, or under any vehicle. If sleeping in or on vehicles, shut off the engine, heater, or other carbon monoxide-producing equipment. Additionally, turn off turret power for combat vehicles.
- f. Use troop safety straps when transporting personnel in the cargo bed of vehicles.
- g. Vehicles may not move over any target berms or protective berms.
- h. Vehicles carrying a load which extends beyond the sides or more than four feet beyond the front or rear will have the extremities of the load marked with red flags, not less than 12 square inches in daytime and with red lights at night. On unusually long loads greater than one-third the length of the

vehicle cargo bed, check with state or local traffic authorities to determine whether a special permit is required.

- i. Drivers of tactical vehicles will keep lights on at all times when on public highways.
- j. Do not transport personnel in engineer dump trucks, unless the truck has an approved positive antidumping device and a means to ease boarding and off-loading.

12-2. Speed Limits

- a. Non-Tactical Wheeled Vehicles. 45 miles per hour (MPH) unless otherwise posted.
- b. Tactical Wheeled Vehicles on asphalt/gravel roads.
 - (1) **30 miles per hour unless otherwise posted.** Commanders will determine if a slower speed is necessary on maneuver trails or on all roads and trails during limited visibility and address implementation measures in their DD Form 2977.
 - (2) There are no black-out drive areas. Units that desire to reserve portions of routes for night vision training must submit an NSTR to reserve training areas.
- c. Tracked Vehicles (on primary graveled roads).
 - (1) Day – 25 MPH unless otherwise posted. Commanders will determine if a slower speed is necessary on maneuver trails or on all roads and trails during limited visibility and address implementation measures in their DD Form 2977.
 - (2) Tank Trails – Tracked vehicle speed limit on tank trails is 30 kilometers per hour (KPH) (20 MPH) during the day. Commanders will determine if a slower speed is necessary and address in the DD Form 2977 for day or night movements.
- d. Units will adhere to all posted speed limit signs.

12-3. Parking

Fort Gordon prohibits POVs from entering and parking on any live fire range. Fort Gordon does not allow POVs to park in any scheduled training area of the Range Complex. Fort Gordon does allow POVs belonging to persons checked into iSportsman to park in areas of the Range Complex not scheduled for training in RFMSS and open in iSportsman. IAW USACCoE&FG Regulation No. 420-5, "Hunting, Fishing, Bicycling, and Training Area Recreation Regulation" the operators of these POVs must display an activity card on the dash declaring the purpose of their parking and sign-in and sign out daily. Fort Gordon does not allow POV parking in areas not scheduled in RFMSS and available on iSportsman by individuals training in an adjacent or nearby area to include the shoulders of the roads and trails that run through the complex.

- a. Fort Gordon considers a government authorized TDY rental vehicle to be a military vehicle. These vehicles may transit onto the ranges and park in designated areas on those ranges.
- b. Range operations and maintenance personnel may ask to look at the TDY orders and rental car agreement to verify that a vehicle is a government authorized TDY rental.
- c. Operators of TDY rentals may stop at the range operations fire desk to pick up a numbered pass placard. Display the placard in the dash of the windshield which will facilitate verification by range personnel in the complex and reduce the likelihood that multiple range personnel ask to examine certifying documentation.
- d. Range Operations tracks these placards so operators must turn them in prior to return to home station or risk delays in scheduling future ranges and training areas.
- e. No POVs on tank trails.
- f. Government contractors operating within the scope of their employment or contract are not subject to this provision.
- g. Department of Justice (DoJ) and Department of Energy (DOE) personnel using the Fort Gordon training facilities must submit requests for unmarked police or DOE vehicle access to the Range Complex as part of their NSTR packet submission to Range Operations.

12-4. Ground Guides

- a. Vehicles operating within 50 feet of buildings (unless in a designated parking space/unloading zone) or 200 feet of bivouac sites require ground guide(s). Use ground guides anytime drivers cannot clearly see the trail or route.
- b. Units must use ground guides when vehicles enter or move within assembly areas.
- c. Backing vehicles.

(1) Units must employ ground guides when backing vehicles 1 1/4 ton or larger, all track vehicles, and any vehicle at night.

(2) Use two ground guides when backing tracked vehicles in assembly areas or other congested areas containing personnel, equipment, or obstacles.

(3) Wheeled vehicles normally require one ground guide; however, use two ground guides during limited visibility. Ground guides must not walk backward while ground guiding a vehicle; if the ground guide needs to move, then stop the vehicle and resume backward movement once the rear ground guide is set in a stationary position.

d. Prior to starting the vehicle in assembly areas, operators or members of the crew must walk completely around the vehicle and ensure that the vehicle's movement endangers no one.

12-5. Convoy Operations

a. Units must adhere to the following stipulations when conducting convoy training within the training areas. This requirement does not include convoys for logistical supply operations, movements to and from live fire ranges, or compass courses. Submit all requests for convoy training to Range Scheduling.

(1) Training units will provide Range Scheduling with an NSTR consisting of an overlay of the route, start and end times for the convoy, a listing with type and location for all training injects to include any type of vehicle borne improvised explosive device (VBIED), pyrotechnics, explosive simulators, blank weapon firing, and Civilian on the Battlefield (COB) play. Training units will provide a list of these injects by start and end times.

(2) When conducting convoys, only vehicles that are part of the training will participate. Units that encounter vehicles that belong to civilians, contractors, and the Fort Gordon workforce will not be consider them as part of the exercise and will not substantially hinder their progress. Do not point weapons nor fire at them. If one of the above vehicles should happen to unintentionally get involved in the play, the unit will be polite to the occupants of the vehicle. Explain to them what is happening and move them out of the play as soon as possible.

(3) Training units will provide a list of injects by start and end times. Complete a DD Form 2977 and have it available on site for inspection.

(4) When the unit misses the start time for the convoy by 15 minutes, the unit must contact the Fire Desk.

(5) Units cannot utilize the primary tank trails for wheel operations or ambush training without a Range Scheduling approved overlay.

(6) Post road guards to inform traffic of the operation at night.

(7) Pick up all Class V residue, training devices, training aids, trash, and IEDs daily and at the end of the training event.

(8) Refer to the map which shows prohibited routes and areas for inject sites on the RFMSS website.

b. Blackout Drive Training. Will require a NSTR.

12-6. Track Vehicle Operations

a. No tracked vehicles may utilize hard surface roads without prior approval from Range Operations. The only exceptions are authorized crossings connecting the tank trail or specific hard surface connectors for the tank trail; units must coordinate with DES, 706-791-2681 for movement of tracked vehicles in the cantonment area.

b. Tracked vehicles will operate with the hatches open along tank trails and other main roads.

c. Tracked vehicles utilizing or entering areas in the vicinity of built up areas, ranges, or training facilities must have the hatches open and utilize ground guides until clear of the area.

d. Tracked vehicles may operate buttoned up along trails within the unit's assigned tactical training area as approved in a NSTR. Units employ road guards and/or barriers to ensure that vehicles not involved in the training do not enter the area where tactical driving occurs.

e. Tracked vehicles may not operate along the shoulders of hard surface roads.

f. Units will utilize the concrete reinforced track crossings whenever possible.

g. Units should minimize damage to terrain and vegetation.

12-7. Breakdowns

a. The unit must employ measures to direct traffic safely around any vehicle that obstructs roads

and move the vehicle off the road as soon as possible.

- b. Drivers must notify their units and remain with the vehicle until help arrives.
- c. Drivers will utilize warning flashers and triangles.

Chapter 13

Environmental Protection and Conservation

13-1. General

Fort Gordon's training mission is dependent on a high quality environment and natural resources. It is the responsibility of everyone who works and trains on Fort Gordon to, first and foremost, successfully complete our missions while maintaining a healthy environment that will support current and future training requirements. For more information contact the Fort Gordon Environmental Division.

13-2. Procedures

This chapter outlines procedures and actions for units to take to minimize environmental damage and to address potential environmental issues that arise during training. This chapter covers natural and cultural resource management, hazardous substance management, and fire prevention.

13-3. LRAM Program.

- a. The LRAM Program is a component of the ITAM Program within the Range Control. The intent of LRAM is to sustain a realistic field training environment for continuous and diverse training events and to mitigate environmental impacts caused by realistic training. To do this, LRAM conducts preventive and corrective land rehabilitation and maintenance projects within the training areas (i.e. smooth out excessive ruts, repair washed out trails, re-vegetate heavily disturbed sites). While LRAM efforts are in progress, the Range Officer may temporarily restrict vehicle maneuver on specific tracts of land to minimize safety hazards and insure the fastest recovery possible for the land. Once the land recovers, the Range Officer will lift the restriction.
- b. The LRAM crew will mark project areas with signs or LRAM tape.
- c. Although marked, these areas will remain available for dismounted training, but not for digging and off road vehicle maneuver.

13-4. Environmental Factors

- a. Any unit conducting military training, both standard and non-standard activities, must submit a FTX environmental checklist and obtain an approved, signed Record of Environmental Consideration (REC) prior to training IAW 32 CFR Part 651 (AR 200-2) Environmental Analysis of Army Actions. The FTX environmental checklist can be found in the library section of RFMSS.

b. Units must submit the FTX environmental checklist for the following requirements 45 days prior to initiating training.

- (1) Field Shower/ Laundry sites.
- (2) Tent heaters.
- (3) Bulk petroleum storage, distribution points, and refueling sites.
- (4) Digging or ground disturbance of any type.
- (5) Smoke generation.
- (6) Water purification points.
- (7) Vehicle decontamination points.
- (8) Abatis & tree cutting.
- (9) Vehicles off established roads or trails.
- (10) Field Kitchens (MKT).
- (11) Pyrotechnics.
- (12) Generators

NOTE. Units must maintain a copy of an approved, signed REC on site during training. For additional guidance, refer to the SRP Customer Support Package, available at Range Scheduling.

c. Endangered, Threatened, and Special Emphasis Species. The Red Cockaded Woodpecker, Gopher Tortoise, and Bald Eagle are federally endangered species and/or federally protected species that inhabit Fort Gordon. Special unit responsibilities during training events exist in the areas where these species occur. See Appendix F for specific responsibilities for each of these species. Range Scheduling will post changes to endangered species on the announcements tab in RFMSS.

d. Damage Control. Commanders must consider environmental concerns during all training. Maneuver and training plans must include provisions for protection of known sensitive areas. As part of the risk assessment process, the Army expects trainers to deliberately consider the impact of training events on the environment and implement measures to minimize the risk. Commanders will ensure tracked and wheeled vehicle movement causes no unnecessary maneuver damage. Care should be taken when crossing paved and unpaved surface roads. Units must report major damage areas to the Fire Desk when clearing training areas

e. Cultural Resources. The Cultural Resources Program identifies and preserves significant archaeological and cultural resources located within the Military Reservation boundaries. Archaeological and cultural resources include, but are not limited to, rock shelters, prehistoric stone artifacts, and homestead remains. Many of these resources are fragile and all are irreplaceable. It is unlawful to disturb or remove items from areas suspected to be of archaeological or cultural significance. This includes removal of any items found on the ground surface or while digging, such as stone arrow heads, pieces of pottery, or similar items. Vehicle maneuvers, digging, bivouac, or other ground disturbing activities are prohibited within known cultural sites; travel on foot is allowed. Units will review the Fort Gordon "Go, Slow Go, No Go" map to ensure they restrict their military activities outside of sensitive cultural and environmental areas. Notify the Cultural Resource Manager (706) 791-2403 immediately if you encounter archaeological or cultural resources during the course of your training here at Fort Gordon.

f. DPW – Environmental Division.

(1) Provides range and training area forest fire suppression activities and for seasonal prescribed burning, as needed.

(2) Responsible for implementation of the installation Environmental Noise Management Plan, noise compliant tracking, and joint investigation with Range Control of training activities that create noise issuance.

(3) Provides routine water testing of all potable water sites and Range Control Facilities.

(4) Conducts environmental impact analysis and document coordination of field training exercises as required by NEPA and 32 CFR Part 651.

g. Environmental Protection.

(1) Commanders at all echelons will ensure compliance with USACCoE&FG Regulation 420-7 (Endangered Species Regulation), and AR 200-1 (Environmental Protection and Enhancement) and 32 CFR Part 651 (AR 200-2 Environmental Analysis of Army Actions). All units and organizations using Ft. Gordon training areas will build environmental considerations into their planning process.

(2) All training units will maintain a hard copy of approved or pre-approved Record of Environmental Consideration while occupying any if the training area.

(3) No live bushes or trees will be cut or damaged. Only foliage from dead trees on the ground will be used for camouflage.

(4) All wheeled and tracked vehicles will use only established roads, trails, firing points, and firebreaks. Tracked vehicles will avoid paved roads and will use tank trails or firebreaks. Vehicles will not travel on unpaved shoulders or lawns.

(5) Use of ditches and shoulders for tank trails is prohibited. Off-road, cross-country shortcuts through trees or across grass hay, wildlife food plots, and planted areas are prohibited. New trails will not be established. A sharp turn by tracked vehicles which may cause damage to hard surfaced areas is strictly prohibited. Any ruts created by wheeled vehicles will be repaired by the using unit.

(6) Each unit or activity is responsible for cleaning up after completion of exercise or operation. Upon completion of training, the unit OIC/NCOIC will initiate a thorough police of the area to ensure that all spade holes, foxholes, sumps, etc. have been filled, and all track mounds leveled. All trash will be collected and removed from the field training areas and deposited in a dumpster.

(7) All ground disturbing activity to include foxholes, trenches, tank ditching, etc., is prohibited unless permission is granted from DPW-Environmental Division through Range Control. Request for the ground disturbing activities must include grid coordinates and the number of positions on a Record of Environmental Consideration, see Annex C-3. Care will be taken to ensure soil is not stripped bare of

vegetation.

(8) Disturbed ground and vegetation will be replaced after the conclusion of training activities and prior to requesting a clearing time. Maneuver damage, destroyed trees and vegetation will be reported to the Range Control firing desk immediately.

(9) Burning, burying, or abandoning garbage, refuse, and rubbish including field and concertina wire, wooden pallets, and projectile fiber containers and other ammunition residue is prohibited. Commanders will ensure that the above materials are disposed of properly. Units will remove all debris from their ranges and TAs and disposed into an approved trash receptacle. Units or civilians found illegally dumping trash will be reported immediately to installation provost marshal's office and range control.

(10) Fuel sumps and refueling point operations will only be conducted after submission of the Record of Environmental Considerations to and approved by ERNMO-DPW.

(11) Fuel sumps, refueling points, and fuel cans must be placed in a manner that will contain any fuel spillage and will not be placed within 150 meters of food plots. Size and depth of a sump constructed must be able to hold the amount of fuel stored. All fuel sumps, as a minimum, will have a 10 lb. equivalent fire extinguisher, a shovel, and axe located within 50 meters of the sump.

(12) All fuel tankers will be grounded properly and use of an overflow container is mandatory when dispensing fuel.

(13) When Petroleum, Oil, and Lubricant (POL) spills occur in any size, the unit involved will immediately contact Range Control (LMR channel 1 or 791-5005 or FM frequency 42000), who will contact Environmental Division, DPW, 791-6481, Oil Spill Response Program Manager, IAW 40 CFR 112 during normal duty hours. After normal duty hours, spills will be reported to the Installation Operations Center, 791-9747, or the Fire Department, 791-2989.

(14) Training and vehicle traffic on wildlife food plots, pine seedlings, and endangered species habitat areas are prohibited. Violations may incur cost to replant damages by units.

(15) For engineer training and construction activities, a soil erosion and control plan will be submitted to the Environmental Division 14 days prior to any land disturbing activity. Training and construction that results in land disturbance of one acre or more, within 200 feet of State waters and/or within the 25 foot vegetated State waters buffer will require planning and permitting IAW the Georgia Water Quality Control Act and Erosion and Sediment Act. Plans will be submitted to the Environmental Division at bldg. # 14600, 791- 9927/6129, and to Range Control Operations at bldg. # 18200, 791-5005/5008. Land disturbance activity permits will be obtained through DPW ED. Training and construction activities which require permitting shall not commence land disturbance activities until DPW ED conducts a Pre-construction meeting and issues the applicable permits.

(16) Noise complaints will be forwarded to the Environmental Division, DPW. They will be handled IAW the Environmental Noise Management Plan (ENMP).

13-5. Natural Resources Management

a. Camouflage.

(1) Units must not cut, nail, pull off bark, or damage live trees without permission from Range Control, who coordinates this approval with NRB.

(2) Units should use dead or fallen trees as camouflage.

b. Water.

(1) Units must refrain from using water from ponds and streams to wash vehicles and other equipment.

(2) Units may cross streams and wetland areas only at approved crossing sites.

c. Excavations.

(1) Units must include a request to dig major obstacles on the Range Complex on the FTX environmental checklist and receive an approved, signed REC prior to any ground disturbance. This includes but is not limited to: fighting positions, tent ditches, and holes for equipment such as generators during training exercises.

(2) Units must fill all excavations prior to the range clearance inspection and departure.

(3) During training, units must mark excavations to prevent vehicles or personnel from accidental discovery and subsequent injury.

(4) Units desiring to dig, drive stakes or grounding rods must include a requests to dig on the

FTX environmental checklist and receive an approved, signed REC prior to any ground disturbance when applicable.

d. Wildlife. Personnel will neither shoot nor disturb wildlife, except as authorized in the current USACCoE&FG Regulation 420-5, Hunting, Fishing, Bicycling, and Training Area Recreation Regulation. However, hunters may inadvertently cross into active training areas; if this is the case, report them to the Fire Desk.

13-6. Deer Hunting Season

a. Deer management is very important for the military training mission on Fort Gordon. Maintaining deer populations within management goals is necessary to maintain native vegetation, protect endangered species such as the Red Cockaded Woodpecker, and personal safety. If deer population levels are not controlled, they can also cause ecological, economic, and/or health problems on Fort Gordon and surrounding communities. High populations can degrade the natural habitat through over-browsing the vegetation, which can lead to soil erosion, impact the host plant of the Red Cockaded Woodpecker, increase agricultural damage to surrounding farms, increase vehicle/deer collisions, and help increase deer tick populations that carry the bacteria for Lyme disease and Anaplasmosis. The primary tool to maintain a healthy and viable deer population is hunting. The deer season on Fort Gordon normally begins the second Saturday in September and runs until the second Sunday in January. If possible, units are encouraged, but not required, to plan their training outside the first two weekends of gun season, which are normally the second and third weekends of October. The most participation occurs from the second weekend in October until the weekend after Thanksgiving and then it begins to decline for the rest of the season.

b. IAW AR 200-1, Environmental Protection and Enhancement, Fort Gordon fully supports training the total force while simultaneously performing the necessary natural resources management to comply with federal law, DOD guidelines, and DA regulations.

c. The Deer Hunting Season is a vital event to control the deer population on Fort Gordon and support natural resources stewardship. In support of the Deer Hunting Season, the Range Officer will fully support the training mission, but also make available as many training areas for hunting as possible.

d. The following rules will be applied when scheduling the use of ranges and training areas during the Deer Hunting Season.

(1) Non-mobilized units request for training during the Deer Hunting Season (primarily the opening weekend) will be submitted NLT90 days prior to Deer Hunting Season.

(2) Mobilized units requests will be submitted 14 days prior to the start of gun deer season.

13-7. Hazardous Substances Management

a. Spills.

(1) Always turn in unused or waste oil and fog oil, empty drums and other hazardous waste, such as old batteries, solvents and paints, through the Hazardous Material Collection Point (HMCP) Phone number: (706) 791-9824/9825; Bldg. 10604 at the intersection of 10th Street and Barnes Ave. Hours of operation M-F 0730-1600. After normal duty hours units will contact the IOC (706) 791-0974. Units are responsible for providing their own waste drums and disposal containers.

(2) Because of strict federal and Georgia environmental laws, commanders must report any spills of the following items immediately to the Fire Desk.

- (a) Oils.
- (b) Brake fluids.
- (c) Fuels.
- (d) Battery acids.
- (e) Antifreeze.
- (f) Paints and paint thinners.
- (g) Grease.
- (h) Decontamination agents.
- (i) Pesticides.
- (j) Solvents.
- (k) Hydraulic fluids.
- (l) Batteries.

- (m) Fluorescent bulbs/lamps.
 - (n) Unused Flameless Ration Heaters (FRH) from Meals Ready to Eat (MREs).
 - (o) Unusable equipment/materials that contain radioactive materials.
 - (p) Sweeping compounds or absorbent materials containing hazardous substances.
 - (q) Any other similar substance/material.
- b. Reduction of Spills. To ensure an environmentally safe training exercise and minimize the chance of toxic spills, commanders should the following.
- (1) Minimize the use of hazardous substances.
 - (2) Inspect fueling points and equipment daily to ensure safe operation. Bulk fueling operations require a Range Scheduling approved special site request.
 - (3) Maintain eye contact with discharge and loading nozzles at all times during refueling.
 - (4) Conduct maintenance only in areas that can contain and minimize spills.
 - (5) Utilize drip pans on vehicles parked for extended periods of time.
 - (6) Carry dry absorbent, drums and/or spill kits in case of an accident.

13-8. Environmental Spills

- a. For instructions on how to handle/react to any spill of a hazardous substance (per para 13-7) refer to Chapter 6 Training Accidents/Incidents, para 6-8, Spills.
- b. Batteries. Batteries are hazardous waste if not properly recycled. Commanders will ensure their Service Members do not throw away batteries as part of regular refuse.
- c. FRH. Unused FRHs have the potential to be reactive characteristic hazardous waste. The FRHs use a water reactive chemical to generate heat and warm MRE. Once the reaction takes place, it removes the hazard, so the Soldier should dispose the used heater with other solid waste. Turn in unused FRH to the DPW ED.

13-9. Fire Prevention.

- a. Fire Danger Classification.
 - (1) Prior to the use of any fire-producing pyrotechnics, smoke grenades, smoke pots, trip flares, star clusters, tracers, etc., obtain the current fire danger classification from the Fire Desk. Failure to follow the restrictions of the fire code could result in fires, lost training time, and unnecessary expenses for the training unit.
 - (2) Figure 13-1 below contains fire danger levels and definitions.
- b. Open Fires. Fort Gordon prohibits open fires anywhere on the installation without prior written approval of the Fort Gordon Fire Chief except for small camp fires in campsite fire rings located in the Leitner Lake Campground and NRB's use of prescribed fire.
- c. Heater Fuel. Units must properly use all heaters to include using the correct fuels. Gasoline is not an acceptable fuel for heaters on Fort Gordon. Clear heated tents of leaves and other combustible debris.
- d. Mess Operations.
 - (1) Units will do the following actions.
 - (a) Scrape and remove all brush, grass, and any combustible material a distance of at least three feet from field ranges and immersion heaters.
 - (b) Locate the fuel supply and filling point at least 50 feet from the ignited units.
 - (c) Properly license all personnel utilizing food preparation equipment, field ranges, and immersion heaters IAW AR 600-55, The Army Driver and Operator Standardization Program (Selection, Training, Testing and Licensing).
 - (2) In extremely dry conditions, the Fort Gordon Fire Department may suspend mess operations fires.
 - (a) Catalytic Converters. Personnel operating military vehicles equipped with catalytic converters must use caution when operating an idling engine in vegetated areas to prevent hot or defective converters from igniting dry vegetation.
 - (b) Field Heaters. For operation of field heaters refer to Chapter 14, Natural Safety Precautions.
- e. Fire Danger Restrictions.

Fire Danger Classification	Restrictions Necessary to Avert Serious Vegetation Fires
CLASS 1 DAY -- GREEN	The Range Officer approves all authorized ammunition, explosives, and pyrotechnics on live fire ranges and training areas.
CLASS 2 DAY -- BLUE	The Range Officer approves all authorized ammunition, explosives, and pyrotechnics on live fire ranges and training areas.
CLASS 3 DAY -- YELLOW	<p>a. Submit specific requests to use pyrotechnics or other incendiary devices, including explosive simulators, smoke grenades, and flares, to the Range Officer for consideration.</p> <p>b. Do not use tracer ammunition on ranges.</p> <p>c. The Range Officer may authorize the use of tracer ammunition on ranges around the AIA contained by a currently maintained firebreak and prescribed burned during the current burning season prior to the use of tracers on the range.</p>
CLASS 4 DAY -- ORANGE	No Illumination rounds or pyrotechnics.
CLASS 5 DAY -- RED	Only ball ammunition, no other type of ammunition, pyrotechnics, or explosives.
Figure 13-1	

f. Units will not delink belted ammunition to remove tracers. To continue training, units must contact the ASP for replacement ball ammunitions.

13-10. Transportation of Hazardous Materials.

- a. Hazardous materials are defined as any ammunition, explosives, pyrotechnical devices, or POL.
- b. All hazardous material will be transported and handled only under the direct supervision of certified, competent, and qualified personnel who are thoroughly familiar with the handling and safety requirements listed in AR 190-1, AR 385-63, AR 385-64, Technical Manual (TM) 9-1300-206, Field Manual (FM) 5-250, and in FMs of specified explosives.
- c. The transportation and storage of hazardous materials will be coordinated and conducted in accordance of the approved training CONOP.

Chapter 14 Natural Safety Precautions

14-1. Electrical Storms

For RTAF with buildings. Have personnel occupy buildings. For RTAF without or not enough buildings the OIC/Safety Officer should designate a dispersal area. When told to disperse, all personnel should move to the dispersal area, ground their weapons and place their ponchos over themselves before squatting on the ground. Do not locate dispersal areas near flagpoles, trees or wires.

14-2. Heat Injuries

- a. Heat injuries mostly occur in the summer months, but can occur even during colder conditions based on work level, layers of dress, and individual training, physical fitness and hydration levels.
- b. Prevention. Preventing heat injuries is a commander's responsibility. To prevent heat casualties, commanders will ensure that they are monitoring the following.
 - (1) Monitor the current heat phase category, Figure 14-1, during conduct of strenuous physical activity. The current heat index reading is available by calling Fire Desk. Additionally, the Fire

Desk will start issuing heat index readings when the temperature reaches 78 degrees Fahrenheit. The Fire Desk will also issue heat index conditions as they change via the Fire Desk frequency. Unit commanders are responsible for Wet Bulb readings in their RTAF.

(2) Ensure that subordinate Commanders and leaders are notified of changes in the heat alert category.

(3) Train supervisory personnel in the heat casualty prevention procedures, as outlined in the heat phase guide. Use battle buddy checks.

(4) Allow approximately 14 days of progressive physical acclimatization for newly assigned troops or for all personnel to acclimate to a radically new climate.

(5) For the most part, heat casualties are preventable if leaders maintain good order and discipline through the enforcement of standards. Measures to enforce include ensuring personnel eat all meals to put salt into the body; do not drink diuretics especially energy drinks; obtain adequate sleep; and consume water at a sustainable rate (not chugging).

c. Training. Ensure personnel are instructed in the following precautions to prevent heat-related injuries.

(1) Prevention of sunburn. Wear loose-fitting clothing; use sun protection Sun Protection Factor (SPF) 15 or above on exposed skin and avoid extended periods of unprotected exposure to the sun.

(2) Prevention of heat cramp, heat exhaustion, and heat stroke. Proper acclimatization (14 days); adequate water intake; and continual surveillance of all personnel to detect early symptoms of heat illness.

d. Symptoms. Ensure personnel know how to recognize symptoms of heat illness and how to administer emergency first aid treatment. Use battle buddy checks to ensure proper food and water intake.

(1) Heat cramps.

(a) Symptoms. Painful cramps of the muscles of the extremities and abdominal wall.

(b) Treatment. Move patient to cool, shaded area and give fluids.

(2) Heat exhaustion.

(a) Symptoms. Profuse sweating, headache, tingling sensations in the extremities, pallor, nausea, and vomiting, weakness, and rapid pulse.

(b) Treatment. Remove victim to cool place and elevate victim's legs.

(3) Heatstroke. This is a medical emergency and can be fatal if not treated promptly and correctly.

(a) Symptoms. Stoppage of sweating, skin flushed, hot, and dry, headache, fast pulse, nausea, vomiting, dizziness, mental confusion, and unconsciousness.

(b) Treatment. Cool casualty continuously by removing outer garments and/or protective clothing; immersing casualty's trunk in cool water being careful not to over cool; massaging the patient while immersed in cool water to help skin (capillaries) transport cooling effect; and pouring cool water over casualty and fanning to permit the cooling effect of evaporation. Place under cool shower, if possible, keeping casualty in shade, using ice bags, if available, at the sides of the neck and underarms during transportation to medical treatment facility, to aid and maintain cooling effect; and transport to medical treatment facility as soon as possible.

e. Medical personnel can determine whether salt treatment is appropriate in the interim. Below is a table of heat phase guidelines more applicable to initial entry Service Members or Service Members who are not acclimated to a new climate. The table is a tool for commanders to consider when training Service Members and units but is not binding on decision making. With an acclimated unit, commanders can work personnel more than the recommended guidelines especially in preparation for deployment to contingency operations in extremely hot climates. Commanders should address heat injuries in the DD Form 2977.

CATEGORY	1	2	3	4	5
WBGT Index (1)	78-81.9	82-84.9	85-87.9	88-89.9	90+

WORK/REST. (1,2) Easy Moderate Hard	No Limit No Limit 40/20	No Limit No Limit 30/30	No Limit 40/20 30/30	No Limit 30/30 20/40	50/10 20/40 10/50
<p>1. MOPP gear. Add 10 degrees to WBGT for easy work and 20 degrees for moderate and hard work; add five degrees for body armor.</p> <p>2. The work/rest times and fluid replacement volumes will sustain performance and hydration for at least four hours in the specified heat category.</p> <p>3. Rest means minimal physical activity (sitting or standing) and should be accomplished in the shade if possible.</p> <p>4. Hourly fluid intake should not exceed 1 ½ quarts. Daily fluid intake should not exceed 12 quarts. Individual water needs will vary +/- ¼ quart.</p> <p>EASY WORK. Weapon maintenance; walking on hard surface at 2.5 MPH, <30 pound load; manual of arms; marksmanship training; drill and ceremony training.</p> <p>MODERATE WORK. Walking on loose sand at 2.5 MPH, no load; walking on hard surface at 3.5 MPH, <40 pound load; calisthenics; patrolling.</p> <p>HARD WORK. Walking on hard surface at 3.5 MPH, <40 pound load; walking on loose sand at 2.5 MPH, with a load; digging.</p> <p>Service Members who are overweight, dieting, or past heat casualties are more prone to heart injuries. As a result, their activities must be closely monitored.</p> <p>THE FIRE DESK WILL ANNOUNCE THE HEAT INDEX AT THE FIRE DESK LOCATION HOURLY OR AS IT CHANGES DURING RADIO CHECKS. NOTE. THE HEAT INDEX TEMPERATURE IS LIKELY DIFFERENT AT YOUR SPECIFIC LOCATION.</p>					

Figure 14-1

14-3. Cold Weather Injuries

a. Fort Gordon reaches moderate cold temperatures in the winter and can have relatively cool periods during warmer months. Units should reserve or provide warm-up structures for training personnel. Adequate dry, loose fitting and layered clothing is important to prevent cold weather injuries as well as leaders checking their subordinates exposed skin, hands and feet for potential injuries. Units may heat urban training facilities using U.S. Army Safety Center approved unit heaters; the OIC must inform the Fire Desk in advance which buildings will have heaters. NOTE. Units must plan for adequate ventilation to prevent carbon monoxide poisoning and exercise vigilance to prevent fires within the urban complex structures. When commanders and NCOs place emphasis on prevention of cold weather injuries, units are unlikely to experience cold weather casualties.

(1) Prevention. To prevent cold weather injuries, commanders will take into consideration the following.

- (a) Plan for the effects of wind chill IAW Figure 14-2.
- (b) Equip personnel with suitable cold weather gear and check serviceability prior to and throughout training.
- (c) Prepare equipment for extreme cold weather like the use of artic oil for weapons and functionality of tents and stoves.
- (d) Train all supervisors on cold weather responsibilities.
- (e) Train all personnel on cold injury prevention procedures, first aid treatment, and carbon monoxide hazards.
- (f) Monitor current wind-chill during outdoor activity. Call the Fire Desk for the current wind- chill reading. Additionally, the Fire Desk will issue wind-chill advisories when the temperature reaches 40 degrees Fahrenheit.

(2) Training. Commanders will train participating personnel in the recognition of the early warning signs of cold weather injuries and performance of emergency first aid treatment.

(3) Early warning signs. Tingling, stinging, or dull sensation of exposed part followed by numbness. Skin may appear red and then pale or waxy white.

(4) Common injuries.

- (a) Frostbite - condition results when skin temperature falls below freezing.

(b) Immersion foot - condition occurs when feet are wet for 12 hours or more in temperatures below 50 degrees Fahrenheit and when feet get little or no exercise.

(c) Trench foot - condition caused by prolonged standing in water or by having wet feet for long periods of time while temperature is just above freezing. Personnel from warmer climates sometimes wear boots for extreme cold, but move so much that the feet sweat which then leads to a cold weather injury. Change socks often to ensure feet remain dry.

(d) Hypothermia - condition caused by exposure to cold and aggravated by wetness, wind, and exhaustion.

(5) Treatment.

(a) Remove the individual from the cold.

(b) Remove constricting items of clothing (boots, socks or gloves) from injury site. Protect with non- constricting clothing/blankets.

(c) Do not apply medications, salves, or ointments.

(d) Do not allow patient to smoke or drink alcohol.

(e) Give hot liquids.

(f) If lower extremity is involved, treat as litter patient with injured part level or slightly elevated.

(g) Obtain medical help.

b. Carbon monoxide overexposure.

(1) Commanders will train personnel in the hazards of carbon monoxide.

(2) The most common source of carbon monoxide is the exhaust from internal combustion engines and field heaters in confined spaces without adequate ventilation like personnel sleeping in a running HUMMV.

(3) Commanders will ensure the following.

(a) Prevent personnel from sleeping in, on, or near fuel-powered vehicles while the engine or heater is running.

(b) Ensure adequate ventilation exists during the operation of engines, generators, battery chargers, and space heaters.

(4) Train all personnel to recognize the warning signs and symptoms of carbon monoxide overexposure and how to perform emergency first aid treatment.

(a) Signs and symptoms. Throbbing temporal headache, generalized weakness, dizziness, dimness of vision, nausea, vomiting, muscular lack of coordination, increased pulse/respiration, and unconsciousness.

(b) Treatment. Remove individual from contaminated environment to fresh air. If respiration is weak/absent, administer artificial respiration and seek medical help.

(c) Field Heaters.

(1) Operate portable radiant-type space/tent heaters IAW the following.

(a) License each operator for the specific heater.

(b) Securely tie off stovepipe opening flaps of the tent so that the flaps do not come in contact with the hot stovepipe.

(c) Use a sufficient number of stovepipe sections so that the top section is one foot above the highest point of the tent.

(d) When using solid fuel (such as wood or coal) with the heater, install a spark arrester on the top stove pipe section.

(e) When using liquid fuels, install a draft diverter on the top pipe section and secure it with guy ropes. (do not use guy ropes with solid fuel).

(f) Erect stovepipe sections straight up without physical contact on any part of the tent. Inspect tents to ensure that there is no sagging nor contact between the stovepipe and the canvas parts of the tent.

(g) Clear the area surrounding the heater inside the tent of combustibles (including dry grass, pine needles etc.) at least four feet from the heater. Do not store man made combustibles in the tent like paint or fuel.

(h) Check fuel cans, lines, and carburetors daily for leaks, particularly after changing fuel cans. Do not operate any heater when fuel leaks are present.

(i) When operating heaters, have a Carbon Dioxide (CO₂) fire extinguisher in the tent.

(j) Do not operate tent heaters at full capacity even in the extreme cold. Overheating

of the stovepipes may ignite tent.

(k) Emplace sandboxes upon which to place heaters for tents with wooden or canvas floors (use at least three inches of sand/dirt for this purpose).

(l) While some tent heaters are designed to use several types of liquid fuel, never use gasoline as a heating fuel.

(m) Post a fireguard during heater operations.

(n) Only allow properly trained personnel to operate immersion heaters.

(o) When operating Herman Nelson heaters and/or similar radiant type tent heaters ensure the following occurs.

- Place heater as far from structures as the length of the heating ducts will allow.
- Attach a 20 foot long steel chain or cable to heater to facilitate removal in case

of fire.

- Establish and maintain five foot high sandbag buffer on the front and sides of

the heater.

- Post fireguards when operating Herman Nelson heaters and/or radiant-type tent

heaters.

(p) Ensure field heaters are extinguished when leaving tent or fireguard is not

present.

(d) Annotate field heater usage on the DD Form 2977.

Wind Chill Index Guidelines

WIND CHILL INDEX	UNIFORM	ACTION
40-35 degrees	Army Combat Uniform (ACU) / ACU Operational Camouflage Pattern (OCP), boots, Gen II ECWCS parka gloves w/inserts.	Continue normal training activities as scheduled.
34-30 degrees	ACU / ACU OCP, boots, Gen II ECWCS parka, gloves w/inserts, scarf.	Continue normal training activities as scheduled. Initiate buddy system to check for cold injuries.
29 degrees and below	(Dry). ACU / ACU OCP, boots, OG108 cap, Gen II ECWCS parka, gloves or mittens w/inserts, scarf, long johns, extra socks (carried). (Wet). ACU, boots, OG108 cap, parka w/liner, gloves or mittens w/inserts, scarf, long johns, overshoes, field trousers, extra socks (carried), wet weather gear.	Ensure that all personnel wear cold weather clothing, with special attention to the protection of hands, ears, and feet. Provide warm-up areas and hot beverages.
0 degrees and below	Same as above.	Leaders inspect personnel for cold injuries. Increase frequency of rotation to warming areas.
-6 degrees and below	Same as above.	Continue training but cancel bivouac.
-25 degrees and below	Same as above.	Cease outdoor training. Move Service Members into warming areas and arrange to conduct suitable training indoors.
<p>NOTE. These guidelines are a tool for commanders. It is the commander's decision, based on the personnel, type of training such as preparation for similar climactic conditions in a contingency or war plan area as to what actions will be taken.</p> <p>THE WIND CHILL INDEX IS ANNOUNCED BY RANGE OPERATIONS DURING THE HOURLY COMMUNICATIONS CHECK OR AS IT CHANGES ON THE FIRE DESK FREQUENCY.</p> <p style="text-align: center;">Figure 14-2</p>		

14-4. Ticks

Ticks bite humans with the potential to transfer Tick-Borne Diseases (TBD). At Fort Gordon, personnel may encounter blacklegged ("deer") ticks, dog ("wood") ticks, and lone star ticks (rare). Each species of tick may transmit TBDs. Lyme Disease is one of the most prevalent TBDs. Fever, headache, fatigue, muscle/joint aches, and rashes are common symptoms associated with TBDs. The following are ways to avoid ticks.

- a. Wear clothing in a protective manner to include long sleeve shirts and trousers tucked in the socks.
- b. Avoid grassy and bushy areas whenever possible particularly the outer edges of each.
- c. Inspect body and clothing frequently. Shower as soon possible after being in a suspected tick habitat and inspect clothes thoroughly to ensure ticks do not remain on them.
- d. Use insect repellent. The most effective repellents are Permethrin/Permanone-clothing repellent (NSN 6840-01-278-1336) and DEET- personal application (NSN 6840-01-284-3982). Consult a medical professional regarding side effects due to prolonged use.

14-5. Hazardous Plants

- a. Poison ivy (*Toxicodendron radicans*), poison oak (*Toxicodendron diversilobum*) and poison sumac (*Toxicodendron vernix*) have oils that transfer to skin or clothing from any part (leaves, stem, and berries) of the plants. Oils which contact the skin can cause a rash and oozing blisters. Severe exposure may require medical attention. Both poison ivy and poison oak have clusters of three leaves that grow towards the end of a single stem. Thus the old saying "Leaves of three leave it be." Poison ivy can take the form of a vine or a shrub. Poison oak is generally a shrub, averaging about 3 feet tall, but shoots of it can also grow as a vine. Both poison ivy and poison oak can be found growing across the installation. Poison sumac normally has 7 to 13 leaves growing in pairs on a single stem except for a single leaf at the end of the stem and grows as a large shrub or small tree which tend to grow along stream corridors or in wetland areas.
- c. Stinging Nettle (*Urtica dioica*) plants have hair like structures that cover both the stems and leaves. Skin contact with the hair like structures can result in a stinging or burning sensation and a rash and/or hives.

14-6. Severe Weather/Tornadoes

- a. During the spring/summer months, thunderstorms regularly occur on Fort Gordon. Tornadoes and straight line winds occur occasionally. Unit leadership should develop sheltering plans and brief personnel in the case of such events.
- b. The Fort Gordon Fire Desk will provide severe weather notices to personnel training in the field via regular FM radio notices as needed.
- c. Ensure personnel work/sleeping/shelter areas are not in close proximity to dead/hazardous trees.

14-7. Wildlife

- a. Do not feed, disturb or harm wildlife. Report any wildlife that appears to be acting oddly or aggressively toward people. Properly store or dispose of all food and garbage items to reduce the likelihood of visits from raccoons, opossums, or bears.
- b. Threatened and Endangered Species (TES) Endangered species and their habitats are protected under the Endangered Species Act. It is a violation of the law to harm, harass, pursue, hunt, shoot, kill trap, capture, and/or collect an endangered or threatened species. Information regarding threatened and endangered species and their impact on training see Appendix F and USACCoE&FG Regulation 420-7, "Endangered Species Regulations."
- c. The RCW was listed as an endangered species in 1970 due to declining numbers and habitat loss. It excavates cavities for roosting and nesting in mature, live pine trees. Each cavity tree is marked with two 4 inch wide white bands. The boundary of the 200 foot buffer zone is marked by diamond shaped yellow or white metal signs, similar to the one below. Activities which may or may not be conducted in RCW habitat are outlined in Appendix F.
- d. Gopher Tortoise live in burrows located in dry sandy areas. These burrows are 12-14 inch wide holes in the ground with a mound of sand in the front. Gopher tortoise burrows are an important habitat for other species of animals. Avoid driving over and collapsing these burrows. Allow 25' radius around

burrows, do not disturb burrows or tortoises. See Appendix F for more information about training around gopher tortoises and their burrows.

e. Bald eagles have been found nesting on the installation in the lower end of Training Area 26 near the controlled lakes. The bald eagle (*Haliaeetus leucocephalus*) is protected by the Bald and Golden Eagle Protection Act (Eagle Act) and the Migratory Bird Treaty Act (MBTA) and as such there are limitations to activity and training within one-half mile of the nesting site. The limitations vary within buffers of 330 feet, 1000 feet, and one-half mile. See Appendix F for activity and training limitations within the three buffers.

f. Spiders. The following spiders are common in Georgia and at Fort Gordon.

(1) Brown recluse spiders (*Loxosceles reclusa*) are found in Georgia. The spiders are generally active at night. During the day they rest in undisturbed, dark, sheltered areas such as under rocks, woodpiles and bark. They are frequently found in corners and crevices of buildings. The brown recluse normally bites when pressure is applied to it. Painful bites can cause restlessness and fevers. The healing of bites may take several weeks to months.

(2) Black widow spiders are known to occur in Georgia and frequent undisturbed places in warehouses, storage areas, fixed firing positions, and range and recreational structures. These spiders may produce painful bites as well as toxic reactions that can become severe.

(3) Fire ants are common on Fort Gordon. Their venomous sting may cause an allergic reaction in hypersensitive individuals and/or lead to secondary infections. Fire ants may also have a detrimental impact on endangered or threatened species.

(4) Envenomation from stings of bees, hornets (*Vespa* spp.), yellow jackets (*Vespula* sp. or *Dolichovespula* sp.), and wasps may produce allergic reactions in some individuals.

(5) Skunks, raccoons, bat, foxes, stray cats and dogs not only can become a nuisance but they may be infected with rabies. Since these animals may be found in or under buildings, the disease potential should be recognized.

(6) Scorpions (*Centruroides*) may be found in and around buildings, particularly in those parts of the installation, which tend to remain dry. Like the black widow spider (*Latrodectus* sp.), they are usually encountered in undisturbed areas. They are venomous, but stings cause few serious consequences.

(7) The copperhead (*Agkistrodon contortrix*), cottonmouth or water moccasin (*Agkistrodon piscivores*), coral snake (*Micrurus fulvius*), eastern diamondback (*Crotalus adamanteus*), and timber or canebrake rattlesnake (*Crotalus horridus*) are venomous snakes found in Georgia. Although rarely encountered, these snakes are capable of causing serious illness or death. A variety of nonpoisonous snakes are also found in the state; although non-venomous, their bites may be painful and could lead to secondary infection. Snakes from unwanted areas are captured alive and relocated to other areas away from ongoing activities. Removal and relocation of snakes found in unwanted areas (e.g., under buildings) is occasionally required.

g. Notify the Fire Desk if personnel believe the snakes are venomous. In the winter it is common to see rattle snakes on the roads warming themselves. Do not run over them. Do not mess with them.

Chapter 15

Range Sanitation Procedures

15-1. General

a. Foxholes, bunkers, tent ditches, and all open pits must be filled in only with dirt prior to facility clearance.

b. All training areas must be properly policed and serviced by the using units, according to the range operations checklist provided in each range packet. Range inspectors will use this checklist to inspect each site.

15-2. Recycling and Disposal of Waste Materials

a. The Recycling Center is located at Bldg. 997, at the intersection of 10th Street & Chamberlain AVE, (706) 791-7881; hours are Monday-Friday, 0730-1530 (summer hours 0600-1430) or by special arrangement. The Recycling Center will accept the recyclable materials listed below and excludes items identified as hazardous waste, medical waste, or kitchen/cooking grease.

(1) Recycling. Units shall participate in the recycling program to the greatest extent possible while at Fort Gordon. Recyclables include the following items: Cardboard, white office paper, color office paper (must be bagged), shredded office paper (strip shred only, must be bagged), aluminum cans, all metals (steel brass, copper, aluminum), and pallets (wood pallets must be in serviceable condition). To increase compliance with recycling, additional recycling receptacles are available for troop units, for more information contact the Recycling Center.

(2) Solid waste material (garbage) and recyclables produced in the cantonment area will be placed within dumpsters located in/around unit scheduled buildings/facilities.

(3) Units will transport recyclables produced in the training areas or on ranges (without dumpsters) to the Recycling Center during regular business hours. Units training on weekends only, or during non-operational hours of the Recycling Center, will transport waste materials and recyclables to dumpsters located adjacent to Bldg. 997, 10th Street & Chamberlain AVE, see para 15-2 b. below.

(4) Dumpsters to support training may be requested by calling the Fort Gordon DPW HELP Desk at phone number (706) 791-3483. Units must provide the unit name, a unit point of contact (POC), the POC telephone number, the training area or range number, the eight digit grid location for potential placement of the dumpster, the dates of the training event, the estimated number of personnel to be trained, and anticipated materials (solid waste, recyclables, woody debris/construction materials). Dumpster locations selected must be accessible by a main road (hard packed gravel or asphalt). Units will keep recyclable, solid, hazardous, and woody/construction materials separated.

(5) Used ammunition containers/packaging must be turned into the ASP

(6) Under no circumstances will units place or leave waste material, recyclables, woody materials waste or other items on the ground surrounding dumpsters. If dumpsters become full, units will contact the Recycling Center at (706) 791-7881, and as needed temporarily transport materials to the Recycling Center.

b. The Hazardous Materials Collection Point (HMCP) is located in Bldg. 10604, at the intersection of 10th Street and Barnes AVE. Phone number: is (706) 791-9824; 0730-1600. After duty hours, in case of an emergency, contact Customer Assistance Office or Emergency Service Order Desk at 706-791-5520/4575/6468. Hazardous waste includes items such as POL products, batteries, used NBC kits, fluorescent light bulbs, POL soaked rags, paints, solvents, oils and greases, used cooking oil and grease, varnishes, dopes, adhesives, and unused MRE flameless heaters, etc. This is not an all-inclusive list but generally common items. Contact the HMCP for assistance and clarification. Units are responsible for providing their own waste drums and disposal containers.

(1) Drums containing hazardous waste shall be labelled as to its contents. Do not mix different types of materials (i.e. oil with antifreeze). Units are responsible for providing their own waste drums and disposal containers. Call HMCP to schedule turn in of drums at least one day prior to the desired turn in date. HMCP personnel will assist with the turn in documentation and provide additional instructions as needed. Units must provide their Department of Defense Activity Address Code (DODAAC) number to HMCP personnel in order to check out these items.

(2) If your unit has small volumes of usable material (i.e. a partially used gallon of paint or insect repellent) and they do not wish to transport it back to home station, a unit may turn it into building 10604 so the materials can be made available to other units/staff through the HMCP Re-use section. Units may also request to receive materials from Re-Use without cost.

(3) Units must have SDS for every hazardous material item they have on hand and have it readily available for anyone working with that item.

(4) Place soil contaminated by spills of less than one gallon of hazardous material in a small drum and take to HMCP for turn in. Units are responsible for providing their own waste drums and disposal containers.

(5) Waste may not be turned in or dropped off at the HMCP after hours.

c. Medical waste disposal should be coordinated with the Environmental Protection Specialist through the Defense Health Agency Medical Logistics at DDEAMC. Call (706) 787-6246 for medical disposal procedures.

(1) Sharps Containers. Dispose of used needles and syringes, glass culture trays and test tubes, and sharp disposable instruments and razors in sharps containers. The sharps containers must be tightly sealed, taped twice to insure the lid does not come off, labeled with the date the container was closed, name of who closed the container, unit turning in the container, and contact number of person who sealed the container. Items that are not authorized in sharps containers include: plastic pipettes,

packaging, paper, gloves, cotton rolls or gauze, and bottles.

(2) Red Bags. Authorized items for red bags include: cultures and stocks of infectious agents, items used to prepare cultures, human pathological waste, blood and blood products in bags or suction containers (blood may be drained down sanitary sewer as available), items saturated or dripping with human blood, cotton rolls or gauze saturated or dripping with saliva, items caked with dry blood, and isolation wastes. Label red bags with the date the bag was sealed, name of who sealed it, unit turning it in, and contact number of who sealed the bag. Items not authorized in red bags include: non-pasteur pipettes, soiled diapers, sanitary napkins, packaging, paper, gloves and other items not caked/saturated with blood, sharps of any type (place in sharps container), and urine or fecal matter without visible signs of blood.

d. Grease/oil from cooking operations. Include cooking grease/oil disposal on the submitted FTX Environmental Checklist and an SOP will be provided with instructions on disposing of waste cooking/oil grease. Do not dispose of greases and oils by dumping them into floor drains, other sewer facilities, or directly on the ground. Separate cooking grease/oils from all other waste materials.

15-3. Gray Water

a. Request gray water sites on a special site request and submit to Range Operations NLT 45 days prior to training for approval. This requirement must also be included on the submitted FTX environmental checklist and approved on the signed REC prior to the training. Construct sumps for disposal of gray water IAW ATP 4-25.12, Unit Field Sanitation Team. The unit must fill sumps and return area to original conditions prior to departure. Grey water disposal must be included on the submitted FTX environmental checklist and an SOP will be provided with instructions on disposing of strained grease from the wash water.

b. Collect wastewater generated from mess operations in/around the cantonment area and dispose of in the Fort Gordon sewer system. Strain grease and dispose of per para 15-2d.

c. Transport gray water produced in the field and stored in tanks, tankers, or similar to the gray water disposal site/transfer station located on 12th Street near 3rd Avenue. Do not dump solid waste or grease into the system.

d. Grey water shall not be disposed of and/or discharged into storm drains and/or ditches.

15-4. Field Sanitation

a. Each unit training on Fort Gordon will have a Field Sanitation Team (FST), equipped, trained, and capable of handling all field sanitation requirements for the unit, IAW AR 40-5, Preventive Medicine, DA PAM 40-11, Preventive Medicine, FM 4-02.17 and ATP 4-25.12, Unit Field Sanitation Teams.

b. The FST ensures that appropriate field sanitation facilities and practices are established and maintained; that effective sanitary control measures are applied; that effective preventive medicine measures are practiced to protect Service Members and the environment.

c. Although portable latrines are preferred, units that desire to emplace field latrines must submit a special site request IAW para 2-1b and 5-28 of this regulation.

d. Vaulted Latrines. Units are responsible for cleaning vaulted latrines they use in training areas, ranges, or training facilities. Units must provide toilet paper as needed. Do not allow Service Members to put anything other than human waste and toilet paper into the toilets. For wet wipes, units will provide Service Members a trash bag to place wet wipes into. Cleaning includes sweeping the area and washing out the facility due to tracking of mud or foreign material into the facility. Keep the area clean for the follow-on unit to use. Ensure all toilet seats are kept closed when not in use and doors are locked when leaving the training site.

Appendix A. References

ARMY REGULATIONS (AR)

AR 5-13

Total Army munitions Requirements and Prioritization Policy

AR 11-2

Manager's Internal Control Program

AR 40-5

Preventive Medicine

AR 75-1

Malfunctions Involving Ammunition and explosives

AR 75-15

Policy for Explosive Ordnance Disposal (EOD)

AR 95-1

Flight Regulations

AR 95-2

Air Traffic Control, Airfield/Heliport, and Airspace Operations

AR 190-11

Physical Security of Arms, Ammunition, and Explosives

AR 190-13

The Army Physical Security Program

AR 200-1

Environmental Protection and Enhancement

AR 200-2 (32 CFR Part 651)

Environmental Analysis of Army Actions

AR 350-1

Army Training and Leader Development

AR 350-19

The Army Sustainable Range Program

AR 385-10

The Army Safety Program

AR 385-63

Range Safety

AR 530-1

Operation Security

AR 700-13

World Wide Ammunition Logistics/Explosives Safety review and Technical Assistance Program

AR 700-19
U.S. Army Munitions Reporting System

AR 735-5
Property Accountability Policies

AR 600-55
The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing)

ARMY TECHNIQUES PUBLICATION (ATP)

ATP 3-04.1
Aviation Tactical Employment

ATP 3-06
Urban Operations

ATP 3-09.02
Field Artillery Survey

ATP 3-09.30
Techniques for Observed Fire

ATP 3-09.50
The Field Artillery Cannon Battery

ATP 3-09.70
Paladin Operations

ATP 3-11.32
Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Passive Defense (w/Basic Incl C1)

ATP 3-11.91
Chemical, Biological, Radiological, and Nuclear Threats and Hazards (w/Basic Incl C2)

ATP 3-18.11
Special Forces Military Free-Fall Operations (w/ Basic Incl C1 & C2)

ATP 3-21.91
Stryker Brigade Combat Team Weapons Troop

ATP 3-34.22
Engineer Operations--Brigade Combat Team and Below

ATP 3-37.34
Survivability Operations

ATP 3-90.97
Mountain Warfare and Cold Weather Operations

ATP 4-25.12
Unit Field Sanitation Teams

ATP 4-31
Recovery and Battle Damage Assessment and Repair

ATP 4-35.1
Ammunition and explosives Handler Safety Techniques

ATP 4-43
Petroleum Supply Operations

ATP 5-19
Risk Management

DEPARTMENT OF ARMY PAMPHLETS (DA PAM)

DA PAM 40-11
Preventive Medicine

DA PAM 40-501
Army Hearing Program

DA PAM 350-38
Standards in Weapons Training

DA PAM 385-10
Army Safety Program

DA PAM 385-30
Risk Management

DA PAM 385-24
The Army Radiation Safety Program

DA PAM 385-40
Army Accident Investigations and Reporting

DA PAM 385-63
Range Safety

DA PAM 385-64
Ammunition and explosives Safety Standards

DA PAM 385-90
Army Aviation Accident Prevention Program

DA Pam 420-7
Natural Resources--Land, Forest, and Wildlife Management.

FIELD MANUAL (FM)

FM 3-05.70
Survival

TRAINING CIRCULAR (TC)

TC 3-04.3
Aviation Gunnery

TC 3-09.81
Field Artillery Manual Cannon Gunnery

TC 3-21.75
The Warrior Ethos and Soldier Combat Skills

TC 3-21.220
Static Line Parachuting Techniques and Training

TC 3-22.9
Rifle and Carbine (w/ Basic Incl C1)

TC 3-22.10
Sniper

TC 3-22.19
Grenade Machine Gun, MK 19 Mod 3 (w/ Basic Incl C1)

TC 3-22.37
Javelin-Close Combat Missile System, Medium

TC 3-22.50
Heavy Machine Gun M2 Series

TC 3-23.30
Grenades and Pyrotechnic Signals

TC 3-25.26
Map Reading and Land Navigation

TC 3-39.30
Military Police Leader's Handbook

TC 3-39.31
Military Police Gunnery and Live-Fire Program

TC 3-23.35
Pistol (w Basic Incl C1)

TC 4-02.1
First Aid (w/ Basic Incl C1 & C2)

TC 4-02.3
Field Hygiene and Sanitation

TC 7-101
Exercise Design

TC 21-24
Rappelling

TC 21-305-2
Training Program for Night Vision Device Driving Operations

TC 21-306
Tracked Combat Vehicle Driver Training

TC 25-1
Training Land

TC 25-8
Training Ranges

TECHNICAL BULLETINS (TB)

TB Med 524
Occupational and Environmental Health: Control of Hazards to Health from Laser Radiation

TB 9-639
Passenger-Carrying Capacity of Tactical and Administrative Vehicles Commonly Used to Transport Personnel

TB 9-1300.385
Munitions Restricted or Suspended

TECHNICAL MANUALS (TM)

TM 3-22.31
40 MM Grenade Launchers

TM 3-23.25
Shoulder-Launched Munitions

TM 3-34.62
Earthmoving Operations {MCRP 3-17.71}

TM 3-34.82
Explosives and Demolition (w/ Basic Incl C1 - C3)

TM 3-34.85
Engineer Field Data {MCRP 3-17a}
TM 4-33.31
Cold Weather Maintenance Operations

TM 9-1010-223-10
Technical Manual Operator's Manual for Lightweight Company Mortar, 60mm: M224 (NSN 1010-01-020-5626) {Tm 08206a-10/1a} (This item is included on EM 0065)

TM 9-1015-200-10
Operator's Manual for Mortar, 81-Mm, M29a1 (NSN 1015-00-999-7794) (Reprinted w/Basic Incl C1-4) (This item is included on EM 0065)

TM 9-1015-250-10
Technical Manual Operator's Manual for Mortar, 120mm: Ground Mounted M120 (NSN 1015-01-226-1672) (EIC: 4sl) Mortar, 120mm: Carrier-Mounted M121 (1015-01-292-3801) (This item is included on EM 0065)

TM 9-1015-254-13&P
Operator's, Unit, and Direct Support Maintenance Manual with Repair Parts and Special Tools List (Rpstl) for Mortar, Subcaliber Insert: M303 (NSN 1015-01-377-4824) (EIC: 4sr) (Reprinted w/ Basic Incl C1-3)

TM 9-1025-211-10

Operator's Manual (Crew) for Howitzer, Medium, Towed: 155-Mm, M198 (NSN 1025-01-026-6648) (EIC: 3e1) {Tm 08198a-10/1} (Reprinted w/ Basic Incl C1-5)

TM 9-1300-200

Ammunition, General (Reprinted w/ Basic Incl C1-5)

TM 9-1370-207-10

Operator's Manual for Pyrotechnic Simulators (Reprinted W/Basic Incl C1-3)

TM 9-1375-213-12

Operators and Unit Maintenance Manual (Including Repair Parts and Special Tools List): Demolition Materials (Reprinted w/ Basic Incl C1-18)

TM 9-1425-648-13 & P

Operator, Organizational, And Direct Support Maintenance Instructions, Destruction Of Equipment To Prevent Enemy Use Battlefield Damage Assessment And Repair, Repair Parts And Special Tools List For Launcher, Rocket, Armored Vehicle Mounted: M270 (NSN 1055-01-329-6826) EIC: QBU, Part Number 13029700-203

TM 9-2350-311-10

Operator's Manual for Howitzer, Medium, Self-Propelled, 155mm M109a2 (NSN 2350-01-031-0586) (EIC:3e2) M109a3 (2350-01-031-8851) (EIC: 3e2) M109a4 (2350-01-277-5770) (EIC: 3e8) M109a5 (2350-01-281-1719) (EIC: 3e7) (Reprinted w/ Basic Incl C1-5)

TM 9-2350-314-10-1

Technical Manual Operator's Manual for Howitzer, Medium, Self-Propelled: 155mm, M109a6 (NSN 2350-01-305-0028)

TM 9-2350-314-10-2

Technical Manual Operator's Manual for Howitzer, Medium, Self-Propelled: 155mm, M109a6 (NSN 2350-01-305-0028)

TM 43-0001-28

Army Ammunition Data Sheets Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles and 40mm Grenade Launchers (Federal Supply Class 1310, 1315, 1320, 1390) (Reprint w/ Basic Incl C1-16)

FORT GORDON REGULATIONS (USACCoE&FG)

USACCoE&FG Reg 210-3,

Installation Motor Vehicle Traffic Code

USACCoE&FG Reg 210-13

Control of Firearms, Ammunition, and Other Dangerous Weapons

USACCoE&FG Regulation 350-19

Range Installation Range and Training Area Operations

USACCoE&FG Reg 385-10

U.S. Army Cyber Center of Excellence and Fort Gordon Command Safety Program

USACCoE&FG Reg 420-4

Installation Fire Prevention Program

USACCoE&FG Reg 420-5
Hunting, Fishing, Bicycling, and Training Area Recreation Regulation

USACCoE&FG Regulation 420-7
Endangered Species Regulations

DA AND DD FORMS

DA Form 1594
Daily Staff Journal or Duty Officer's Log

DD Form 626
Motor Vehicle Inspection (Transporting Hazardous Materials)

DD Form 1265
Request for Convoy Clearance

DD Form 2977
Deliberate Risk Assessment Worksheet

Appendix B. OIC/RSO Appointment Requirements

This table provides the grade requirements for OICs and RSOs.

Table 1–1, Officer In Charge and Range Safety Officer appointment requirements (DA PAM 385-63, Apr 14)

Weapon System	OIC ¹			RSO ¹		
	OFF	WO	NCO	OFF	WO	NCO
Practice hand grenades; sub-caliber training devices; laser devices; firing devices; simulators and trip flares; small arms and machine guns.	X	X	E-6	X	X	E-5
Chemical agents and smoke ²	X	X	E-6	X	X	E-5
Aerial gunnery and air defense weapons; live grenades, grenade launchers, and grenade machine guns; live mines and demolitions; tank and fighting vehicle cannons.	X	X	E-7	X	X	E-6
Field artillery ³	X	X	E-7	X	X	E-6
Mortars	X	X	E-6	X	X	E-6 ⁴
Air defense artillery rockets and guided missiles	X	X		X	X ⁵	
Direct fire antitank rockets and missiles	X	X	E-7	X	X	E-6
Live-fire exercises using organic weapons, squad through company, battery, troop.	X	X	E-7	X	X	E-6
CALFEX/CAX using outside fire support, troop, battery, squad, platoon, company; or battalion and larger. ⁶	X	X	E-7	X	X	E-6

Notes:

¹ Civilians in the grade of general schedule (GS)-07 and above, or equivalent, may act as OIC; GS-05 and above, or equivalent, may act as RSO.

² For the Marine Corps, OIC and RSO must be E-4 and above and be chemical, biological, radiological, and nuclear (CBRN) MOS 5702/5711 when conducting CBRN or smoke training. For the Army, OIC and RSO must be CBRN qualified when conducting CBRN or smoke training.

³ Use of E-7s as OICs is authorized only when approved by the senior commander (Army)/installation commander (Marine Corps). Duties of the RSO are normally performed by either the battery executive officer or the platoon leader.

⁴ RSO for Marine Corps can be an E-5 for mortar training activities.

⁵ Senior Range Safety Officer (SRSO) will be a chief warrant officer four, chief warrant officer four or higher, or a civilian in the grade of GS-12 or above.

⁶ For battalion or larger CALFEX/CAX, OIC will be a field grade commissioned officer; exercise RSO will be E-7 or above.

Appendix C. Ranges, Training Areas and Facilities

This appendix covers primary capabilities (standard events) for RTAF's. SOPs are located in the RFMSS library or Range Scheduling.

Facility Name	FCC	Standad Event	CONCOP / DRAW Required	REC Required	Requires Specific Certification for Site	Remarks
Range 2	17821	CPQC / MP FireArms Qual Range, Automated	Y	Y	N	
Range 4	17892	Known Distance Range (1000 yds)	Y	Y	N	7.62MM AND BELOW
Range 5	17834	Grenade Launcher Range	Y	Y	N	
Range 6	17806	Modified Record Fire Range	Y	Y	N	
Range 7	17801	Basic 25-M Firing Range Zero	Y	Y	N	
Range 8	17801	Basic 25-M Firing Range Zero	Y	Y	N	
Range 9	17806	Modified Record Fire Range	Y	Y	N	
Range 9A	17801	Basic 25-M Firing Range Zero	Y	Y	N	
Range 10A	17801	Basic 25-M Firing Range Zero	Y	Y	N	
Range 11	17806	Modified Record Fire Range	Y	Y	N	
Range 13	17881 17882 17883	Hand Grenade Accuarcy Crs, Qulaification Crs, Live Bay Range	Y	Y	N, N, Y	OIC and NCOs Require Specific Training to conduct Live Bay Training
Range 14	17802	DFMWR Recreational Range	Y	Y	N	
Range 17	17833	Multi-Purpose Magine Gun Range	Y	Y	N	
CLFR	17771	Convoy Live Fire range	Y	Y	Y	Currently Closed Repoens 2027

Appendix C. Ranges, Training Areas and Facilities

This appendix covers primary capabilities (standard events) for RTAF's. SOPs are located in the RFMSS library or Range Scheduling.

Facility Name	FCC	Standard Event	CONOP / DRAW Required	REC Required	Requires Specific Certification for Site	Remarks
MOUT	17996	Mout Collective Trng Facility (TA30)	Y	Y	N	Container Village
00524	17995	Combat in Cities Facility (TA24)	Y	Y	N	
00523	17170	NBC Chamber	Y	Y	Y	CBRN Qualified OIC Required
DZ001	17991	Personnel/Equipment Drop Zone	Y	Y	Y	OIC Airborne Certification Required
MP C	17855	Mortar Live Fire	Y	Y	Y	60/81/120mm
AFP A	17856	Field Artillery Indirect Firing Point	Y	Y	Y	Located in TA 36
AFP B	17856	Field Artillery Indirect Firing Point	Y	Y	Y	Located in TA 36
AFP D	17856	Field Artillery Indirect Firing Point	Y	Y	Y	Located in TA 42
AFP E	17856	Field Artillery Indirect Firing Point	Y	Y	Y	Located in TA 42
AFP G	17856	Field Artillery Indirect Firing Point	Y	Y	Y	155mm Artillery Only, Collocated in TA23 with DZ001
AFP H	17856	Field Artillery Indirect Firing Point	Y	Y	Y	Located in TA 42
AFP I	17856	Field Artillery Indirect Firing Point	Y	Y	Y	Located in TA 28
TA 09	17710	Land Navigation Crs, Patrolling, FTX, COMEX	Y	Y	N	
TA 21	17710	Land Navigation Crs, Patrolling, FTX, COMEX	Y	Y	N	
TA 26	17710	Land Navigation Crs, Patrolling, FTX, COMEX	Y	Y	N	
TA 37A	17710	Land Navigation Crs, Patrolling, FTX, COMEX, Landing Strip Operations, FARP Operations, LOGEX	Y	Y	N	
TA 37B	17710	Land Navigation Crs, Patrolling, FTX, COMEX,	Y	Y	N	

Appendix D. Range/Facilities Safety Conflicts Matrix

Site	Location (17S LS..)	Standard Ammunition	Range Conflicts	Training Area Conflicts	Remarks
Range 2	87187 96845	.38, .40, .45, 357, 9mm, 12 guage Shotgun	None	SAIA Closed	
Range 4	85283 94628	9mm, 5.56mm	None	SAIA Closed	
Range 5	85741 94506	40mm TP	None	SAIA Closed	
Range 6	85684 94212	5.56mm	None	SAIA Closed	
Range 7	85725 93859	5.56mm	None	SAIA Closed	
Range 8	85961 92662	9mm, 5.56mm	None	SAIA Closed	
Range 9	86156 92493	5.56mm	None	SAIA Closed	
Range 9A	86375 92237	5.56mm	None	SAIA Closed	
Range 10	86504 92069	9mm, 5.56mm	None	SAIA Closed	
Range 10A	82693 89012	5.56mm	None	SAIA Closed	
Range 11	86837 91833	5.56mm	None	SAIA Closed	
Range 13	92198 92791	Hand Grenades (Fragmentation, Concussion, and Practice Fuses)	When live bay is Hot R13Q is closed	TA 19 Closed	OIC Certification Requirements
Range 14	91301 93438	.308 and Below MWR Range	None	SAIA Closed	
Range 15	80372 85949	Non Standard Range (Varies)	Varies	Varies	NSTR Required
Range 16	80687 88371	Non Standard Range (Varies)	Varies	Varies	NSTR Required
Range 17	76178 89474	5.56, 7.62, 50cal, 40mm TP	None	38,39,45, 46,47,49B	
Artillery / Mortar	As Determined by Unit Request	HE, WP, SMK, Illumination, Blanks, Pyrotechnics ***	Varies	AREA E 105mm/ 550m 155mm/ 725m ***	Ammunition MUST be approved for overhead fire. No overhead fire for Motrars

Appendix E. Training and Range Contact Information

Range Operations Point of Contacts	
Range Operations & Scheduling	791-5008/5005
Range Manager	791-9285
Range Supervisor	791-9935
Range Safety Officer	791-9286
Training Facility Coordinator	791-2422
Ammunition Manager	791-3639
Range Maintenance	791-9937
ITAM	791-9936
Range FAX	791-9760
EOD (Ft Stewart)	(912) 368-6529
Alternate EOD (Ft Stewart)	(912) 435-8307

Installation Support Point of Contacts	
IOC	791-9747
EST 2000	791-1791
Fire Department*	791-4141
Forestry	791-9932
Conservation Law Enforcement Officer*	791-5033
Grave Information	791-2403
Military Police	791-2681
DFMWR	791-5078
TADSS	791-9378/9104
Environmental Division (REC approvals)	791-2403/9927/8245
GIS Technician	791-5696

***For Emergencies, DIAL 911**

Appendix F. Training Limitations for Endangered, Threatened, and Protected Species on Fort Gordon

1. Red Cockaded Woodpecker (RCW) Training Guidelines

Some training restrictions are in place for areas where red cockaded woodpeckers (RCW) occur. In general military training and other activity is restricted within a 200 foot buffer surrounding RCW cluster sites. A list of more specific, detailed restrictions are in the chart that follows. For more information regarding authorized and unauthorized activities in and around RCW cluster sites and habitat management units can be found in USACCoE&FG Regulation 420-7.

The purpose of training restrictions associated with RCW clusters is to avoid or minimize the potential for “take” as defined under Section 9 of the ESA. Implementation of training restrictions on U.S. Army installations will balance support of RCW population growth to achieve an installation's population goals and flexibility to achieve training mission requirements.

The following is some information specific to military training and red cockaded woodpeckers contained in the Army's RCW Management Guidelines.

The following are some excerpts from the Army's RCW Management Guidelines related to training in and/or near RCW cluster sites published in 2007.

Excerpt # 1: Training in Clusters.

The purpose of training restrictions associated with RCW clusters is to avoid or minimize the potential for “take” as defined under section 9 under the ESA. Implementation of training restrictions on Army installations will balance support of RCW population growth to achieve installation population goals and flexibility to achieve training mission requirements. ESMCs, with appropriate consultation, may contain provisions to remove or add restrictions in HMUs.

Certain activities (refueling points, generators, smoke generators, smoke pots, and mechanical digging) are by their nature likely to disrupt the ability of RCWs to roost or nest (or conduct nesting activities; e.g., incubating, brooding, feeding) if conducted in proximity to cavity trees, or have potential for significant habitat damage. These activities will be conducted only at locations approved by Directorates of Plans, Training, and Mobilization (DPTMs) either IAW provisions of the Installation Range Regulation or by case-by-case evaluation. DPTMSs must consult with the installation biologist to ensure that such activities are avoided in buffer zones and minimized elsewhere in RCW HMUs. These activities will not be approved within buffer zones of protected clusters or within 200 feet of unprotected cavity trees unless authorized through consultation with USFWS (preferably done during the ESMC process).

Excerpt # 2:

1. Training in Protected Clusters

a. The training restrictions in this section apply to buffer zones within protected clusters. RCW-related training restrictions do not apply to foraging areas or unprotected clusters.

b. Standard training guidelines in protected clusters are:

(1) Military training within 200 feet of marked cavity trees is limited to military activities of a transient nature (less than two hours occupation). Appendix 1 provides a list of prohibited and permitted training activities within buffer zones.

(2) Military vehicles are prohibited from occupying a position or traversing within 50 feet of a marked cavity tree, unless on an existing road or maintained trail or firebreak.

2. Training Activities in All Habitats. In addition to training restrictions associated specifically with RCW clusters, the installation will implement the following guidelines for habitats throughout the installation to

maintain and improve potentially suitable habitat for the RCW. These guidelines will remain in effect even if restrictions are discontinued upon reaching 350 PBGs or the installation population goal, whichever is less.

a. Military personnel are prohibited from cutting down or intentionally destroying pine trees unless the activity is approved previously by the installation biologist and is authorized for tree removal. Hardwoods may be cut and used for camouflage or other military purposes. If removal of hardwoods would damage a cavity tree, approval from the installation biologist would be required.

b. Units will immediately report to range control known damage to any marked cavity or cavity start tree and/or any known extensive soil disturbance in and around RCW clusters. Range control will notify installation biologists immediately.

c. The installation will immediately (within 2 working days of notification) re-provision a cavity tree if one is destroyed due to training activity.

d. Installations will as soon as practicable (normally within 3 working days of notification) repair damage to training land within a cluster to prevent degradation of habitat.

e. All digging for military training activities in RCW habitat management units will be filled and inspected upon completion of training.

f. Training guidelines will be actively enforced through installation training and natural resources enforcement programs.

TRAINING ACTIVITY WITHIN RCW BUFFER ZONES (1)	ALLOWED
MANEUVER AND BIVOUC:	
Hasty defense, light infantry, hands and hand tool digging only, no deeper than 2 feet, 2 hours MAX, must be filled back in before leaving.	Yes
Hasty defense, mechanized infantry/armor	No
Deliberate defense, light infantry	No
Deliberate Defense, mechanized infantry/armor	No
Establish command post, light infantry	No
Establish command post, mechanized infantry/armor	No
Assembly area operations, light infantry/mech infantry/armor	No
No Establish CS/CSS sites	No
Establish signal sites	Yes
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, hardwood only	Yes
Establish camouflage netting	No
Vehicle maintenance for no more than 2 hours	Yes
TRAINING ACTIVITY WITHIN RCW BUFFER ZONES (1) (Continued)	ALLOWED
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
Hoffman type devices	Yes

PYROTECHNICS/SMOKE:	
CS/riot agents	No
Smoke, haze operations only, generators or pots, fog oil and/or graphite flakes (3)	Yes
Smoke grenades	No
Incendiary devices to include trip flares	No
Star clusters/parachute flares	No
HC smoke of any type	Yes
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
NOTES:	
(1) These training restrictions apply to RCW cavity trees in training areas but not to cavity trees located in dedicated impact areas.	
(2) Vehicles will not get any closer than 50 feet of a marked cavity tree unless on existing roads, trails or firebreaks.	
(3) Smoke generators and smoke pots will not be set up within 200 feet of a marked cavity tree, but the smoke may drift thru the 200 feet circle around a cavity tree.	

2. Gopher Tortoise Training Guidelines

Some training restrictions are in place for areas where gopher tortoises occur. In general military training and other activity is restricted within a 25 foot buffer surrounding gopher tortoise burrow sites. A list of more specific, detailed restrictions are in the chart that follows. For more information regarding authorized and unauthorized activities in and around Gopher Tortoise burrow sites and habitat management units can be found in USACCoE&FG Regulation 420-7.

The following is some information specific to military training and gopher tortoises contained in the Army's Gopher Tortoise Management Guidelines published in 2008.

Some training restrictions are in place for areas where gopher tortoise burrows occur. In general, vehicular traffic is prohibited within 25 feet of a burrow (unless the burrow is directly adjacent to a training area road or fire break) and individuals on foot are prohibited within 5 feet of a burrow. A list of more specific, detailed restrictions are in the chart that follows. Additional information regarding gopher tortoise management and protection can be found in the gopher tortoise guidelines contained in USACCoE&FG Regulation 420-7.

TRAINING ACTIVITY WHERE TORTOISE BURROWS OCCUR

MANEUVER AND BIVOUAC:	Potential Adverse Impacts to Burrows
Hasty defense, light infantry, hands and hand tool digging only, no deeper than 2 feet, fill in before leaving	NO
Hasty defense, mechanized infantry/armor	YES
Deliberate defense, light infantry	NO

Deliberate Defense, mechanized infantry/armor	YES
Establish command post, light infantry	NO
Establish command post, mechanized infantry/armor	YES
Assembly area operations, light infantry/ mechanized infantry/armor	YES
Establish CS/CSS sites	YES
Establish signal sites	YES
Foot transit thru the colony	NO
Wheeled vehicle transit through the colony	YES
Armored vehicle transit through the colony	YES
Cutting natural camouflage	NO
Establish camouflage netting	NO
Vehicle maintenance	YES
WEAPONS FIRING:	
7.62mm and below blank firing	NO
,50 cal blank firing	NO
Artillery firing point/position	NO
MLRS firing position	NO
All others	NO
NOISE:	
Generators	NO
Artillery/hand grenade simulators	NO
Hoffman type devices	NO
PYROTECHNICS/SMOKE:	
CS/riot agents	NO
Smoke, haze operations only, generators or pots, fog oil and/or graphite flakes /3)	NO
Smoke grenades	NO
Incendiary devices to include trip flares	NO
Star colonies/parachute flares	NO
YES HC smoke of any type	NO
TRAINING ACTIVITY WHERE GOPHER TORTOISE BURROWS OCCUR (Continued)	Potential Adverse Impacts to Burrows
DIGGING ALLOWED:	
Tank ditches	YES
Deliberate individual fighting positions	YES
Crew-served weapons fighting positions	YES
Vehicle fighting positions	YES
Other survivability/force protection positions	YES
Vehicle survivability positions	YES

3. Bald Eagle Nesting Site Training Guidelines

The following limitations are in place for training and other activities within buffers around bald eagle

nesting sites. These limitations are in effect during the bald eagle nesting season from 1 October to 15 May each year.

a. There is a 330 foot buffer from the actual bald eagle nest site which is marked with signage that clearly states that the area behind the signs is off limits to all activity including all military training during the nesting season. During the nesting season each year no activity of any type is authorized within this marked buffer.

b. There is another buffer at 660 feet from the nest site which is not marked that mainly prohibits forest management activities such timber harvesting and equipment operation during the nesting season but all types of mechanized military training and off road vehicle travel are also prohibited in this buffer during the nesting season. Non-mechanized training such as foot maneuvers and land navigation are authorized during the nesting season in this second buffer area.

c. There a 1000 foot vertical and horizontal no fly zone around the bald eagle nest site in which aircraft flight is restricted during the nesting season.

d. No loud noises such as artillery simulators, howitzer/artillery fire, fireworks or other extremely loud noise producing devices are to be detonated within one-half mile of the bald eagle nest site during nesting seasons.

Glossary Abbreviations

AA	Active Army
A&E	Ammunition and explosives
AESD	Army Enterprise Service Desk
AGAR	Army Ground Accident Report
AHA	Ammunition Holding Area
AMC	Air Mission Commander
AR	Army Regulation
ASP	Ammunition Supply Point
ATWESS	Anti-Tank Weapon Effect Signature Simulation
CACTF	Combined Arms Collective Training Facility
CALFEX	Combined Arms Live Fire Exercise
CAT	Category
CAX	Combined Arms Exercise
CBRN	Chemical Biological Radiological Nuclear
CCT	Combat Control Team
CIF	Clothing Issue Facility
COB	Civilian on the Battlefield
COM	Commercial
C-IED	Counter Improvised Explosive Device
CLEO	Conservation Law Enforcement Officer
DA	Department of the Army
DAGR	Defense Advanced GPS Receiver
DES	Directorate of Emergency Services
DFAC	Dinning Facility
DFMWR	Directorate of Family, Morale, Welfare and Recreation
DOD	Department of Defense
DPTMS	Directorate of Plans, Training, Mobilization and Security
DPW	Directorate of Public Works
DRAW	Deliberate Risk Assessment Worksheet
DZ	Drop Zone
DZSO	Drop Zone Safety Officer
DZSTL	Drop Zone Support Team Leader
ECS	Equipment Concentration Site
ECT	Extended Combat Training
ED	Environmental Division
EOD	Explosive Ordnance Disposal
EPW	Enemy Prisoner of War compound
FA	Field Artillery
FA	Functional Administrator
FAA	Federal Aviation Administration
FAC	Forward Air Controller
FDC	Fire Direction Center
FLIPL	Financial Liability Investigation of Property Loss
FM	Field Manual
FM	Frequency Modulation
FM Form	Fort Gordon Form
FMR	Fort Gordon Regulation
FO	Forward Observer
FOB	Forward Operating Base
FP	Firing Point
FRH	Flameless Ration Heaters
FST	Field Sanitation Team
GLPS	Gun Laying & Positioning System
GIS	Geographic Information System

HAZMAT	Hazardous Materials
HIMARS	High Mobility Artillery Rocket System
HSTC	Home Station Training Complex
HSTL	Home Station Training Lane
IAW	In Accordance With
ICE	Interactive Customer Evaluation
ICM	Improved Conventional Munitions
IED	Improvised Explosive Device
IFR	Instrumented Flight Rules
IFSD	Indirect Fire Safety Diagram
IMMA	Installation Material Maintenance Activity
ITAM	Integrated Training Area Management
ITTB	Improved Tactical Training Base
ISO	Installation Safety Office
LAO	Local Area Orientation
LRAM	Land Rehabilitation and Maintenance
LRC	Logistics Readiness Center
LRSO	Laser Range Safety Officer
LSDZ	Laser Surface Danger Zone
LWCS	Low Water Crossing Site
LZ	Landing Zone
MACOM	Major Command
MATES	Maneuver Area Training Equipment Site
MEDEVAC	Medical Evacuation
MHz	Megahertz
MILES	Multiple Integrated Laser Engagement System
MIM	Military Installation Map
MLRS	Multiple Launch Rocket System
MOS	Military Occupation Specialty
MPE	Maximum Permissible Exposure
MPTR	Multi-Purpose Training Range
MRE	Meal, Ready to Eat
MSDS	Material Safety Data Sheet
NBC	Nuclear Biological Chemical
NCO	Non-Commissioned Officer
NCOIC	Non-Commissioned Officer-In-Charge
NEC	Network Enterprise Center
NEPA	National Environmental Policy Act
NIA	North Impact Area
NLT	No Later Than
NOHD	Nominal Ocular Hazardous Distance
NRB	Natural Resources Branch
NSTR	Non-Standard Training Request
NVD	Night Vision Devices
OCT	Observer Controller Trainer
OIC	Officer in Charge
OP	Observation Point
PAM	Pamphlet
PAO	Public Affairs Office
PD	Point Detonating
PLGR	Precision Lightweight GPS Receiver
PPE	Personal Protective Equipment
PMCS	Preventive Maintenance Checks and Services
POC	Point of Contact
POL	Petroleum Oil Lubricants
POV	Privately Owned Vehicle

QASAS	Quality Assurance Specialist (Ammunition Surveillance)
RCMP	Range Complex Master Plan
QD	Quantity Distance
REG	Regulation
RF	Radio Frequency
RFMSS	Range Facility Management Support System
ROA	Restricted Operating Area
RSO	Range Safety Officer
RSS	Range Safety Specialist
RTAF	Range Complex Training Facility
RTO	Range Training Officer
RTLA	Range and Training Land Assessment
RTLTP	Range Training Land Program
SARSA	Small Arms Range Safety Area
SDZ	Surface Danger Zone
SDS	Safety Data Sheets
SINCGARS	Single Channel Ground and Airborne Radio System
SOP	Standard Operating Procedure
SRA	Sustainable Range Awareness
SRP	Sustainable Range Program
SVFR	Special Visual Flight Rules
TACON	Tactical Control
TBD	Tick-Borne Diseases
TC	Training Circular
TM	Technical Manual
TMC	Troop Medical Clinic
TMP	Transportation Motor Pool
TOAGA	Temporary Overnight Ammunition Guard Area
TOC	Tactical Operations Center
TOW	Tube Launched, Optically Tracked, Wire-Guided
TP	Target Practice
TSS	Training Support Section
TTB	Tactical Training Base
UAS	Unmanned Aerial Systems
US	United States
USAF	United States Air Force
USAR	United States Army Reserve
UTM	Ultimate Training Munitions
UXO	Unexploded Ordnance
VFR	Visual Flight Rules
VIP	Very Important Person(s)
WBGT	Wet Bulb Gauge Temperature
WDZ	Weapons Danger Zone

Terms

Accident

An accident is an unplanned event resulting in death or injury to personnel, or the loss or damage of equipment or property.

Aerial Firing Point

A surveyed location over which an armed helicopter may engage targets with its weapon systems.

Ammunition

All types of cartridges small arms, mortar, and recoilless rifle, shot shell, explosives fuses, detonating cord, firing devices, chemical munitions, pyrotechnics (rockets, flares, burst simulators, fire crackers), and components used in training.

Ammunition Breakdown Area

An area used for unpacking and preparing ammunition for firing. Marking requirements are the same as for service magazine.

Ammunition Lot Number

Code number that identifies a particular quantity of ammunition made by a manufacturer. The number is printed on each lot of ammunition when it is made.

Area E

The danger area between an indirect fire weapon system and Area D. This area is endangered by muzzle debris, overpressure, blast and hazardous impulse noise. Personnel in service batteries firing from approved tactical configurations may occupy Area E.

Bivouac

A training facility located within a tactical area and used as an overnight Bivouac Area. No vehicles are allowed in bivouac areas.

Cease Fire

Immediate termination of all firing activities. All weapons must be cleared and made safe. Turret mounted weapons must be elevated. Range Operations personnel, the OIC, the Safety Officer, or anyone observing an unsafe act may order a cease-fire.

Cease Fire Freeze

Immediate termination of all firing activities; Weapon(s) systems are not moved or altered, all settings remain as is. Personnel are removed from in or around the weapons and guards are posted to prevent tampering. A cease-fire freeze order will normally be employed when rounds have been fired out of the approved surface danger zone.

Cleared weapon

- (a) To operate a weapon to unload it, and make certain no ammunition remains in it.
- (b) To free weapons of stoppage.

Cook Off

Functioning (firing) of a chambered round of ammunition initiated by the heat of the weapon.

Dud

An explosive munitions, which has been fired or otherwise activated and has failed to detonate.

Firer

A Soldier in a firing position, on the firing line, participating in a firing exercise controlled by the control tower.

Firing Line

The line of position which weapons are fired. No one is permitted forward of the firing line during weapon firing, except as specifically indicated in this regulation (e.g., target detail, etc.).

Firing Point

- (a) The numbered position to which a firer is assigned during a firing exercise.
- (b) Surveyed point for indirect fire units. The area within a 350-meter radius of a surveyed firing point.

Firing Position

- (a) The point or location which a weapon, other than demolition is placed for firing.
- (b) In the case of demolition, the Firing Position is that point or location which the firing crew will be located during demolition operations.

Hang Fire

Temporary failure or delay in the action of a primer, igniter, or propelling charge. A hang fire cannot be distinguished from complete failure or misfire for several seconds. Be sure to keep the weapon pointed down range. A hang-fire for a rocket occurs if the rocket propellant is ignited by the firing impulse, but the rocket fails to exit the launcher within the expected time.

Incident

An occasion of noteworthy interest that may or may not result in injury to personnel or damage to property. It may indicate factors that may result in injury or damage to property if the unit Chain-of- Command does not prevent it from occurring again.

Impact Area

The area (primary danger area) having designated boundaries within the limits of which all ordnances is to make contact with the earth's surface.

Malfunction

Any failure of an ammunition item to function as expected when fired or launched, or when explosive items function under conditions that should not cause functioning. Malfunctions include hang-fires, misfires, duds, abnormal functioning, and premature functioning.

Misfire

Failure of a primer, propelling charge of a round, or rocket/guided missile ignition and/or propulsion system to function, wholly or in part.

Officer-in-Charge

The officer (or Non-Commissioned Officer) designated by the command as responsible for range operations, training areas or training facility and who has operational control of the troops firing weapons, or utilizing a specific training area or facility.

Range Safety Officer

An officer or qualified NCO (depending on the type of firing to be conducted) designated to assure the adequacy of safety when firing is conducted on a specific range or combination of independent ranges.

Round of Ammunition

A round of ammunition comprises all the components necessary to fire the weapon once. In general terms, it consists of the following parts: primer, propellant, fuse and booster (if necessary).

Safe

When a weapon or round is unable to fire due to deployment of a safety feature.

Safety

A locking or cutoff device that prevents a weapon or missile from being fired when placed in the "ON" position.

SARSA

Army established and Army managed areas to contain small arms range activities that if not conducted in a controlled environment, would be hazardous to nonparticipating aircraft.

Set Down Area

Designated area on each aerial firing range where an aircraft experiencing a malfunctioning weapons system will land, keeping weapons systems facing down range, and where systems repairs may be made after weapons system is rendered safe.

Switches/Cold

Aircraft armament sub-systems are considered cold when the master arm switch is on safe or in off position and circuit breakers off.

Switches/Hot

Aircraft armament sub-systems are considered hot with switches on and circuit breakers in.

Target Area

The location to which firing is directed. For demolitions, the target area is the point where the demolition charge is placed.

Training Area

An area set-aside for units to train in tactics such as: ambushes, patrolling, and individual common tasks.

Training Facilities

A facility designated for training and utilization.

Unit Trainer

A qualified pilot placed on military orders as a Unit Trainer, in the applicable aerial weapons system.