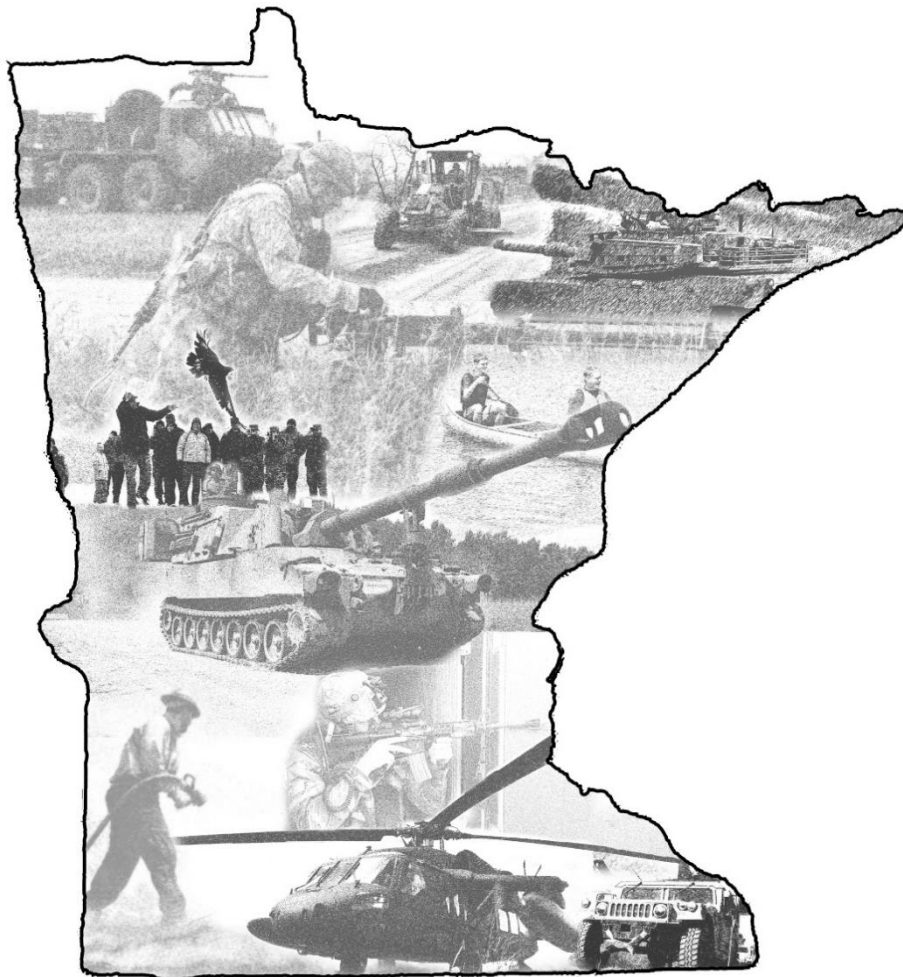


**“The Warriors Choice”**  
**COL Troy J. Fink, Garrison Commander**



Headquarters  
Camp Ripley Training Center  
Little Falls, MN  
January 2026

Headquarters  
Camp Ripley Training Center  
Little Falls, MN  
01 JAN 2026

Camp Ripley Training Center

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By Order of the  
Adjutant General:

SHAWN P. MANKE  
Major General, MNARNG  
The Adjutant General

Official:

FINK.TROY.JAM  
ES.1137280015

Digitally signed by  
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Date: 2025.12.19 14:43:50 -06'00'

TROY J. FINK  
COL, FA, MNARNG  
Garrison Commander

**History.** This current publication  
supersedes all previous versions.

**Summary.** This procedures guide  
enforces rules to enable operations,  
care for, and preserve existing  
facilities and resources pursuant to  
Minnesota Statutes 190.11 and  
609.396.

**Applicability.** This publication  
applies to all Minnesota National  
Guard organizations and all other  
military and civilian organizations  
operating on the installation.

**Supplementation.** Supplementation  
of this publication and establishment  
of command and local forms are  
prohibited without prior written  
approval from the Camp Ripley  
Garrison Commander's office.

**Proponent.** The proponent for this is  
document is the Director of Plans,  
Operations, and Training. Activities  
may request a waiver to this  
regulation by providing justification  
that includes a full analysis of the  
expected benefits and must include  
formal review by the CRTC legal  
officer.

**Suggested improvements.** Users  
are invited to send comments and  
suggested improvements on DA  
Form 2028 (Recommended Changes  
to Publications and Blank Forms)  
directly to Operations, Building 8-1,  
15000 Hwy 115, Little Falls, MN  
56345 or [ng.mn.mnarng.list.crc-  
opns@army.mil](mailto:ng.mn.mnarng.list.crc-opns@army.mil).

**Distribution.** This publication is  
available in electronic media only and  
is intended for all command levels  
within the Minnesota National Guard  
and transient units training at Camp  
Ripley Training Center.

### Summary of Changes

- Multiple instances of title standardization/ update
  - “Senior Commander” changed to “**Garrison Commander**”
  - “Range Control OIC” changed to “**Range Management Authority (RMA)**”
- Updated IAW newly published AR 385-63, removed all mentions of “DA PAM 385-63”
- Removed restated doctrinal references
- Removed all mentions of RAVE
- [1-3.H.1](#): Updated RSO/OIC guidance
- [1-7](#): Updated Gate Names
- [1-10](#): Points Based Safety Policy
- [3-6](#): Updated Restrictions Regarding the Use of Steel Reactive Targets (SRT)
- [5-1](#): Added hand grenade throwing locations
- [11-8.F,K,&O](#): Updated UAS guidance
- [16-11.B.6](#): All spills must be reported to Range Control (Previously 5 gal or more)
- [16-13.B](#): Added marking guidance for dig operations, night and day
- [16-14](#): Updated Tick guidance

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## Chapter I – General Information

This Regulation is a summary of policies and procedures set forth by AR 385-63, NGR 385-63, AR 385-64, DA Pamphlet 385-64, TC 25-8, and any other Regulations pertaining to the use and operation of the Field Training Area, Live-Fire ranges, Non-Live Fire ranges, and ammunition usage in the Installation. All persons entering the Field Training Area are subject to the regulations set forth in this document.

Violations of this regulation by persons subject to the Uniform Code of Military Justice are prosecuted there under. Any other persons who violate this Regulation may be prosecuted by administrative action by the Garrison Commander or other appropriate military or civilian authority.

### 1-1 Purpose

Camp Ripley Range Regulation is published to establish the procedures to proper usage of down range activities. Provisions of this regulation apply to personnel, military or civilian, utilizing any portion of Camp Ripley. Personnel comply with AR 385-10 The Army Safety Program, DA Pamphlet 385-10 Army Safety Program, AR 385-63 Range Safety, AR 385-64 U.S. Army Explosives Safety Program, and DA Pamphlet 385-64 Ammunition and Explosives Safety Standard.

### 1-2 References

AR 350-19, AR 385-10, AR 385-63, DA Pamphlet 385-10, DA Pamphlet 385-64, NGR 385-63, NGR 385-64, TC 25-8, ATP 5-19, Camp Ripley Garrison Regulation 210-1, and any other referenced publications.

### 1-3 Responsibilities

**Commanders:** Commander of units and Civilian entities comply with guidelines established in AR 385-63 and this publication, regarding the functions of appropriate and safe range operations. The following is a list of personnel, and their responsibilities, for safe range operations:

- a. The Garrison Commander
  - (1) Prohibits use of alcohol and controlled substances on the installation.
  - (2) Ensures an aggressive education program on the dangers of Dud ammunition and other UXO items is implemented.
- b. Director of Plans, Operations, and Training – Camp Ripley Command
  - (1) Serves as units initial POC for information to Camp Ripley.
  - (2) Serves as POC for scheduling activities.
  - (3) Represents the Commander in matters pertaining to the control and access of ranges and training areas.
- c. Range Control Officer/Senior Shift SGT
  - (1) Serves as the central point for control and coordination of activities conducted with in installation training areas and ranges.
  - (2) Withdraws or suspends privileges from person, organization, agency or club who violates regulation listed above. This includes the obstruction of other units training.
  - (3) Responsible for providing safe training environments by ensuring Weapon Danger Zones (WDZ) and Surface Danger Zones (SDZ) are identified, and control measures are employed.
  - (4) Publishes Range Bulletin for Camp Ripley 24 hours prior to any scheduled firing. Range Bulletin is available at Range Control, Bldg. 24-199, SharePoint Page, and at the Camp Ripley Operations Office,

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Bldg. 8-1. These items include the following:

- Where firing is being conducted.
- Scheduled start and end time of ranges.
- Boundaries of all SDZs, WZDs, Air Drop Danger Zones (ADDZs), and UAS/SUAS Restricted Operations Zones (ROZs).

(5) Display and update:

- Range Maps/Overlays
- Firing Data
- Open and Close TAs and Ranges
- Update Range Bulletin out 72 hours
- Monitor ASIP range control frequencies
- Primary 36.100 Single Channel Plain Text
- Alternate 40.400 Single Channel Plain Text

d. Unit Liaison Officer

Attends Range Control Annual Training morning synchronization meeting at 0830 May through August, where conflicts are discussed and training is validated for 72 hours out. Unit must send representative who have decision making authority.

e. Training Area Coordinator

Maintains a list of restricted areas, clears maneuver damage and assists Range Control personnel in clearing training areas.

f. Battalion/Squadron Commanders

Comply with the Installation procedures for the certification and training of Unit OICs, RSOs, and Laser Range Safety Officers (LRSOs). Certify personnel prior to live fire through a weapons certification safety memorandum submitted to Range Control.

g. Unit Commanders

(1) Ensures compliance with AR 385-63, NGR 385-63, this Regulation, and any applicable TMs, FM's, MWCPs (Marine Corps), TCs, and SOPs for safe training and firing for each weapon system within the command.

(2) Ensure personnel are briefed and comply with Installation range procedures.

(3) Ensure appointed OIC and RSO for each firing and/or maneuver exercise are compliant in accordance with AR 385-63 Table 1-1.

(4) Ensure medical treatment for overexposure to laser energy, and reporting laser overexposure incidents IAW AR 385-40, TB MED 524, MIL-HDBK 828C, and MCO 5104.1c.

h. Range Officer in Charge (OIC)

(1) Meets Grade/Rank requirements of AR 385-63 Table 1-1. OIC's may not be non-branch qualified lieutenants, cadets or non-NATO foreign military officers/NCO's.

(2) Weapon Safety Certified IAW Paragraph 1-4.

- (3) Attend a Range Safety Briefing at Range Control prior to scheduled range.
- (4) Briefing is valid for period of ninety (90) days.
- (5) OIC is the only person authorized to open and close the range with Range Control.
- (6) OIC is not allowed to leave the range while during 'open' status.
- (7) Ensures required communications are established and maintained.
- (8) Not assigned any additional duties while the range is open.
- (9) Ensure overall safe conduct of training and proper use of the range.
- (10) Ensure the RSO is physically present on the range.
- (11) Determine when it's safe to fire IAW applicable regulations and Installation range requirements.
- (12) Ensure proper supervision of personnel performing misfire, hang-fire, and cook-off procedures.
- (13) Ensure safe laser operations.
- (14) Ensure adequate medical support is available and properly equipped.
- (15) Ensure ammunition and explosives are properly handled, transported, stored, and accounted for within the FTA from the time of receipt to the time of expenditure or turn-in.
- (16) Plan for firing exercises and maneuvers are coordinated with Range Control.
- (17) Ensure control of the target areas from entry by unauthorized personnel. Ensure ammunition malfunctions and accidents are reported to Range Control IAW AR 75-1 and AR 385-40.
- (18) Range Control has authorized the entrance of any Civilian personnel into the FTA.
- (19) Brief RSO on the duties performed in support of training event. Clearly establish safety requirement for the RSO to brief units on range conduct. Implement risk management.

i. Medical Personnel

- (1) Current with their appropriate certifications.
- (2) Know the location of the closest Improved Landing Area (Helipad) to the range they are supporting.
- (3) Required aid bag or equivalent, litter, and dedicated medical evacuation vehicle with litter carrying capability on each range or firing point. This medical aid person and vehicle are not to be utilized for any additional duties (they are authorized to perform the hourly commo checks for the OIC).
- (4) Radio communications with range control required in medical vehicle and a Camp Ripley map. If the dedicated medical aid person or vehicle leaves the range for any reason, the range must request a "Check-fire" status from Range Control until the Medic returns, or a replacement is on site.
- (5) Range Specific Medical Support Requirements List (Tab C to this enclosure).

#### **1-4 Guidelines for Unit safety Certification Program**

- a. Unit training RSO/OIC IAW TC 3-20.40 and appropriate PMI&E for each weapon or system being used.
- b. Once all requirements of the Safety Certification Program are met, the BN/SQDN CDR (O-5 or O-4P) certifies the OICs and RSOs utilizing the Commander's Safety Certification Memorandum.
- c. This Certification is valid for one (1) year. A copy is required at Range Control. Units without a Battalion/Squadron Commander obtain certification from an O-5 (O-4 (P) in an O-5 or higher command position within the organization.
- d. The Range Control Officer has authority to revoke Certification of any OIC or RSO for violating the requirements of AR 385-63, NGR 385-63, or this regulation.

#### **1-5 Accident and Incident Reporting**

- a. Accidents and incidents reported in accordance with procedures outlined in AR 385-40 Accident.
- b. Accidents and incidents that occur anywhere in the Field Training Area (FTA) are reported to Range Control immediately by SINCGARS radio (36.100 primary, 40.400 alternate), 800 MHz radio, or by telephone 320.616.3137/3134, 320.412.6075 utilizing the CRTC Accident/Incident Checklist.
- c. Malfunctions involving weapons, ammunition, and/or explosives must be reported immediately to Range Control, the CRTC ASP, and to the CRTC QASAS, in accordance with AR 75-1. See also Chapter 3, Paragraph 3-3.

#### **1-6 Requesting Ranges and Training Areas (TA)**

- a. Units request ranges and training areas directly in RFMSS, or by submitting an ATS Form 23 to the Operations Office NLT 90 days prior to requested date.
- b. The RFMSS Schedulers review, confirm dates, and/or notify the units of conflicts.
- c. Conflict resolutions made by the RFMSS Schedulers as reservations are being entered into RFMSS, or during the daily Range Control Annual Training coordination meeting.
- d. For un-established ranges, DEMO ranges, and Live-Fire Exercises: OPLANS; DEMO Plans with wiring diagrams; target scenarios, target matrices, are required to Range Control NLT 90 days prior to range.
- e. No additions or changes to live fire ranges or weapon systems are authorized within 72 hours of range execution. An Exception to Policy (ETP) request submission to Range Control with O5 signature for change/addition request (No signature delegation is authorized).
- f. Activities in the FTA are considered unauthorized without an RFMSS Reservation.
- g. Units ensure proper number and type of Medical Support personnel are available to support downrange facilities.
- h. Military units order chemical latrines from Supply and Services at 320.616.3128 for activities scheduled in the Field Training Area, except established ranges with latrine facilities.
- i. Civilian Lessees request chemical latrines directly from vender.

#### **1-7 Access to Ranges and Field Training Areas**

- a. "A" Gate: Range Control (UM 9542006908) is not authorized for tracked vehicles.
- b. "D" Gate: Chickamauga Road and Armor Trail (UM 9395105457).

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- c. "C" Gate: Ft. Ripley Road and Armor Trail (UM 93940582) Tracked Vehicles must enter and exit the FTA through Gates C, or D.
- d. Tracked vehicles are prohibited from operating on infantry, Recreational Areas, or designated Winter Training Areas.
- e. For Emergency access the following gates and location are below:
  - "A" Gate: Range Control (UM 9542006908) is NOT authorized for tracked vehicles
  - "B" Gate: Ft. Ripley Road north of North Motor Pool Road (UM 9417206306)
  - "C" Gate: Ft. Ripley Road and Armor Trail (UM 93940582)
  - "D" Gate: Chickamauga Road and Armor Trail (UM 9395105457)
  - "E" Gate: Normandy Road at County Highway 1 (UM 8450613526)
  - "F" Gate: Enniskillen Road at County Highway 1 (UM 8609121578)
  - "G" Gate: Cassino Road at County highway 1 (UM 8631823156)
  - "H" Gate: Old Gravel Pit access trail at County Highway 1 (UM 8633023694)
  - "I" Gate: Arno Road at County Highway 1 (UM 8639325168)
  - "J" Gate: Yalu Road at the Installation Boundary (UM 8812731293) Authorized personnel only

### 1-8 Vehicle Passes

- a. Privately Owned Vehicles (POVs) and rental vehicles are required to stop at Range Control for a pass.
- b. Buses, marked law enforcement vehicles, tactical vehicles, GSAs do not need a pass.
- c. Master Gunners receive a pass specific to accomplish their duties.
- d. Recreational passes are used for all activities reserved in iSportsman.
- e. Additional passes are available upon request or designated by Range Control OIC.

### 1-9 ATV/Snowmobile Usage

- a. Operator PPE requirements
  - The list of items is required if vehicle is outfitted; vehicle with Rollover Protection Systems (ROPS): glass enclosed cabs, equipped with seat belts, flashing lights, and headlights.
  - ETP for change in PPE is required and signed by Range Control OIC.
- b. ATVs/Snowmobiles/snowmachine in the FTA:
  - Military ATVs / snowmobiles are considered tactical vehicles.
  - Personal ATVs/ snowmobiles are not authorized down range.
  - ATVs and snowmobiles are prohibited on Armor Trail.

### 1-10 Points Based Safety Policy

A points-based policy is used to enforce the safety standards, rules and procedures AR 385-63, AR 350-19 and NGR 385-63. Each higher headquarters (BN and above) using the FTA is allotted 50 points at the beginning of each training year. For each infraction identified below points are deducted from the unit's total. Companies training at CRTC with a BN level Higher headquarters assigned to CRTC in ARMM are assessed points based off the BN's point total. If a unit depletes all 50 points, the unit's highest physically present command team is required to attend a 1-hour safety briefing at BLDG 24-199. Upon completion of the briefing the unit is assigned 50 new points. If a unit depletes its 50 points twice in a one-year period the unit's Range Control Safety Briefing is revoked, and the unit is placed in a stand down until a new Range

Control Safety Briefing has been completed.

A. Violations. Points are subtracted from the unit's total based on the criteria below:

- 1) Missing items required to safely operate a range or training area. 10 points.
- 2) Safety violations as described in this regulation and AR385-63. 5 points.
- 3) Attempting to open a live fire range or training area without required documentation. 5 points.
- 4) Missing Required Radio Checks. 5 points.
- 5) Failed range or training area clearance. 5 points.
- 6) Speeding. 1 point is subtracted for each MPH over the posted speed limit.

c. Units point levels are tracked via a SharePoint list posted on the [CRTC Range Control SharePoint Page](#).

**1-11 Down Range Speed Limit**

The speed limit is 25 MPH unless otherwise posted. On one lane roads the speed limit is 15 MPH. Commanders may submit an Exception to Policy Request, a Risk Management Worksheet, and a Strip Map to the Range Control OIC to increase speed limit during daylight hours. Speeding tickets are issued by range control staff to enforce the speed limit and are tracked via the points-based safety policy mentioned above.

**1-12 White Light Policy**

a. MSRs and Main Roads: White Light usage is required at night. This includes the direct route (Champagne Road, South Gettysburg Road, and Argonne Road) between Range Control and the A-Complex Ranges.

b. Interior roads and trails: White Light usage is prohibited from use in FTA during periods of darkness, except for emergency vehicles involved conducting emergency response. This includes range control vehicles conducting routine duty requirements.

c. Night Vision Device (NVD): Drivers Training is coordinated through Range Control NLT 48 hours prior, if training is not being conducted on Driver Training Ranges 1-3 or EVOC. Certified and Licensed Instructor must be present per AR 600-55.

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### **1-14 Occupying and Opening Training Areas**

- a. Unit POC for a TA(s) is required to attend a Range Control Safety Briefing.
- b. POC obtains a basic range packet containing an RC Form 18 Training Area Opening/Closing Checklist.
- c. If the POC oversees more than one TA, report all TAs being utilized in opening checklist.
- d. From the TA, the POC sends Range Control the opening data to receive an opening time. When entering a TA, immediately report existing maneuver damage or litter to Range Control. Failure results in the occupying Unit being held responsible for the damage and litter.
- e. The POC is responsible for sending daily personnel data of each TA to Range Control prior to 2330 daily.
- f. Coordinate blocking/unblocking of any roads or trails with Range Control NLT 48 hours prior.

### **1-15 Closing and Clearing Training Areas**

- a. Conduct a thorough police call of the area(s) within the TA(s) that were utilized.
- b. Remove garbage, trash, and debris from the field. Dispose waste at the Transfer Station located near Range Control
- c. Blank Brass returned to the ASP.
- d. Fill fighting positions and restore the area to its original appearance. Do not use logs or trash as filler material when filling in any type of fighting position.
- e. Remove all types of wire and pickets. remove and disassemble position barriers. Reopen all roads and trails.
- f. Utilizing the closing portion of RC Form 18, send Range Control the requested information. Range Control schedules a TA Clearance time with Unit POC.

### **1-16 Communications**

#### Primary

- ASIPS 36.100
- ASIPS 40.400 (when 36.100 becomes compromised)
- 800MHz on range 1

#### Secondary

- Commercial phone: 320.616.3137/3134
- Cell phone 320.412.6075

#### a. Communication Procedure

- Military Units are required to utilize SINCGARS as their primary form of communication.
- Units occupying facilities are required to have two forms of communication. Cell phone is authorized as a secondary form.
- Cell phones are required to be turned on.
- When you call range control your call sign is the training area or name of the range. No SOI is used.
- Unit internal communication is not authorized on any Range Control frequency.

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- Primary form of communication is used to request an open and close of TA and ranges.
- Cease fire ranges when primary communication is lost with range control.
- Live fire ranges require hourly radio checks on the hour, non-live fire requires continuous radio monitoring.

### b. Antenna Mast Locations

MAST NUMBER	LOCATION	COORDINATES
Z-2	A-1	UM 91990868
Z-3	Training Area 61	UM 95082437
Z-4	Y-4 TTB	UM 95162684
Z-5	ISBC (CLSRM)	UM 88182891
Z-6	Training Area 69	UM 86802508
Z-7	OP-16	UM 90142468
Z-8	DEMO-5	UM 89652713
Z-9	Training Area 54	UM 87102204
Z-10	Training Area 40	UM 85381612
Z-11	OP-1	UM 91001464
Z-13	CLFX AA (TA58)	UM 92912305
A-12	A-12 Tower	UM 92640873
Multiple	Retrans Site TA 35	UM 92241410

### 1-17 Declination Station

Aiming circles are required to be declinated when laying direct fire weapon systems. The three locations are below:

Station 1 UM 95780531, located east of the MUTF (TMC).

Station 2 UM 88022470, located in TA68 SE of the Kodiak and Easy ST intersection.

Station 3 UM 884110, located in TA18 S of trail and W of Manila RD

Station 4 UM 909114, located east of firing point 2 on J range.

### 1-18 Severe Weather

Range Control disseminates Severe Weather Watches and Warnings published for Morrison County by the National Weather Service on Range Control frequencies. During inclement weather, the unit Commander decides when to institute protective measures. Inclement weather shelters are opened by range control personnel for safety. Range Control and/or the ATS operators have the authority to stop firing because of an electrical storm.

### 1-19 Maps

a. Unit Supply personnel can order the Camp Ripley Military Installation Map, Edition 004, Series V772S, Sheet CPRIPLEMIM, Scale 1:50,000 (NSN 7643014485151).

b. The CRTC Environmental Department produces a 1:50,000 scale Installation Map for distribution, upon request. A 1:25,000 scale Installation Map is also available, upon request.

c. Units may request customized maps on a limited basis for any Camp Ripley Range or Training Area from Range Control or the CRTC Environmental Department.

### 1-20 Physical Fitness Down Range

Physical fitness is authorized downrange while Range Control is staffed. Viking trail is authorized for running, mountain biking, and cross-country skiing. Thull Road is authorized for running and mountain biking. EVOC may be used for physical fitness if it is not reserved in RFMSS by a unit.

## Chapter II - Ranges

### 2-1 Access to Impact Areas

- a. Range Management Authority (RMA) is the approval authority for entry into restricted and impact areas.
- b. Unauthorized persons are prohibited from entering Impact Areas and other areas known, or suspected, to contain UXO by use of positive controls, to include fencing and UXO hazard warning sign.
- c. Personnel entering an Impact Area are thoroughly briefed on the hazards of UXOs and accompanied by Range Control personnel.
- d. Personnel accessing Impact Areas are limited to qualified EOD personnel, Range Control staff, and range maintenance personnel designated by the RMA.
- e. Unauthorized personnel are prohibited from handling UXO or removing them from the FTA. Procedures for ammunition and explosive turn in are established by ASP.

### 2-2 Warning Signs, Barriers, and Markers

Barriers are to protect personnel from accessing danger areas. Barriers remain in place during firing. RMA takes disciplinary action against personnel who breach barriers.

- a. MN Statute 609.396 unauthorized presence at Camp Ripley.  
Subdivisions 1: Misdemeanor - A person is guilty of a misdemeanor if the person intentionally and without authorization of the adjutant general enters or is present on the Camp Ripley Military Reservation.  
  
Subdivisions 2: Felony - A person is guilty of a felony and may be sentenced to not more than five years imprisonment or to payment of a fine of not more than \$10,000, or both, if:
  - The person intentionally enters or is present in an area at the Camp Ripley Military Reservation that is posted by Order of the Adjutant General as restricted for weapon firing or other hazardous military activity.
  - The person knows that doing so creates a risk of death, bodily harm, or serious property damage.
- b. Barrier Breach requires the following actions: Immediate Cease-Fire of affected Training Areas, Ranges, and Firing Points.
- c. Range Control personnel physically check affected area and detain any violators
- d. The Unit Commander is notified and must submit a written CRTC Accident/Incident Report to the RMA.
- e. The RMA is authorized to establish additional perimeter and/or interior guard positions at any time.
- f. The Senior Range Control staff member lifts the Cease-Fire upon notification that affected SDZ(s) is(are) clear(ed).

### 2-3 Ranges use by Non-Military/Civilian Agencies

- a. The Civilian Agency supervisor appoint in writing an OIC and RSO for each live fire range requested. This appointment specifies those individuals are certified for the specific weapon(s).
- b. If a Civilian Agency has no certifying official, the Completion of a National Rifle Association Instructor Course or equivalent, is approved for any individual performing the duty of OIC and RSO on small arms

ranges.

- c. The following are equivalent course model programs are approved by Range Control:
  - State of MN Firearms Instructor Courses
  - Police Officer Firearms Instructor Courses
- d. RMA approves Civilian access to the FTA
  - Non-Military or Law Enforcement receive authorization from the Operations Officer to enter the FTA to observe live fire and training. Personnel remain in safe areas designated by RSO.
  - Civilians, to include family members and DOD Civilians, must have approval from the RMA to fire weapons within the FTA per AR 385-63.

#### **2-4 Special use Airspace (SUA) ZMP R-4301**

Training areas using ariel surveillance are required to open a ROZ. Units are not required to request the R-4301 facility in RFMSS.

#### **2-5 Live Fire Range Usage**

- a. Firing M855A1 5.56mm Enhanced Performance Round (EPR) and the 6.68mm Reduced Range or General-Purpose ammunition is not authorized on D Range and F Range.
- b. Air Defense Artillery Weapon Systems are not authorized to fire on Camp Ripley.
- c. Per AR 385-63 Paintball, less-lethal ammunition, and simunitions are considered live ammunition. less-lethal and simunitions require an SDZ, OIC and RSO, a Commanders safety certification memo, and a range safety brief.
- d. The following are required to run a live fire range:
  - (1) Facility requested in RFMSS.
  - (2) Commander safety certification memo submitted to range control.
  - (3) Current version of DD2977, Deliberate Risk Assessment Worksheet submitted to Range Control.
  - (4) OIC and RSO completed range safety brief within 90 days.
  - (5) OIC and RSO are required to be present at the firing positions while live fire is conducted.
- e. Open, operate, and close a live fire range
  - (1) Occupy Range.
  - (2) Verify serviceability.
  - (3) Establish radio communication.
  - (4) OIC request to open range on primary communication.
  - (5) Open range IAW Range packet. Once open you can fire, no need to call back in.
  - (6) Once open, hourly radio checks are required every hour on the hour.

- (7) At the completion of firing OIC request to close the range.
  - (8) Close range IAW range closing checklist.
  - (9) Range Control or ATS clears unit from the range.
- f. "Check fire, check fire, check fire" is announced by any person witnessing an unsafe action or condition.
- g. Live fire range layout and description can be found in Tab A.

**2-6 Non-Live Fire Ranges and Definition**

a. Consult Range Control for required SOP and range specific requirements. Range Control has specific folders for each training facilities.

The following are classified as non-live fire ranges:

A-5 MOUT Site	CACTF (Combined Arms Collective Training Facility)
A-6 Confidence Obstacle Site	CTF (Collective Training Facility)
A-7 Rappel Tower	DT-1 Driver Training Course 1
A-10 Hand Grenade Qualification Course	DT-2 Driver Training Course 2
A-11 Land Navigation Course	DT-3 Driver Training Course 3
A-13 Litter Obstacle Course	F BIATHLON Ski Trails
A-15 Field Leader Reaction Course	FASP Forward Ammunition Supply Point
A-16 MSTC MOUT	MSTC Medical Simulations Training Center
A-17 Explosive Hazard Detection Lane	R Recovery Range
B-2 Shoot House (MOUT Building)	React to Contact Lane
B-3 Land Navigation Course	SCALED Range
B-4 Mounted Land Navigation Course	W-1 Ferrell Lake Pontoon Bridge Site
B-5 Land Navigation Course	W-2 Mississippi River Ribbon Bridge Site
B-6 Engineer Dig Site	Y-1 POW Camp
B-7 Land Navigation Course	Y-2 Tactical Training Base
B-8 Tactical Mine Lane	Y-4 Tactical Training Base
BENNET HILL Ski/Tubing Hill	Water Points (Purification/Shower/Laundry)

- (1) OIC/RSO require a range safety brief within 90 days.
- (2) Non-live fire ranges are not required to perform hourly radio checks but must maintain continuous communications with range control, in case of medical emergencies or severe weather alerts.
- (3) Rope or rappel operations must comply with paragraph 2-11
- (4) Open, operate, and close a non-live fire range:
- (5) Occupy range.
- (6) Verify serviceability.
- (7) Establish radio communications.
- (8) OIC request to open range on primary communication.

(9) Open range IAW range packet.

(10) At the completion of training, OIC request to close the range.

(11) Close range IAW range closing checklist.

(12) Range Control clears unit from range.

### **2-7 Observation Post (OP)**

a. OPs are required to be opened with Range Control prior and have ability to view the impact area prior to supporting firing point requesting to open. Firing ceases when visibility is less than 1/3 mile, unless radar is utilized.

b. The following OPs are established. The use of an un-established OP is authorized, if rounds can be observed and TA is reserved in RFMSS.

(1) OP-1 UM 9101 1463

(2) OP-1.5 UM 9157 1521

(3) OP-2 UM 9194 1565

(4) OP-16 9016 2469

(5) OP-19 UM 9162 2771

(6) OP-23 UM 9285 2379

### **2-8 Forward Observers**

a. FOs are required to have safety fans for the units they are supporting.

b. A red flag (and blinking red light at night) must be displayed while the OP is in an open status.

c. For Manual Call-For-Fire missions, a POC with a current Range Safety Briefing is required.

d. For Laser Call-For-Fire missions, a Laser Qualified OIC and RSO are required, per AR 385-63.

e. Unless covered by a Range Control approved ETP, hourly radio checks must be performed by the OP while fire missions are being conducted. When fire missions are complete, the OP reverts to a Non-Live Fire status and is only required to monitor the radio.

### **2-9 Observation of Rounds**

a. Rounds fired must impact within the designated range safety limits. On established direct fire ranges, left and right limits are clearly marked (e.g., green/orange poles or arrows).

b. Projectiles that burst or land outside the safety limits, or any unobserved rounds, require immediate action and investigation.

- Immediately Cease-Fire-Freeze all Firing Points until the responsible Firing Point is identified and contact Range Control.
- Report the incident utilizing the Range Incident Checklist (Indirect Fire), located in the Range Packet.

c. Radar must be used, in conjunction with forward observers when visual observation is

limited/restricted. The radar operates in the "Friendly Fire" mode, and the time interval between rockets for multiple round missions no less than 30 seconds (if only radar is used).

d. Rounds/Rockets not observed or observed out-of-safe, must be reported immediately to Range Control. The unit places itself in check-fire until a determination of the problem resulting in the unobserved or out-of-safe round/rocket has been identified.

## **2-10 Authorization for Personnel within Danger Zone**

a. The following personnel are authorized to be within a Danger Zone, subject to the restrictions in the applicable chapters of this regulation and application of the risk management process by the Camp Ripley Garrison Commander:

- (1) Crews directly involved in the firing of a weapon system or munition.
- (2) Tactical Air Control party or Joint Terminal Attack Controllers (JTACs) controlling aviation ordnance deliveries.
- (3) Cannon-launched Guided Projectile (Copperhead) Fire Support Team (FIST) personnel located in the Mission Essential Area (MEA). FIST personnel allowed within the SDZ when the Copperhead is not fired in the ballistic mode.
- (4) Aircrew operating within danger zones as part of an exercise.
- (5) During indirect field artillery firing, personnel may be in Areas A through E subject to the restrictions in Chapter 10 and Chapter 11 of AR 385-63.
- (6) Designator operators (laser) during AGM-114 HELLFIRE antitank guided missile operations.
- (7) Personnel down range when approved overhead small arms ammunition is fired.
- (8) Personnel down range when supporting training on known distance firing ranges, when protection is provided.
- (9) Personnel participating in Simunitions and less-Lethal Weapons training.
- (10) Target Scorers/Target Lifter Operators in the A-1 Known Distance Range "PIT" are authorized to wear their normal Duty Uniform (PPE Level 0) while performing their duties.
- (11) Any other request of deviation from AR 385-63/MCO 3570.1C is approved by RMA.

## **2-11 A-7 Rappel Tower**

a. Rappel Safety Terminology

- (1) Rappel Safety Officer/Rappel Master = Range OIC
- (2) Rappel Lane NCO = Range RSO

b. Civilian agencies must meet or exceed Army minimum standards. Civilian agencies use their equipment and follow their training guidelines. A-H discuss acceptable certification. Certificate must be on file at Range Control:

- (1) Rock Climbing Instructor
- (2) Single pitch instructor

- (3) Climbing wall instructor artificial structure only
- c. Professional Climbing Instructor Association (PCIA)
  - (1) Base-managed climbing instructor
  - (2) Top-managed climbing instructor
  - (3) Single pitch instructor
  - (4) Climbing wall instructor (artificial structure only)
- d. Climbing Wall Association (CWA)
- e. Boy Scouts of America
  - (1) BSA Level II climbing instructor or climbing director
  - (2) BSA Level II COPE instructor or COPE director (artificial structures only)
- f. Professional climbing guide/instructors who are licensed by the state or accredited according to:
  - (1) BSA Level II climbing instructor or climbing director
  - (2) BSA Level II COPE instructor or COPE director (artificial structures only)
- g. Peak Performance
- h. National fire protection association rope/high angle rescue technician

**2-12 Water Bridging and Ice Crossing training Sites**

- a. General
  - (1) W-1 lake must be used prior to moving to W-2 for invasive species.
  - (2) Require RSO and OIC, must be on the safety memo.
  - (3) OIC and RSO must attend a Range Safety Brief
  - (4) DRA submitted to Range Control.
- b. Current Manuals for Water Bridging and Ice Crossing:
  - (1) TC 21-21 Army Water Survival Training
  - (2) AR 385-10 The Army Safety Program
  - (3) Tactical Water Safety Operations Chapter 13
  - (4) Water Operations, Chapter 22.
- c. Refer to Chapter 17 Environmental for specific equipment for cleaning.

**2-13 Range Personal Protective Equipment (PPE) Requirements**

- a. TC 3-20.40 and AR 385-63 dictate the commander determines PPE Level.
- b. PPE levels according to AR 385-63 are listed in the table below:

PPE Level	Personal Protection required
0 (Min Req)	Army Combat Uniform/Standard Utility Uniform, hearing/eye protection
1	Body armor and helmet, hearing/eye protection
2	Body armor with front/back enhanced small arms protective insert plates and helmet, hearing/eye protection
3	Body armor with front/back/side enhanced small arms protective insert plates and helmet, hearing/eye protection

**2-14 Ice Diving Operations**

- a. Diving is only authorized to be conducted by trained and qualified US military divers. All students must be under the supervision of an appointed and qualified instructor IAW with appropriate regulations and policies for their service.
- b. Ice thickness is assessed before equipment is placed on the ice to ensure load in within margins of safety and must be monitored throughout training to ensure safe operations.
- c. Vehicles are not allowed on any frozen body of water on Camp Ripley without an exception to policy. Snowmobiles to aide in casualty evacuation are allowed and ETPs are granted for rental equipment serving this purpose.
- d. Units conducting diving must ensure medical support plans meet DOD regulations for the service conducting training. Portable decompression chambers are recommended to aide in on site treatment during emergencies. The nearest potential chamber is in the Twin Cities Metro approximately 2.5 hours from CRTC.

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### **Chapter III - Ammunition and Targetry**

#### **3-1 Ammunition References**

Ammunition and explosives are to be drawn, handled, stored, utilized, and returned IAW DA PAM 385-64 and Camp Ripley Ammo Supply Point SOP.

#### **3-1 Placards**

Placards are not required in training areas or ranges.

#### **3-2 Suspension of Ammunition and Explosives Involved in Malfunctions**

When any round or item of ammunition, explosives, or their components malfunctions, the firing unit notifies Range Control immediately. Range Control then notifies the ASP Supervisor and/or the QASAS. The range OIC and RSO suspends the use of the Lot in question. The Camp Ripley ASP Supervisor substantiates or withdraws the suspension, per AR 75-1.

#### **3-3 Malfunctions of involving Ammunition and Explosives**

In the event a malfunction occurs and present an immediate hazard to personnel, immediately report the type of round, the location, unit, and point-of-contact information to Range Control. Follow guidance in AR 75-1, The affected Lot(s) are recorded as a malfunction and reported to the Ammunition Supply Point immediately.

#### **3-4 UXO (DUD) Reporting**

Range OIC report all UXO/Dud ammunition to Range Control utilizing the 9-line UXO report. In the case munitions create immediately hazardous to personnel, halt firing until qualified EOD clear UXO, and the range is closed until qualified EOD personnel clear the UXO. All other cases notify Range Control.

#### **3-5 General Target Requirements**

- a. Target types are locally manufactured, as prescribed in TC 25-8 Training Ranges, or commercially purchased prefabricated targets.
- b. Make requests for targets NLT 90 days in advance.
- c. Target requests are worked through Automated Target Systems on Camp Ripley BLDG 2-198, 320.616.3132/3133.

#### **3-5 Requirements for Use of Steel Reactive Targets (SRT)**

- a. Use of SRT must comply with guidelines established by AR 385-63.
- b. For unit or agency owned SRT. Units / Law Enforcement agencies submit manufacturer certificates of hardness to Range Control NLT 30 days from event execution. SRT must have an brinell hardness rating of AR-500 minimum. Units supplying their own SRT coordinate with Range Control to ensure targetry can be contained by a pre-established SDZ. Units follow procedure for a non-standard life fire range for use of SRT that cannot be contained by an existing SDZ.

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## **Chapter IV - Small Arms**

For this regulation, small arms are man-portable, individual and crew-served weapon systems of 30mm or less used primarily against personnel and lightly armored or unarmored equipment. Small arms SDZ diagrams and tables provided in this chapter are the standard for the proper construction of small arms direct fire SDZs with or without exploding projectiles.

### **4-1 Non- Standard Small Arms**

Small Arms may be fired at locations other than at the Established Ranges when the following conditions exist:

- a. The Surface Danger Zone can be employed without significant impact on other range operations or training areas.
- b. The Range Control Officer has approved the location.
- c. A Risk Assessment Worksheet has been developed by the Unit, detailing the risk mitigation measures implemented.
- d. Conditions are met for Live Fire outlined in Paragraph 2-5 Live Fire Range Usage.

### **4-2 Automated Ranges**

Changes to Automated Range Scenarios must be requested NLT 72 hours prior to firing. Notify ATS tower operator when you are done for the day if you require them the following day.

### **4-3 Blank Ammunition**

OIC and an RSO grade of rank E5 or above required for blank firing.

- Grenades and Grenade Launchers
- Separate live and blank ammunition during storage and issue.

### **4-4 Unestablished Ranges**

Units requesting to conduct a Live Fire Exercise (LFX) on a not already established range are required NLT 90 days prior to exercise:

- Detailed Training Scenario
- Firing Points
- Target Description
- Weapon type from each firing point
- Risk management worksheet

### **4-5 Live Fire Exercises**

#### **a. Training Units Responsibilities**

- (1) Plan submitted no later than 90 days for unestablished ranges.
- (2) Reservations in RFMSS for TA and ranges.
- (3) OIC RSO memo. Field Grade required for BN and larger CALFEX.
- (4) Written plan submitted with integrators and control measures.

#### **b. Range Control Responsibilities**

- (1) Assist in development of training for SDZ RTMK and safe exercise.

(2) Range control assist in development for range and provide any appropriate equipment and targets to facilitate training.

(3) Changes to LFX are approved by range control OIC or NCOIC.

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## Chapter V - Grenades and Grenade Launchers

### 5-1 Hand Grenades

- Defined as an explosive charge with a delay of 3-5 seconds.
- Cooking off a grenade is prohibited.
- Hand grenades are not to be tossed into water.
- Duds must be reported to range control.
- Range ceases operation until EOD clearance if all lanes contain dud grenades.
- Only EOD is authorized to approach DUD ordnance.
- Throwing locations:
  - Hand Grenade Firing Range (HGFR)
  - DEMO-4
  - Life Fire Breach Facility (LFBX)

### 5-2 Grenade Launchers and Grenade Machine Gun

- a. J range, MK-19, M Range, and OP-2 are approved form 40mm TP rounds.
- b. K and OP-23 are the only authorized range from MK-19 40mm HE rounds.
- c. TP ammunition minimum range is 75 meters
- d. HE minimum range is 310 meters.
- e. Restrictions for moving vehicle mounted MK19, per AR 385-63:
  - Restrict speeds to not greater than 20 kph/12 mph when firing from the HMMWV M1025/1026 armament carrier, M998T interim squad carrier, and the M1114 over paved and improved roads in good condition, and not greater than 10 kph/6 mph over rough roads, trails, and cross-country.
  - Restrict speeds to not greater than 16 kph/10 mph when firing from the M113 and M106 personnel carriers on any kind of terrain.

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**Chapter VI - Antitank rockets/recoilless Rifles**

Antitank rockets and Recoilless rifles are authorized on the following ranges:

- J Range – Practice and live rounds
- K Range – Practice and live rounds
- ERG – Practice subcaliber
- CRG – Practice subcaliber

TM 3-23.25 and TM 9-1015-262-10 contain required information for firing antitank rockets and recoilless rifles.

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## Chapter VII - Antitank Guided Missiles

### TOW Missiles

- Inert TOW missile is approved for firing on J, K, and OP-16.
- TOW HE can be fired on OP-15 and OP-23 with 90 days prior authorization.
- Accessible wire is required to be cleaned up.

### Javelin

- Javelin is fired on J, K, OP-16, and OP-23 ranges.
- Ensure SDZ is clear prior to occupying firing positions.

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## Chapter VIII - Tank/Bradley fighting Vehicle gunnery

### 8-1 General

The following ranges are authorized for Tank and BFV:

- Center Range: Automated/Computer scored. Platoon Table VI capable. Main gun and machine gun.
  - East Range: Automated/Computer scored. Platoon Table VI Capable. Main gun and machine gun.
  - North Range: Station firing positions.
  - Scaled BFV range main gun and machine gun. Tanks machine gun only.
  - IPBC west: Machine guns.
  - Scaled Range: Dry and blank gunnery tables. Maximum distance is 1000m.
  - Target matrix sent to ATS.
  - Scaled range is remote control by unit training.
- a. Live fire target matrix submitted to Range Control and ATS no later than 90 days prior to execution.
  - b. Request for tank and BFV scenario changes must be submitted no later than 72 hours prior to execution.

### 8-2 Tank and Bradley firing Conditions

- a. Tank and BFV cannons do not fire above 5 degrees QE.
- b. Firing is prohibited when operating in non-stabilized or emergency mode.
- c. Range specific range safety brief is completed by RSO
- d. Misfires and stoppages are conducted according to TM.

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**Chapter IX - Mortars**

**9-1 Firing Conditions**

- a. Firing overhead ammunition must be certified for unprotected troops.
- b. Marine Corps overhead fire authorized with Expedition Fire Support System M327 120mm rifled tower mortar.
- c. Overhead fire authorized over Abrams and Bradley's in protected mode and 100m or more from fire line.
- d. Charge 1 is authorized for hand-held mode only.

**9-2 Surface Danger Zones**

- a. 25-degree angle for Areas A must be increased to 70 degrees when firing HE ammunition at ranges equal to or less than 600 m for 60mm; 940 m for 81mm mortars; and 1500 m for 120mm mortars.
- b. RTMK required and created from firing plan.

**9-3 CRTC Specific Regulations**

- a. Mortars are authorized to fire from any location approved by Range Control GIS coordinator.
- b. Unit training plans, TAs, and Firing Point are reserved NLT 90 days prior to event.
- c. Supporting Observations Posts are required to be open with RC prior to opening Mortar Firing Point. Observers co-located with firing unit at the Mortar Firing Point do not require a separate opening.
- d. Increment burning locations must be 1200m away from the installation's boundary and 200m from personnel and equipment. Ensure burn off location reduces the chance of wildland fire.

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## Chapter X - Artillery

### 10-1 General

a. Artillery units coordinate TA usage with co-use Maneuver units prior to occupation. This coordination happens during Annual Training deconfliction meetings; 0830 at Range Control.

b. BN HQs may perform Hourly Radio Checks with Range Control for subordinate firing units and OPs. Communication is required to be maintained, and information relayed quickly from Range Control to the subordinate units and back. The OIC for the subordinate units must still open and close the firing point/OP with Range Control.

c. IAW AR 385-63, minimum PPE Level 1 is required to be worn by personnel immediately engaged in artillery operations. All required hearing hazard and danger area E/F are blocked off by the firing unit.

d. Each artillery piece is required to have the most current version TM for weapon system firing.

e. Burning powder requires a 1200m standoff from CRTC boundaries and a 200m standoff for personnel and equipment. Ensure burn off location reduces the change of wildland fire.

f. Artillery pieces must be located a minimum of 200m from installation boundaries, with firing point grids verified using Survey (iPADS) or two DAGRs set to Averaging Mode, FOM 1,200 hits.

g. Weapon systems utilizing AFCS/DFCS must be located within a 750m radius of the firing point grid. When firing without AFCS/DFCS systems, safety must be factored per each weapon location.

h. OIC, RSO, and those in leadership/firing roles are required to be familiar with Ammunition Information's (AINs), Safety of Use Messages (SOUms), and Regulations.

i. Physically plotting firing point, target area, and target locations on firing chart/map is required.

j. Paladin Units may travel with fuzed ammunition (HE/PD only).

k. Maximum ordinate for artillery fire is 26,000 feet, per FAA ZMP R-4301 Regulation. No exceptions are made.

l. Minimum QE for indirect fire is 267 mils for 105mm and 155mm howitzers.

m. The following charges are restricted for use on Camp Ripley:

- MACS Charge 4H or higher
- 155mm Charge 3 White Bag or higher
- 105mm Charge 7 White Bag or higher

n. Area E for CRTC is reduced to 300m for 105mm and 350m for 155mm. Prior to firing, OIC and RSO ensure Area E is clear of personnel with temporary barriers blocking access to any roads/trails passing through. Notify Range Control when main road closures are required.

o. Projectile ricochets and empty carrier projectile bodies and debris found outside the target area, in or beyond Area A and B, are reported to Range Control.

### 10-2 Firing Incidents

Projectiles fired outside defined target areas, safety limits, and any unobserved rounds, require immediate action and investigation. OP notifies FA units and Range Control of the firing incident; FA units check fire to identify the unit responsible. The unit responsible follows procedures dictated by Range Control.

### 10-3 Camp Ripley HINE/LINE Artillery Firing Point Program

- a. Authorized Training Areas for Indirect Fire:
  1. Within Class D airspace requires NLT 90-day coordination and approval with MAAF and Range Control: TAs 1 (west of grid line 9330), 2 (north of grid line 06), 3 (Y2 Area), 5 (east of grid line 9020, with a left azimuth no less than 6376 mils).
  2. Hendrickson Impact Area: TAs 18 – 23, 25, 29 – 31, 35, 37, 38, 40, 52, 54, 57, 69 – 72, and 79 (below grid line 31)
  3. Leach Impact Area: TAs 18 – 23, 40 – 45, 49, 50, 54 – 59, 61 – 64, 68 – 71, and 79 (below grid line 31).
- b. HINE/LINE procedures for FDCs:
  1. Draw appropriate HINE or LINE circles on firing chart and generate geometry in AFATDS. All artillery rounds must fall within these circles:

HINE: 1000m radius from grid UM 89981689

LINE: 760m radius from grid UM 92282527
  2. Draw HINE or LINE Maximum Canister Range to Impact Circles on firing chart and generate geometry in AFATDS. Base ejecting canisters cannot exceed this limit:

HINE: 1400m radius from grid UM 89981689

LINE: 1400m radius from grid UM 92282527

### 10-4 Special Round Restrictions

- a. Use of any projectile or fuse that is “not cleared for overhead fire” or requires a Ricochet Danger Area (RDA) requires coordination with Range Control and receipt of RMTK data sheet prior to firing at CRTC. Units must locate Base Piece on the RMTK Firing Point Grid.
- b. M825 and M1122 series projectiles must have a firing solution  $\geq$  600 mils.
- c. White Phosphorus (WP) is prohibited in wetland areas within the Leach and Hendrickson Impact Areas. WP is not authorized to be fired directly into, or within 100 meters of, or have airburst directly over, wetland areas. The wetland areas, including the 100-meter buffer zone, are identified on a map at Range Control.
- d. Precision Guidance Kit (PGK) requires coordination with Range Control a minimum of 90 days prior to firing PGK. Howitzers firing PGK must be within 200 meters of the firing point.

### 10-5 Direct Fire Safety

- a. Field Artillery Direct Fire, including Killer Junior, is authorized from J Range into Hendrickson Impact Area or K Range into Leach Impact Area.
- b. Use of M1122 HE round is restricted to J Range and requires coordination with Range Control.
- c. Direct Fire ranges require RMTK SDZ sheet for FP data and do not require a separate OP.

- d. Units use minimum charge necessary for weapon system; maximum charge is 1L.
- e. Minimum target engagement distance is 650m for 105mm and 750m for 155mm.

**10-6 Multiple Launch Rocket System (MLRS) and High Mobility Artillery Rocket System (HIMARS)**

- a. TAs containing the planned Firing Points must be reserved in RFMSS NLT 90 days prior to the event. Notify Range Control at the same time so SDZs can be created, reviewed, and approved.
- b. Impact area center mass grids: Hendrickson UM 90201654, Leach UM 91822529.
- c. For the OPAREA Method, there are two established Operation Areas on Camp Ripley; East Range-firing into LEACH Impact Area and Arno DZ-firing into HEND Impact Area.
- d. For both MLRS Firing Methods, the Unit must fire with the RMTK data from Range Control. The range OIC must have a copy of the RMTK SDZ Sheet at the FP.
- e. General firing conditions
  - 1. Only M28A1 Reduced Range Practice Rocket (RRPR) can be fired on Camp Ripley due to the size of the Installation and the Impact Areas.
  - 2. The RRPR is not certified for overhead fire. All non-mission essential personnel must be cleared from the entire SDZ.
  - 3. Meteorological Data supplied to the Fire Control System must not be more than 4 hours old
  - 4. Position Determining System Data must be verified as correct. Ensure that the Launcher is properly calibrated, updated with a verified survey control point, and that start-up data is correct.
  - 5. Firing is not be conducted if:
    - There is any question of proper operation of the Launcher
    - The winds have changed dramatically since MET Data was taken.
    - The fire Control Panel shows that internal tests were not completed properly.
    - Any other sign of abnormal operation is evident.
- f. Safe Separation Distance between Launchers firing simultaneously from a single firing point is 55m. This distance is based on Net Explosives Weight for Launchers containing two full rocket pods.
- g. Personnel are prohibited from occupying Area F during firing. Area F extends 350m on each side of the launcher, and 400m to the rear of the launcher.
- h. The Noise Hazard Area extending an additional 500m past Area F may only be occupied by mission essential personnel wearing approved hearing protection.

## Chapter XI - Aviation Range Safety

### 11-1 General

#### a. Aircrew requirements.

(1) All aircrew operating within a Range/Training Airspace Complex must participate in a Range Safety Briefing and understand this regulation prior to operating within the Complex.

(2) Aircrews take all measures necessary to ensure they conduct training within assigned SUA or other authorized Operating Areas, and that all effects are contained within Range Complex boundaries.

#### b. Scheduling.

(1) All aviation operations conducted within a Range/SUA must be scheduled through RFMSS.

(2) SUA must be scheduled via RFMSS for all air-to-ground operations.

#### c. Communications.

(1) Two-way communication must be maintained between the range, ROZ or training area OIC and Range Control.

(2) Two-way communication must be maintained with Miller Army Airfield for all aircraft flying within R-4301, with exception of SUAS who maintain contact with Range Control throughout their training area specific ROZ occupation.

(3) In the event a pilot needs to contact Range Control directly, utilize FM 36.100 (Primary) or 40.400 (Secondary).

#### d. Parachutes.

(1) The Unit using the Drop Zone (DZ) is required to physically clear the DZ 24 hours prior to use to ensure no obstacles or hazards are present. The unit ensures DZ has a current survey for the operations being conducted.

(2) Parachute aircrew and DZ personnel maintain communications with Range Control.

(3) DZs must be confirmed clear and closed before commencement of parachute or parachute operations

#### e. Joint Precision Airdrop System (JPADS).

(1) The unit dropping the load is responsible for using JPADS Mission Planning software before they fly the mission.

(2) Range Control approves Improved-Container Delivery System deliveries only if the Precision Airdrop System-Mission Planner derived Point of Impact, the 3-Sigma Footprint for chute failure, and the guidance failure footprint overlay on government owned, leased, or otherwise controlled land with no unauthorized personnel present, and a collateral damage estimate acceptable to Range Control.

(3) Equipment, facilities, and participating personnel are permitted within the 3-Sigma success, chute failure, and the guidance failure footprints as long as the unit has conducted, and Range Control has approved an Operational Risk Assessment.

(4) JPADS users may desire to update weather observations by dropping a Sonde (foot long metal wind sensor) for wind updates to revise footprint analyses up until the time of delivery.

f. Countermeasures.

The use of Chaff/Flares must comply with local Range Regulations/SOPs, FAA requirements, and in accordance with aircraft TMs.

### **11-2 Firing Operations, General Requirements**

a. Weapon Danger Zones (WDZ)

(1) Air-to-ground delivery of munitions can be accomplished from a variety of platforms to include fixed wing (FW), rotary wing (RW), and Unmanned Aircraft Systems (UASs). The hazardous zone associated with these munitions are generated using the WDZ tool that can provide a WDZ for all aviation delivered ordnance. The WDZ is modeled to represent the distribution of impacts, ricochets/broaches, and the vertical hazard associated with fragmentation and the ricochet.

(2) The three-dimensional aspect of munitions delivery can present many challenges when determining the safe location of personnel and facilities operating on the ground. RMTK advances in computer modeling, programming, software, and improved risk analysis provided by the WDZ tool enables RMAs (Army), RCOs (Marine Corps) to reduce risks to personnel and facilities involved with aviation operations.

(3) RMAs (Army), RCOs (Marine Corps) must employ safe management practices that provide the visibility and control required for the integration of both air and ground operations. The use of the WDZ Tool supplemented with an aggressive risk mitigation program reduces the complications and dangers associated with this training.

b. Aircrew currency qualifications for aviation weapons delivery.

(1) Army

- During firing, qualified standardization instructor pilots or instructor pilots having immediate access to positive control of the aircraft and weapon systems being fired, accompany pilots and gunners who are not current and qualified in the aircraft.
- Qualified nonrated crew member flight instructors or nonrated crew member unit trainers having immediate access to the weapons systems being fired, accompany door gunners who are not current and qualified.

(2) Marine Corps. Marine pilot and aerial gunners demonstrate flight and weapons system proficiency in accordance with the appropriate TMs/Training and Readiness manuals.

- Aircrew weapons qualifications for aviation weapons delivery.
- Pilots and gunners successfully complete an approved qualification course or qualification or transition training in accordance with an approved program of instruction.
- Pilots and gunners demonstrate flight and weapon systems proficiency in accordance with TC 3-04.11, TC 3-04.3, FM 3-04, and the appropriate aircrew training manuals.

c. Communications.

(1) Firing elements must maintain positive two-way communications with the OIC

(2) Firing is suspended immediately when communications are lost with the range operations firing desk (Army), range control (Marine Corps), the OIC, or firing elements.

- (3) Command and control aircraft may be used at the commander's discretion.

### **11-3 Firing Conditions, General Procedures**

#### **a. General**

- (1) Pilots and gunners are familiar with the Impact Area boundaries, firing limits, and specific Range SOP.

- (2) The firing aircraft pilot in command ensures that firing aircraft are properly oriented with the target and are safe to fire.

- (3) For FW operations: If the OIC cannot positively determine that the aircraft can release safely, the OIC delegates ordnance release clearance to a qualified flight lead, individual pilot, forward air controller, or other briefed person. The OIC maintains overall authority on the range for the training event and can abort the release or direct a Cease Fire at any time. In all cases, the pilot assumes sole responsibility for the safe release of ordnance and confirmation of the approved target.

- (4) For UAS operations: The Mission Commander maintains the responsibility for the safe operation of payload and platform.

- (5) Live-Fire training must be observed.

#### **b. Armament Safety Procedures**

- (1) Aircraft weapon systems must be loaded or unloaded in approved areas. Selection of these areas ensures total containment in the event of accidental discharge. The weapon systems dispersion angle and maximum range are considered if natural or manmade barriers are not used.

- (2) Airspace routing used by RW aircraft flying from the ammunition loading site to and from the firing range are plotted on a map or chart and maintained by both the using unit and Range Control. This course is selected so that accidental firing at any point on the course minimizes risk to life and property, however, aircraft weapon systems must be maintained in a safe condition until within the range boundary. RW aircraft routing from the ammunition loading site to the firing range are published in local SOPs.

- (3) When training requirements dictate, commanders (battalion, squadron, or higher LTC/O5) direct the loading and unloading of ammunition from aircraft while the engines are running. Such operations are authorized when a thorough risk assessment has been conducted, control measures implemented, and residual risks identified and accepted by the appropriate commander.

- (4) A dry pass or range sweep for the entire range, focusing on the target area, are conducted to ensure personnel are clear from hazardous effects. Aircraft may use onboard sensors (advance targeting pods, sniper, lighting), or UAS targeting payload in lieu of a dry pass. Terminal controllers observing the target area may waive the dry pass.

- (5) Prior to first weapons release/firing for each pass, final switch configuration is not conducted until the aircraft is in such a position that accidental activation or release is contained within the range, and not represent a danger to ground personnel.

- (6) Aircraft must be a minimum of one switch position (excluding trigger) away from weapons release/firing when not oriented toward the target area unless approved by range operations (Army).

- (7) Prior to leaving a range area, FW aircraft conduct a hung ordnance check. If hung ordnance remains on board the aircraft due to malfunction, loss of range time, and so forth, then ensure compliance with local restrictions to avoid undue risk for the return flight. For RW aircraft, the pilot in command ensure

that all weapon systems are clear of ammunition prior to departing the range. Upon completion of training, aircraft weapon systems must be Safed in accordance with aircraft TMs before leaving the range.

(8) Crash Rescue personnel are knowledgeable of safety precautions associated with armed aircraft and impact areas and the hazards associated with burned aircraft (for example, radioactive and advanced composite materials).

c. Hung ordnance and jettison areas

(1) Range operations ensure aircraft report ordnance expended, hung ordnance, and UXO locations to the range operations firing desk prior to departing the range.

(2) Report fuels spills to range control.

#### **11-4 Firing Conditions, Specific Requirements**

a. Running fire. When conducting running fires, cockpit displayed graphics, ground markers, or prominent terrain are used to mark start and cease fire lines.

b. Hover fire. When conducting hover fire, the firing position must be marked. If possible, hover fire should be conducted over level terrain free of flight hazards (for example, dust, brush, trees, blowing debris). Natural or manmade features are used to aid in the establishment of range boundaries and control measures.

c. Markers. When used, markers must be illuminated and/or thermalized when thermal weapons sights are used to ensure proper target area identification at times of limited visibility when required. Additional ground markings are used at the discretion of the Commanding Officer or the range OIC. Adjacent ranges within a range complex that support aviation live-fire should be marked or lighted to facilitate aircrew identification of their assigned range.

#### **11-5 Rotary Wing flanking fire**

a. RW gun and rocket weapon systems are used to provide flanking fire, as shown in AR 385-63, figure 12-3, when a minimum lateral distance of 100 m or 15 degrees between exposed troops and firing aircraft gun target line is maintained. Additionally, exposed troops must be positioned outside the WDZ/SDZ footprint.

b. Positive means are employed to ensure that the firing unit knows the location of the maneuver units while fire support is being provided.

c. Only non-explosive projectiles are authorized to be used for RW flanking fire.

d. The route and location of maneuver units and the firing aircraft providing flanking fire support must be described and briefed in detail. The use of cockpit displayed graphics, and/or recognizable natural/manmade terrain features, and other means of friendly position marking are used by exposed troops.

e. Firing aircraft must positively identify the front-line trace of exposed troops prior to engagement.

f. Rotary wing/tilt rotor door gunnery operations.

(1) Door Gunnery operations are conducted according to the appropriate Gunnery Manuals (TC 3-04.3 for the Army). Marine Corps units follow the procedures established in the Marine Aviation Weapons and Tactics Squadron One (MAWTS-1) Aerial Gunnery Manual and appropriate tactical manuals for the specific type aircraft.

(2) Personnel on the aircraft must wear at least single-hearing protection when firing weapons.

g. Rockets

(1) Training operations. Training operations conducted in conjunction with Aerial Rocket firing must be suspended if winds or gusts exceed 30 knots.

(2) Rotary wing aerial rockets. The launch angle in degrees equals launcher QE in mils divided by 17.7 plus the aircraft pitch in degrees. For articulating launchers, use the maximum articulated QE possible plus the aircraft pitch in degrees.

(3) Maximum launcher QE must not exceed 160 mils.

(4) Maximum range of the 2.75-inch rocket with the MK66 motor is 12,000 m launched at 45 degrees and below standard air density.

(5) Firing of the M267 multipurpose sub-munition practice rocket is prohibited if crosswinds exceed 20 knots.

(6) Firing of the M261 HE multipurpose sub-munition rocket is prohibited in training by the Army only, and/or on Army ranges.

(7) Units using the 2.75" (70mm) aerial rocket are authorized to fire the M255A1 Flechette service munition on range complexes (such as a multipurpose range complex, multipurpose training range, digital multipurpose range complex, digital multipurpose training range, or digital air/ground integration range that support the SDZ. There is no requirement to limit firing of the M255 Flechette into permanently duded impact areas.

h. The following restrictions apply when firing the 2.75in folding fin aerial rocket with the M278 IR illumination warhead:

(1) The pilot/gunner ensures that the M278 IR illumination warhead deployment occurs at least 1,500 ft AGL on training areas. Deployment of the flare below 1500 ft AGL significantly increases the risk of ground fires.

(2) The pilot/gunner mitigates the hazard of spent rocket motor impact. The spent rocket motor impact point can be approximately 700 m to 1200 m beyond the point of flare deployment.

(3) When the rocket with the M278 warhead is fired in the vicinity of friendly troops and personnel in an uncovered position, ground personnel must wear PPE Level 1.

(4) Pilots must exercise extreme caution when operating in the vicinity of IR illumination flares. Once the flare burns out, the flare container and parachute are be visible during its decent.

i. Inertial aided munitions.

(1) Inertial aided munitions are smart weapons, such as a GBU-38 joint direct attack munition, GBU-44 Viper Strike, or Griffin small tactical munition, that employ Global Positioning System as an inertial aid to acquire target location.

(2) Aircraft employing inertial aided munitions in a bomb-on-coordinate mode or aircraft employing any ordnance in a system delivery mode on coordinates only adhere to the following prior to release:

- Aircrew confirm the accuracy of the aircraft navigation and weapon delivery systems. For the Marine Corps, aircrew confirm aircraft health, weapon health, and coordinate in accordance with current MAWTS-1 or weapon school technical training procedures.

- Aircrew ensure accurate receipt and entry of target coordinates and that they come from a valid target source. These coordinates are verified via read-back from target data entry displays or cross-checked with mission planning data or range guides but must include one other person, in addition to the pilot, verifying coordinate/elevation accuracy (either in-flight or during mission planning). Examples of valid target sources include, but are not limited to RMAs (Army), RCOs (Marine Corps), Joint terminal attack controllers, range guides, or forward air controller-airborne qualified aircrew.
- Aircrew use all means available to verify accuracy of target coordinates/elevation, and that the coordinates are within the anticipated target area. Examples of available means include but are not limited to forward looking infrared radar, synthetic radar aperture map, heads-up display cueing, other aircraft sensors, terrain pointer, map plots, data links, radio communications, talk-ons with JTACs, RMAs (Army), RCOs (Marine Corps), and other aircrew members.
- Aircrew confirm and adhere to published range operating procedures and restrictions.

#### **11-6 Unmanned Aircraft Systems Considerations**

a. Operator/air mission commander requirements.

(1) All Operators who control UAS platforms/payloads within Range Complex Training Airspace (RCTA) must participate in a Range Safety Brief within 90 days of training and become familiar with this regulation prior to operating within the Complex. Unit Commanders submit a memorandum with a list of licensed operators to Range Control Prior to event execution.

(2) Air Mission Commanders who oversee UAS operations/training within RTCA must participate in a Range Safety Brief and become familiar with this regulation prior to conducting operations within the Complex.

(3) Air Mission Commanders take all measures necessary to ensure training/operations are conducted within assigned SUA or other authorized operating area and that Unmanned Aerial Vehicles and all effects (for example, munitions/laser) are contained within assigned boundaries.

(4) UAS/SUAS Operational Unit Commanders ensure that all UAS performance, air worthiness and related requirements meet system safety standards prior to operating unmanned aerial vehicles within assigned range space.

b. Operator qualifications for platform/payload operations, aviation weapons delivery/terminal guidance.

(1) Army

- Operators successfully complete an approved qualification course, or qualification, or transition training in accordance with an approved program of instruction
- Operators demonstrate platform, payload, and weapon systems proficiency in accordance with TC 3-04.62 and FM 3-04.11.
- Out of state unit requirements, to include meeting with a Master Trainer from MN to verify all requirements can be met, current maps given to unit and a site survey by Master Trainer or Airfield Manager prior to launch.
- Non-Department of Defense use of Army Restricted Airspace (R-4301) is restricted in accordance with Non-Department of Defense Use of Army Restricted Airspace..
- COTS UAS operations within Class D/E/G airspace require the civilian operator and COTS UAS to be in compliance with FAA 14 CFR Part 107. COTS request must be submitted 120 days prior to training to be submitted to Dept of the Army for approval. Approvals can be

granted for up to 180 days. For further information on COA see CRTC Aviation Procedure Guide (APG), Chapter 4.

(2) Marine Corps. Marines operators conduct training within their appropriate guidelines.

c. Field Systems

(1) Ensure Range Control personnel are familiar with the flight characteristics of UAS involved in range aviation operations.

(2) For ordnance delivery, operate UAS in VMC and when the weather is forecast to remain VMC throughout the flight.

(3) If operating with weapons, arm ordnance for delivery only when the aircraft is within the SUA and in a position from which, if released, the ordnance remains within the designated impact area.

(4) The UAS operator notifies Range Control and or OIC when the UAS has completed ordnance delivery and when departing the range.

(5) The mission commander maintains responsibility for the safe operation of payload and platform.

d. Developmental/Experimental Unmanned Aircraft Systems. If the UAS has not yet been fielded, provide range operations (Army), range control (Marine Corps) personnel current reliability information and a "worst case" depiction of potential range, direction and SUA point of departure for developmental/experimental UAS if loss of contact procedures fail.

e. Unmanned Aircraft Systems operations conducted outside restricted areas and warning areas. UAS operations conducted outside restricted areas and/or warning areas comply with the provisions of applicable FAA and DODDs, notices and current certificates of authorization or waiver.

#### **11-7 CRTC Specific UAS Procedures**

a. UAS training requests must be submitted in RFMSS NLT 90 days prior to the event.

b. RFMSS requires three (3) facilities to be scheduled for the same event:

(1) The Ground Facility (MAAF, TA23 UAS Runway, or Training Area).

(2) The lost link location (ground facility) must also be reserved.

(3) The Airspace above the requested Ground Facility which is the Launch Restricted Operation Zone (ROZ) (All Training Areas have an associated ROZ).

c. To comply with FAA Regulations, Range Control MUST have a minimum notice of 48 hours prior to a previously unscheduled UAS Request to ensure proper scheduling of the ZMP R-4301 with the FAA.

d. UAS Mission Coordinators must be listed as such in the Commander's Safety Certification Memorandum to Range Control. This certification is valid for one year. There is no minimum rank requirement, as the Company Commanders' appoint MCs, per TC 3-04.62.

e. MCs must attend a Range Safety Briefing and sign a Range Safety Briefing Agreement prior to flight operations at TA23 UAS Runway.

f. MCs utilize RC Form 44 UAS/SUAS Opening/Closing Checklist for TA23 UAS Runway only.

g. Range Control treats each ROZ the same as a live-fire range for ROZ Opening/Closing procedures

only. Range Control must receive approval from MAAF Tower prior to opening the range.

- h. Close and clear the range with Range Control.
- i. Prior to UAS flight an Air Traffic Control (ATC) brief and Letter of Agreement (LOA) must be completed with MAAF.
- j. Follow additional guidance from the most current version of the CRTC Aviation Procedure Guide (APG).

#### **11-8 CRTC Specific SUAS Procedures**

- a. UAS Training Requests must be submitted in RFMSS NLT 90 days prior to the event.
  - b. RFMSS requires three (2) Reservations to be scheduled for the same event:
    - (1) The Ground Facility (Range or TA) that the Operator utilizes as the Launch Point (LP).
    - (2) The Airspace above the requested Ground Facility which is the Restricted Operation Zone (ROZ). All ROZ requests are deconflicted with MAAF prior to approval. Each TA has an associated ROZ. Each ROZ is the shape of its' associated TA and are depicted on daily range bulletins. Units may reserve additional TA ROZ without ground space provided the requested TA's about the location of the UAS launch point.
    - (3) TA ROZ airspace is from 0-400 Feet AGL. Requests outside this interval must be coordinated with Range Control and Miller Army Airfield. When TA ROZ airspace is open, only the unit operating the ROZ are permitted between 0-400 feet AGL.
    - (4) MC's open and close each ROZ as it is occupied by UAS.
  - c. SUAS can be flown anywhere in the FTA in an assigned ROZ except for the instances below:
    - (1) SUAS are not authorized to fly over Dedicated Impact Areas without prior approval from Range Control.
    - (2) SUAS are not authorized to fly south of Gridline 06. This is the southern boundary of the Restricted Airspace ZMP R-4301.
    - (3) SUAS must maintain two forms of communication with Range Control while occupying the ROZ. If communications are lost SUAS must be immediately grounded.
    - (4) SUAS are not authorized to fly within the Class D Airspace when it is Active. An Exception to Policy MUST be submitted to the Range Management Authority and MAAF Air Traffic and Airspace Officer NLT 90 days prior for review, deconfliction and authorization. If approved, a letter of agreement is produced between Range Control, Airfield and unit.
  - d. To comply with FAA Regulations, Range Control MUST have a minimum notice of 48 hours prior to an unscheduled ROZ Request to ensure proper scheduling of the ZMP R-4301 with the FAA. The requested ROZ must be one that has already been created and approved by Range Control. If not, the request is denied or delayed until Range Control can create a new ROZ.
- e. SUAS must stay inside their assigned ROZ.
- f. SUAS ROZ's are restricted from operating in the following training areas.
  - (1) 1 through 17, 24, 26 (Class D Airspace).

## Camp Ripley Training Center Range Regulation 210-2

(2) 18, 19, 28, 29, 30, 32, 33 (mitigate congestion with rotary wing low level flight routes).

g. Units may submit an ETP for use of the restricted UAS ROZ's above to the Range Management Authority and MAAF Air Traffic and Airspace Officer NLT 90 days prior for review, deconfliction and authorization.

h. SUAS Mission Qualified Operators (MQ) must be listed as such in the Commander's Safety Certification Memorandum to Range Control. This certification is valid for one year. There is no minimum rank requirement, as the Company Commanders' appoint MQs, per TC 3-04.62.

i. MQs must attend a Range Safety Briefing and sign a Range Safety Briefing Agreement prior to flight operations.

j. Range Control treats the ROZ the same as a live-fire range for ROZ Opening/Closing procedures only. The MQ Open/Close the LP/ROZ with Range Control utilizing RC Form 44 UAS/SUAS Opening/Closing Checklist. Range Control MUST receive permission from Miller Tower/OPS to open the ROZ, prior to Opening the LP/ROZ, when active flights are indicated on the AAAS system.

k. There are five instances in which SUAS Units operating within a ROZ must inform Range Control immediately:

- (1) Upon initial occupation of the ROZ before the first flight.
- (2) Any time the SUAS is flown outside of the ROZ and/or R-4301,
- (3) In the event of a Lost Link
- (4) Any time there is a suspected accident.
- (5) Upon completion of UAS training.

l. MAAF tower – 320.632.7751

m. MAAF Operations when tower is closed – 320.616.2779

n. SUAS do not require a COA if the mission remains within the designated ROZ inside R-4301.

o. Maximum density within the ROZ is "four" SUAS airframes aloft at one time.

p. SUAS lateral limits are RESTRICTED to the designated Restricted Operating Zone.

q. SUAS vertical limit is 400 feet AGL

r. The standard Lost Link point for SUAS is the Launch Point within the ROZ.

s. Upon notification of a Lost Link, MAAF Tower must:

(1) Issue advisories and ATC instructions as appropriate to insure the safe operation of all aircraft training in R-4301.

(2) Cease aircraft departures until status of affected SUAS/UAS is determined.

(3) Recover other SUAS/UAS as appropriate.

t. Units close the LP/ROZ Facility with Range Control. Range Control clears the Ground Facility on a

case-by-case basis.

u. SUAS incidents may be considered an Army Aviation accident and must be reported accordingly. Units are responsible for reporting to their higher HQ in accordance with Army policy.

**11-9 Multi-Platoon SUAS Operations**

a. Multiple SUAS platoons may conduct training utilizing the same launch and recovery area provided the following minimum conditions are met (if approved).

b. Platoons must have conducted coordination and agree to the onsite location(s), frequency usage, and other established de-confliction standards and procedures deemed appropriate.

c. The SUAS must maintain at least 1,000' horizontal and/or 500' vertical separation from each other during the mission.

d. Prior to conducting a climb or descent, the SUAS platoon coordinates with the other SUAS platoon to ensure they are clear of the designated climb/descent routes.

e. Training Areas where SUAS are utilized must open with an active ROZ.

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## **Chapter XII - Chemical Agents and Smoke**

### **12-1 Chemical Agents**

The use of lethal or incapacitating chemical agents in training is not authorized at CRTC.

### **12-2 Riot Control Agents**

a. Commanders may use Riot Control Agents (RCAs) in training with the following guidelines:

(1) Use of RCAs in training is limited to 0-CS. All other RCAs are prohibited for training use.

(2) Use of RCAs in training requires supervision by personnel specially trained in field behavior, individual protection, and first aid for RCAs. Army personnel that meet these criteria are Chemical Officers (Branch Code 74), Chemical NCOs (MOS 54B), school-trained Chemical, Biological, Radiological, and Nuclear (CBRN) officers (SSI 3R) and NCOs (SQI C). Marine Corps personnel that meet these requirements are MOS 5702 CBRN Systems Defense Officer, and MOS 5711 CBRN Defense Specialist. These personnel are authorized to supervise the Mask Confidence Course.

(3) RCAs are not authorized to be used under conditions that are dangerous to life or property. Minimum safe distances to heavily traveled Installation roads, railroad right of ways, airfields (including all aircraft landing areas), or inhabited areas are:

- CS Chambers must be at least 100m away from heavily traveled roads, 500m from aircraft operations and inhabited areas, and 1,000m from the nearest Installation Boundary, unless the CS Chambers are designed to contain and filter all CS gas.
- Field training exercises involving RCAs must be 500m or more away from public traffic routes, the nearest inhabited buildings, and 1,000m from Installation Boundaries.

(4) Prior to a scheduled RCA exercise, training supervisors must conduct a readiness evaluation of personnel. Before being exposed to RCAs, personnel with respiratory ailments, recent eye surgery, or eye infections, open wounds, severe facial acne, or any active dermatitis, and pregnant personnel must be referred to a Medical Officer for evaluation.

### **12-3 Employment Conditions**

a. CS capsule form is the only authorized use in the CS Chamber.

(1) Wearing contact lenses while masked is not authorized.

(2) Coordination through Range Control must be made NLT 30 days prior to the release of any riot control agents.

(3) For the Marine Corps, when CS is used in outdoor confidence courses, the RSO must have been trained in the CS chamber within the past year. The use of a 5702 CBRN Defense Officer and 5711 CBRN Defense Specialist is not required.

(4) Issue of CS capsules is conducted within service/branch regulation.

(5) When RCAs are transported in Army or Marine Corps aircraft, compliance with AR 95-1, AR 95-27, MCO 4030.25B, and MCO 4030.40B is required.

(6) Corpsman or Medic with Unit 5 Medic Bag.

### **12-4 Smoke**

a. The use of smoke during training poses health and safety issues. DRAWs, RSO, OIC are responsible for ensuring regulatory precautions are followed. Follow the below procedures where smoke is utilized during training at CRTC

- (1) Disperse smoke to reduce fire hazards
- (2) Only deploy smoke in/on the below approved surfaces
  - Pavement
  - Gravel
  - Pre-determined areas

b. During red flag wildland fire hazards, create a fire prevention plan and submit to range control for approval.

c. FS (sulfur trioxide-chlorosulfonic acid solution) and FM (titanium tetrachloride) smoke are not authorized for use on CRTC.

**12-5 Smoke Pots**

a. Place smoke pots to reduce fires.

b. The M4A2 smoke pot must be vented for at least 5 minutes within 24 hours before use in accordance with TB 3-1365-490-10.

c. When electrically firing the M5 HC smoke pot, at least 30m of WD-1/TT wire must be used.

**12-6 Oil Smoke Candles**

Oil Smoke Candles (M6, SGF2) are to be used within the guidance of the current TM.

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## **Chapter XIII Less-lethal Weapons and Simunitions**

### **13-1 General**

- a. The term "Less-lethal" does not mean zero mortality or nonpermanent damage. Fatal injuries can occur if munitions are employed at a distance that is less than the determined minimum safe engagement range.
- b. The Inter-Service Non-Lethal Individual Weapons Instructors Course is the only course in DOD that is certified to produce instructors who train individuals in the proper employment of Less-lethal weapons.
- c. For the Marine Corps, the use of less-lethal weapon in force-on-force scenarios except for SESAMS/CCMCK is authorized only under approved deviation per AR 385–63/MCO 3570.1C and Chapter 1 of AR 385-63 and Operational Risk Management procedures have been completed in accordance with MCRP 5–12D and MCO 3500.27B
- d. Marine Corps, if force-on-force training with less-lethal weapon is conducted under an approved deviation, Marines may be in the less-lethal weapon danger zone, always remain outside the minimum target engagement distance.
- e. Army, Soldiers participating in force-on-force training with less-lethal weapons may be in the less-lethal SDZ, must always remain outside the minimum engagement distance.
- f. Less-lethal weapons and Simunitions must be listed on the commander's safety certification memo.

### **13-2 Surface Danger Zone**

- a. Area R is the portion of the SDZ behind the firer where personnel, equipment, and facilities may be endangered by ricochets to the rear of the firing line.
- b. RTMK and SDZ sheet for training is received from range control ARC GIS.

### **13-3 CRTC Specific Guidelines**

- a. Less-lethal weapons and Simunitions training may be conducted anywhere in the FTA, however Range Control is required to create a Surface Danger Zone for the Range or TA prior to the training event.
- b. Units must submit a Training Plan to Range Control that includes the specific ammunition type to be fired NLT 90 days prior to Range/TA usage.
- c. Civilian entities are required to review the list of military less-lethal weapon munitions mentioned in previous paragraphs to request the equivalent or similar Civilian munitions.
- d. Simunition use at CACTF must be cleaned off the walls prior to clearing.

### **13-4 Special Effects Small Arms Marking Systems**

- a. SESAMS is a Marine Corps training system that fires a marking cartridge (colored dye) to enhance realism for force-on-force training. Improper use of the SESAMS training system may cause serious personal injury and/or damage to equipment.
- b. Ensure that only Marine Corps procured adapter kits and marking cartridges are used.
- c. The mixing of live ammunition and SESAMS rounds is prohibited.
- d. Force-on-force training with SESAMS 9mm DODICs (AA12) and (AA21) is prohibited when temperatures are below 38 degrees Fahrenheit. Training with SESAMS 5.56mm DODICs (AB05) and (AB06) is prohibited when temperatures are below 18 degrees or above 104 degrees Fahrenheit.

- e. Live ammunition must be removed and accounted for.
- f. Live and SESAMs are not to be stored together.
- g. Ensure that all personnel within the 150m safety distance (zone) wear PPE Level 0.
- h. The FX 9000 and 9003 Protective Face Masks are authorized for use. The FX 9003 Protective Face Mask is specifically authorized for use with DODICs (AB05) and (AB06).
- i. Ensure qualified medical personnel and appropriate medical equipment are available during SESAMS training.
- j. The MCU-2A/P Chemical Biological Mask may be used for face and eye protection if the hard outer eye shields and the C2 canister are attached during SESAMS training system.

**13-5 Close Combat Mission Capability Kit (Army)**

Personnel engaged in CCMCK force-on-force training must wear PPE in accordance with the procedures, restrictions, and other guidance contained in technical/operator manuals, references, and/or pamphlets (TM 9-6920-3700-10). No personnel are allowed within 75m of the outermost boundary of the training area when force-on-force training is being conducted without meeting the minimum PPE safety requirements.

- The minimum engagement distance is 1.5m (5 ft).
- Post training inspect equipment for damage.
- Ensure PPE is worn IAW current TMs.

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## Chapter XIV - Demolitions, Mines, Firing Devices, Trip Flares, Simulators

### 14-1 General

- a. Procedures in AR 385-63, FM 3-34, and TC 3-34.150 are used for all training in the use of Demolitions and Explosives. Field Expedient Methods outlined in applicable Field Manuals are authorized for use. Unit commanders receive prior approval from the Installation RMA
- b. PPE is worn IAW AR 385-63 and appropriate regulation for current service or branch.
- c. Live and inert munitions/demolitions must not be mixed
- d. Demolitions effects simulators which contain live explosives, as well as other simulators, are considered live munitions.

### 14-2 CRTC Specific Guidelines

- a. Camp Ripley has five (5) approved Demolitions and Explosives Ranges.
- b. L Range is the Large Charge Demolition Range. The range contains a protective viewing bunker. The southern portion of the range is the Small Charge Area (less than 100 lbs.). The northern portion is the Large Charge Area (100-200 lbs.). The maximum allowable charge is the equivalent of 200 pounds of TNT per blast, with a minimum of 30 minutes between blasts.
- c. DEMO-5 is the Light Demolitions Range (LDR). The range contains two protective viewing bunkers, and an antenna mast. The maximum allowable charge is the equivalent of 125 pounds of TNT per blast, with a minimum of 30 minutes between blasts.
- d. CRTC has three field training areas:
  - DEMO-2 UM 91801570 (OP-2 Demo Site)
  - DEMO-4 UM 90282592 (Located south of the Seal Cabin)
  - DEMO-6 UM 90702842 (Located in TA75)
- e. The maximum allowable charge for Demo-2 and Demo-6 Ranges is the equivalent of 100 pounds of TNT per blast, with a minimum of 30 minutes between blasts. The maximum allowable charge for Demo-4 Ranges is the equivalent of 200 pounds of TNT per blast, with a minimum of 30 minutes between blasts.
- f. Fog, wind, and haze can reduce demo 2 and demo 6 based off from noise contours.
- g. Both M1A2 and M1A3 Bangalore Torpedoes are authorized on L Range and DEMO-4. One-half Kit of M1A2 and a full M1A3 are authorized on DEMO-2, DEMO-5, and DEMO-6.
- h. A Five-minute to Blast warning is transmitted to Range Control prior to initiating any firing device.
- i. A One-minute to Blast notice is transmitted to Range Control prior to detonation.
- j. Notify range control when blast is complete.
- k. Demolitions and explosives operations must be discontinued during, or upon the approach of, an electrical storm.
- l. Trees larger than 2 inches in diameter are not authorized to be cut without the approval and marking by the Training Area Coordinator.
- m. All debris from demolitions and associated activities must be removed, and craters filled and compacted.

n. Demo plans are required 90 days prior to training being conducted. Plans must include the following:

(1) Each shot with specifically what demolitions are used in the shot (all explosives, to include MDI, must be accounted for on the plan).

(2) The calculated Net Explosive Weight (NEW) for each component in the charge. Along with the total NEW for the charge.

(3) The standoff distance required for cover and uncovered protection. If covered is used for the charge the plan must identify the cover used.

(4) Must have a misfire kit.

**14-3 Simulators**

a. Procedures for the safe use of other simulators are contained in TM 9-1370-206-10, TM 9-1370-207-10, and TM 9-1370-208-10. Attempts to disarm or disassemble simulators are not authorized.

b. See TM 9-1370-207-10 for the M142 atomic explosion simulator firing precautions.

c. Commercially manufactured fireworks (designated for Civilian use) are not authorized to be handled, stored, or used in any way by military personnel on the Installation.

**14-4 Live Fire Breach Facility**

a. Station 1-Door Breaching-this station has a facade that is 8 feet high with a door opening of 33 inches by 80 inches. Soldiers can conduct mechanical, thermal, ballistic, and explosive door breaching techniques. Units must include Shotgun Breaching in the Demo Plan, if they are performing this task at this station.

b. Station 2-Wall Breaching-this station contains a facade that measures 8 feet high by 20.5 inches wide. Soldiers can conduct mechanical, thermal, ballistic, and explosive wall breaching.

c. Station 3-Window Breaching-this station contains a facade that measures 8 feet high with three window openings measuring 32.75 inches by 38.75 inches.

d. Supports explosive breaching of hard targets up to 4 lbs.

e. Charges are not authorized to be placed on the metal studs in the Station 2 facade.

f. Civilian agencies that utilize this facility are responsible for replacing all doors and windows that are destroyed during training.

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**Chapter XV - Laser Range Safety**

**15-1 General**

- a. Safe use of lasers listed in MIL-HDBK-828B and JP 3-09.
- b. Laser systems: Laser systems must be directed at approved targets only and from approved operating positions/areas or on designated headings and altitudes.
- c. Laser usage: Unfiltered Class 3B, 4, or DOD-Exempt Lasers are authorized use at the Impact Areas only. Also, these Lasers must be operated in Restricted Airspace.
- d. Nominal Ocular Hazard Distance (NOHD). The NOHD is the distance from an operating Laser to the point where the Laser is no longer an eye hazard.
- e. Unprotected personnel. Unprotected personnel must not be exposed to laser radiation within the NOHD of the Laser System.

**15-2 CRTC Specific Guidelines**

- a. Follow instructions contained in the specific Laser or Simulator FMs and/or TMs.
- b. OIC and RSO must be listed in the Commander's Safety Certification Memorandum and have a current Range Safety Briefing.
- c. An approved RMTK Surface Danger Zone Layout Sheet must be utilized for obtaining left and right deflection limits, and vertical angles.
- d. A red range flag must be displayed while the range is open.
- e. Considered a live fire range.

**15-3 Force on Force**

- a. Tactical exercises involving MILES/AGES/AD/TWGSS/PGS do not require SDZ construction, however NOHD restrictions in MIL-HDBK-828B apply.
- b. The Garrison Commander may approve tactical exercises involving force-on-force components using laser devices other than those listed.

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## **Chapter XVI Environmental Management**

### **16-1 General**

a. Environmental protection and conservation are the responsibilities of all personnel using Camp Ripley training facilities. Commanders must ensure that no deliberate destruction of natural or cultural resources occur during training exercises.

b. For information on Environmental Management, the Environmental Office (320.616.2720) or Range Control (320.616.3137/3134) has Leader/Soldier Handbooks and Field Cards available for Soldiers and Units. Environmental information is also included on the CRTC produced 1:50,000 scale maps.

### **16-2 Limited Use Areas**

a. A universal marking system (Siebert Stake) marks all Limited Use Areas on Camp Ripley. The "Siebert Stake" has alternating Red and Amber reflective tape that is Night Vision Device compatible.

b. The areas marked with Siebert Stakes include, but are not limited to:

- (1) Culturally protected areas
- (2) Historic Fort Ripley
- (3) Closed Dump sites
- (4) Closed Mixed Municipal Landfill
- (5) Threatened/Endangered species habitat
- (6) Training hazards

c. The Camp Ripley produced 1:25,000 map displays the Limited Use Areas in the FTA. Units should review the map prior to training and plan accordingly. Maps are available at Range Control and in the Environmental Office.

### **16-3 Field Water Points**

a. Camp Ripley has four Field Water Points for operating Water Purification Points, Field Showers, Field Laundry, and acquiring Potable Water.

(1) WATER SUPPLY TA77 UM 926295 (Crow Wing River): This Site is designated as Zebra Mussel and Faucet Snail infested waters by the MN DNR (see items e-f below).

(2) WATER SUPPLY TA12 (PICNIC #3) UM 939091 (Mississippi River): This Site is designated as Zebra Mussel infested waters by the MN DNR (see items e-f below).

(3) WATER SUPPLY TA06 UM 908072 (SE corner of Ferrell Lake): This Site is not infested water.

(4) WATER SUPPLY WELL TA64 UM 93952839: This is a permanent, electrical pump operated, Potable Water Point. This site is used to draw potable water from only. Please run the pump approximately 15-20 minutes to remove residual sediments in the pipe before filling water storage equipment. The well is tested annually for contaminants.

b. All (established and un-established) Water Supply Points must be reserved in RFMSS.

c. Un-Established Water Supply Points used by Units not hauling their potable water off-site, must also follow the same approval procedures. However, environmental standards for locating these water points

limit their approval. The standards include a 100-meter setback from lakes, streams, wetlands, and historic sites. Furthermore, apply wastewater discharge to land surface using the plastic drain field pipe.

d. It is illegal to transport water from infested waters (Mississippi River and Crow Wing River), except by MN DNR permit.

e. Water treated with greater than a 40-micron filter may not be discharged where it can run into another basin, another river, or a drain system that does not go to a treatment facility.

#### **16-4 Gray Water procedures**

a. Gray Water is defined as wastewater generated by hand washing basins, mobile kitchens, and mobile showers. Gray Water is required to be dumped at designated dump sites.

b. DeParcq Woods is the designated Cantonment Site.

c. Y-2 and Y-4 TTBs contain Gray Water storage tanks. The unit must have the TTB reserved in order to utilize the tank. Usage is tracked by the Environmental Section. Coordination **MUST** be made with Range Control or the TAC prior to disposal operations.

#### **16-5 Bridging Operations**

a. W-1 (Ferrell Lake=un-infested water) and W-2 (Mississippi River=infested water) are the established Bridging ranges.

b. If the Unit is utilizing both ranges during the same training period, with the same equipment, W-1 **MUST** be utilized first. **NO** exceptions. This is to prevent the transfer of invasive species from infested waters to un-infested waters.

#### **16-6 Cleaning Water Purification and Bridging Equipment**

a. Per MN DNR Regulations, any equipment that has been in infested waters must be treated by one of the following means prior to use in another water source:

(1) Power spray equipment to remove dirt, mud, or vegetation. Scraping may be necessary if objects were in the water for extended periods, or

(2) Dry 5 days in temperatures over 65 F. Drying is **NOT** recommended in cool wet weather (< 65 F.).

(3) Wash with 104 Degree (F) water for 4 minutes (hotter temperatures result in better and shorter kill times), or

(4) Freeze for 2 days, or

(5) Treat water with 750mg/l KCL for 1 hour, followed by 25 mg/l formalin for 2 hours to kill Zebra Mussel Veliger.

#### **16-7 Fire Control Procedures**

The Training Area Coordinator (with MN DNR guidance) is responsible for determining the daily Fire/Pyro Usage Status. The Status sign is located at A Gate or contact Range Control.

a. Recreational Fires are prohibited in the FTA. An Exception to Policy must be submitted to, and approved by, Range Control.

b. All Range and Wildland fires must be reported to Range Control immediately.

c. The following information must be given to Range Control:

(1) The location of the fire. It is very important to report that a fire is located within a Range's Targetry package or moving towards any infrastructure.

(2) Approximate size.

(3) Direction of travel.

(4) Unit personnel are NOT authorized to fight fires on their own.

FIRE DANGER CODE		
GREEN	Low Moderate	Use normal caution. Fires start easily. All authorized ammunition, explosives, and pyrotechnics are allowed on live fire ranges and training areas.
YELLOW	High	Use extra caution. Fires start very easily. The beginning of the high danger period. Any type of ammunition may be used, with care, on ranges and within impact areas. Use of pyrotechnics, demolitions, and heat or flame-producing devices within training areas should be limited as much as possible to cleared areas or areas previously burned for that purpose.
RED	Very High Extreme	Flash condition. This is the highest class of fire danger. Fires started are practically impossible to extinguish and usually continue until danger rating conditions improve or they burn themselves out. The utmost caution with fire producing agents and devices must be exercised at all times. Only ball ammunition is used, illumination rounds, pyrotechnics, other types of ammunition, or explosive are not authorized to be fired.

**16-8 Chemical Latrines/ Waste Disposal**

a. Chemical Latrines are required in the FTA, except for the Ranges that have Classrooms with Latrines on them.

b. Units MUST schedule Chemical Latrines through Supply and Services at DSN 871.3128, or Commercial 320.616.3128.

c. Units are required to have a waste disposal plan. Dumpsters are not allowed in the downrange area. Range Control has the authority to issue an exception to policy if circumstances demand such a request.

**16-9 Historical Preservation**

a. Camp Ripley has numerous areas of historical or archaeological significance. The majority of these sites have been located and marked. Many of these areas are off limits to all troops and vehicles. Caution should be maintained when operating near known areas. Deliberate destruction at sites of historical or archaeological significance is not authorized.

b. Any individual finding an artifact or item of historical or archeological significance is required by law and policy to not touch or disturb. Contact Range Control immediately and receive further guidance.

c. Mechanical digging and tracked vehicle maneuvers are prohibited within 100 meters of a historical or archaeological site.

d. If archaeological artifacts (pottery, stone tools, historic foundations, etc.) are encountered at any time during ground disturbing training or construction, immediately cease all ground disturbing activities within 100 meters of the discovery. Secure the discovery location(s). Contact Range Control for further guidance.

**16-10 Noise Monitoring**

a. Noise is inherent to the operation of Camp Ripley. Of course, with noise, the surrounding communities may be impacted or annoyed. As a result, Camp Ripley Operations Office responds to all noise complaints and maintains a record of all complaints.

b. Electric generators in support of training activities produce considerable noise. When generators are located within 500 meters of the Installation boundaries, digging in or sand bagging reduce noise levels.

c. Current noise abatement policy prohibits unnecessary over-flying of populated areas at altitudes lower than 1,500 feet AGL. This policy includes the following:

- (1) CRTC TACC and Valhalla VIP Quarters
- (2) Green Prairie Fish Lake
- (3) Lake Alexander
- (4) Crow Wing Lake
- (5) All Turkey farms directly north of the R4301 area
- (6) Round Lake and Three Fingers Lake
- (7) Area towns and cities
- (8) The Brainerd Lakes Area (northwest of the City of Brainerd)
- (9) Mississippi River adjacent to Camp Ripley, below 1,500 feet MSL

#### **16-11 Field Fuel Storage/Bladders**

a. Units proposing to install field fuel storage bladders submit a written request to Range Control NLT 90 days prior. The request must include: name, address, and phone number of the Unit; amount and type of fuel to be stored and dispensed; number/volume of fuel bladders to be installed; dates of operation; preferred location on Camp Ripley; and the Unit Point of Contact.

b. The following guidance pertains to the installation and operation of field fuel storage bladders:

- (1) The site must not be located within 100 meters of any lake, stream, wetlands, or historical site.
- (2) The site must not be located within 200 meters of the Mississippi and Crow Wing rivers.
- (3) Preparation of the site, underlying the fuel bladder requires excavating the topsoil to provide a level site and to ensure that all debris is cleared that might otherwise puncture the flexible storage container.
- (4) A continuous berm, surrounding the storage site, must be constructed using on-site soils. The dimensions of the bermed area should not be less than the total capacity of the fuel storage bladder located within the area. The bermed area must be lined with an impervious material to act as a secondary containment, in case of any failure.
- (5) The area designated for conveying the fuel (i.e., hoses, piping, etc.) must be underlain with an impermeable liner.
- (6) All spills must be reported to Range Control immediately with grid location, material spilled, quantity spilled, cause of the spill, and time/date of incident. A Spill Report Form (MNGR-200-21-0510) must be completed as soon as possible and cleanup is the responsibility of the unit.
- (7) Any person causing or discovering a spill must take action to stop the spill, contain the spill, and clean up the spill. If the amount of contaminated soil is less than what would fit in a 55-gallon drum, dig it out

and transport it to the Solid Waste Transfer Station located southwest of Range Control. If the Transfer Station is closed, bring the material to Range Control. If the amount is greater than what would fit in a 55-gallon drum, earth-moving equipment may be required for removal. Units are responsible for showing Range Control personnel the location of the spill.

- (8) Range Control or Environmental Office personnel conduct daily inspections of the site.

#### **16-12 Mobile POL Distribution Points**

POL distribution from mobile units is an activity that has the potential of posing environmental concerns; therefore, the following guidance is provided to prevent any negative impacts:

- a. The proposed location of distribution points should be coordinated with Range Control.
- b. Units should be familiar with the Spill Control procedures.
- c. Use drip pans at all times for the dispensing nozzles, and the dispensing area should be lined with a small piece of impermeable liner such as plastic or an old fuel bladder.
- d. Ensure that the fueling hose is drained into the drip pan after each fueling operation and hang the hoses with the nozzle pointed up.
- e. Each POL distribution point should be equipped with a spill kit in the event of a spill. The kit should include absorbent materials, shovel and plastic storage bags.

#### **16-13 Mechanical Digging**

Camp Ripley has identified maneuver sized areas for mechanical digging with written approval from Range Control. Mechanical digging in areas other than those approved is prohibited unless special provisions are requested and approved by the Environmental Office. Range Control approves permits with concurrence from the Department of Public Works (DPW) and the Environmental Office to ensure facilities (above and below ground) are not affected.

- a. Units proposing mechanical digging or earth excavation must submit a Mechanical Dig Permit Form to the Training Area Coordinator NLT 90 days prior. Requests must include type of dig and grid location of the excavation, with time and duration of training.
- b. Active dig operations must adhere to the below;
  - (1) All open earth must be cordoned with engineer tape following active digging.
  - (2) All overnight open earth must be additionally marked with chem lights.
  - (3) Upon conclusion of training, site must be returned to natural grade.
- c. Mechanical digging is not permitted in the following areas with no exceptions:
  - (1) Signed tree plantations
  - (2) 100 meters from historical or archaeological sites
  - (3) 100 meters from surface water or wetlands
  - (4) Active logging sites
  - (5) Within 50 meters of main roads

(6) Within 200 meters from the Mississippi and Crow Wing Rivers

d. Maps with all above listed areas identified are available at Range Control and the Environmental Office.

e. If archaeological artifacts (pottery, stone tools, historic foundations, etc.) are encountered at any time during ground disturbing training or construction, immediately cease all ground disturbing activities within 100 meters of the discovery. Secure the discovery location(s). Contact Range Control for further guidance.

#### **16-14 Tick-Borne Diseases**

a. Camp Ripley employees and troops in training need to remain informed on the potential for tick-borne illnesses and prevention of the same. Similar to other areas in the Midwest, Camp Ripley is an endemic area for Lyme Disease and Human Granulocytic Ehrlichiosis (HGE). While all ticks are a nuisance, it is only the deer tick which is responsible for transmitting these diseases.

b. The following methods are encouraged to prevent bites from all ticks:

(1) Wear uniforms with pants bloused and sleeves down.

(2) Apply repellent with DEET - (Less than 25% concentrate) to exposed skin.

(3) Treat clothing with repellent containing Permethrin.

(4) Use the Buddy System to check for ticks frequently.

c. Dog Ticks.

(1) Individuals should remove common dog ticks by grasping the tick as close to the skin as possible and gently pulling it straight out then wash the bite area and apply antiseptic.

d. Deer Ticks.

(1) Persons with an embedded deer tick should have a Unit Medic (68W) remove the tick. Units/Soldiers must use a Tick Kit and complete a Tick Reporting Form before submission to the MUTF. A drop box outside the main doors of the MUTF is available for after hour submissions. Tick Kits are available from Range Control and the MUTF. The MUTF coordinator can be contacted at 320.616.6168.

(2) The MNARNG subscribes to the [Military Tick Identification/Infection Confirmation Kit \(MilTICK\)](#) program. MilTICK is a free testing and identification service available for ticks removed from Department of Defense (DoD) personnel and their dependents. The patient is informed if the tick is positive for tickborne disease.

#### **16-15 Vegetation.**

Units are encouraged to select locations that have sufficient natural concealment. This minimizes the need to cut vegetation for camouflage. However, it is permissible to utilize natural vegetation as deemed necessary for concealing vehicles, gun emplacements, and fortifications. The following restrictions apply:

a. Use native hardwood species (oak, maple, aspen, ironwood, hazel brush, etc.) that are less than two inches in diameter.

b. Do not cut evergreens (pine, spruce, tamarack, red cedar, etc.) unless special permission is granted by Range Control.

## Camp Ripley Training Center Range Regulation 210-2

c. Larger timbers may be needed for fortification. It is permissible to utilize any down trees throughout the FTA.

NOTICE: The cutting or delimiting of trees is prohibited during the active season of the Northern Long-Eared Bat (01 June – 31 July).

### **16-16 Training Area Clearance**

a. The TAC and/or Range Control personnel inspect all training area and bivouac sites before the using unit may clear Camp Ripley. Ensure the following is done prior to inspection:

- (1) A thorough police call of the entire Training Area.
- (2) Remove all garbage, trash, and other debris, and dispose of it at Camp Ripley Transfer Station.
- (3) Completely fill in all fighting positions and restore the area to its original appearance.

NOTE: DO NOT BURY LOGS OR TRASH IN FIGHTING POSITIONS.

- (4) Scatter trees used for concealment or road barriers.
- (5) Remove all forms of wire from the Training Area.

b. Prior to departing Training Area(s):

(1) During Annual Training periods, the Unit Liaison Officer coordinates with the Training Area Coordinator (TAC) and/or Range Control to clear and close the Training Area.

(2) During IDT Weekend training, contact Range Control, Bldg. 24-199, 320.616.3137, or on SINGGARS radio frequency 36.100 primary, 40.400 alternate.

c. Units must have a POC and a cleaning detail on site for Training Area clearance. Range Control does not clear Training Areas in the dark or without someone present on site.

### **16-17 Fuel Wood Cutting Permits**

a. Authorized personnel: Minnesota active and retired military members, State and Federal Department of Military Affairs employees. The wood is for personal use only.

b. Permits:

- (1) 5 Cords-\$25.00
- (2) 10 Cords-\$50.00

c. Guidelines:

(1) An application for a Woodcut Permit must be acquired from, and submitted to, the Camp Ripley Training Area Coordinator, located at Range Control. After the TAC approves the application, the Applicant brings the application to the DNR Forestry Office in Little Falls. Applicants pay the appropriate Fee, then receive the Woodcut Permit from them.

(2) Permits are valid from the date of issue through 31 March of the following year. Permit Holders are required to get a Vehicle Pass from Range Control prior to entering the FTA. Cutting is allowed during daylight hours only. Woodcutting is not allowed when Range Control is closed, due to safety concerns.

(3) Each permit holder is authorized any number of helpers. The permit holder must accompany the helper(s) at all times.

(4) Permit holders are only authorized to remove down, or marked trees. If the permit holder is not sure of the status of the wood they should contact the Training Area Coordinator for clarification, as well as areas where they are allowed to cut.

d. Violations: Failure to comply with this regulation may result in revocation of future woodcut privileges on Camp Ripley.

### **16-18 Camp Ripley Fishing Policy**

The policies and procedures set forth herein are applicable to all persons authorized to fish on Camp Ripley. Minnesota fishing regulations apply to all lakes and rivers that are within or border Camp Ripley.

a. Authorized personnel:

(1) Current military members in possession of a valid Military Identification Card or retired military members in possession of appropriate identification and their guests.

(2) Civilian employees of the Department of Military Affairs (DMA) and their guests.

(3) Residents on military leave. A resident that is in the armed forces of the United States, stationed outside of the state, and in the state on leave, may hunt and fish without a license if the resident possesses official military leave papers during the regulated seasons. The resident must obtain the seals, tags, and coupons required of a licensee, which must be furnished without charge.

(4) Non-resident military personnel. A nonresident who is in the military and in training at Camp Ripley may obtain a resident license to take fish.

(5) Non-residents stationed in the state. The DNR Commissioner may issue a resident license to take fish or game to a person in the armed forces of the United States that is stationed in the state.

b. Authorized Fishing Areas:

(1) Due to firing and training activities, authorized fishing areas may be temporarily closed by permanent or temporary barriers. At no time is a person allowed to go around or tamper with any road barriers.

(2) Authorized fishing areas are: Mississippi River Rest Area 3 (Zebra Mussel and Faucet snail infested waters); Crow Wing River at Sylvan Dam (Rest Area 5) (Zebra Mussel and Faucet snail infested waters); Ferrell Lake; Round Lake (Rest Area 6); Lake Alott (Rest Area 4); Fosdick Lake; and Lake 1277 (Rapoon Lake). Fishing in other areas of Camp Ripley is at the discretion of Range Control.

(3) Travel to and from the authorized fishing areas in the FTA is limited to two routes, East Boundary Road, and the Argonne /Luzon Road route to Round Lake.

(4) All fishermen must check in at Range Control prior to entering the FTA. Range Control issues a vehicle pass and, if necessary, provides specific directions to authorized fishing areas. In the interest of safety and security, persons must designate which authorized fishing area they intend to fish. During periods when Range Control is not operational, fishing is only authorized in the Cantonment Area.

c. Authorized Fishing Hours: Due to military training and the requirement for Blackout Drive, fishermen may not enter the FTA prior to sunrise and must return to Range Control prior to Sunset.

d. Special Regulations:

(1) Ferrel Lake: Blue Gill Sunfish limit is 5 (Release fish <6 inches.) Crappie limit is 5 (Release all <12 inches). Walleye limit is 3 (release all 14-20 inches, only ONE can be over 20 inches)

(2) Rapoon Lake: Walleye limit is 3. Bluegill Sunfish limit is 5 (release fish <6 inches) Crappie limit is 5 (release fish <12 inches) Largemouth Bass (Release fish 14-20 inches, only ONE can be over 20 inches).

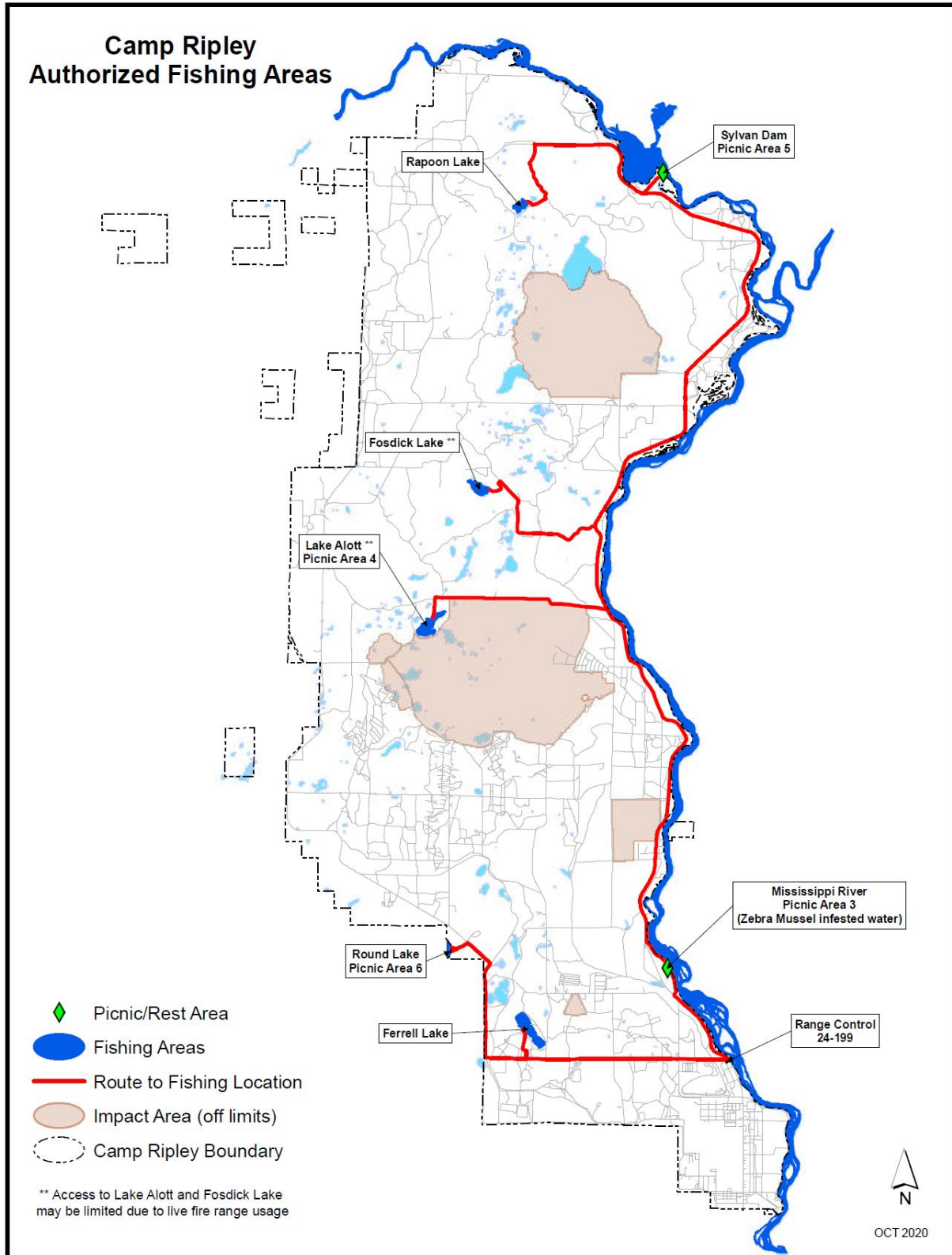
(3) Ice fishing is permitted on authorized fishing areas. While icehouses are permissible, they must be removed each day. No vehicles are authorized to be on the ice of any lake within the Field Training Area.

e. Violations: Failure to comply with this regulation may result in revocation of future fishing privileges on Camp Ripley.

Lake route map is on the next page.

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Authorized Fishing Lakes Route Map



### **16-19 Camp Ripley Hunting Policy**

Since Camp Ripley is a Statutory Game Refuge, permits are required prior to hunting on Camp Ripley. The DNR commissioner may allow hunting of a protected wild animal species within any portion of a State Game Refuge. Hunting may be allowed under this paragraph only if the Commissioner finds that the population of a species exceeds the Refuge's carrying capacity; the species is causing substantial damage to agriculture; the species population threatens forest crops in the vicinity, other protected wild animals, or to the species itself; or a harvestable surplus of the species exists.

NOTE: No firewood is to be brought onto Camp Ripley. This is to prevent the spread of tree diseases and nonnative forest pests such as emerald ash borer, gypsy moth, and oak wilt.

### **16-20 Wildlife Management**

Camp Ripley is home to a wide variety of wildlife. In addition to being a Military Reservation, Camp Ripley is also a State Game Refuge. As such, no hunting or trapping is authorized on Camp Ripley, except during the MN DNR and MNARNG designated special hunts. Always avoid confrontation with wildlife and report any nuisance animals to Range Control. Good sanitation practices in unit bivouac areas reduce intrusion by wild animals. In the event a wild animal bites any individual, provide first aid and immediately notify Range Control.

#### **a. Protection and Observation of Rare Wildlife**

(1) Camp Ripley supports several rare wildlife species that are protected under Federal or State Laws. When these or other species are observed on the ground, care should be taken to avoid them with vehicles or damaging activity.

(2) The most likely species to be observed on roads and trails or in fields are the Blanding's Turtle, Snapping Turtle, and Eastern Hognose Snake. The most likely time to encounter turtles is in June, when they are crossing roads between water and nesting sites or when they are digging their nests along the edges of, and in the middle of, roads and trails. Turtle nesting frequently occurs from late afternoon until just after dark. The Blanding's Turtle measures up to 10 inches across, it can be identified by its high domed shell, which looks like a hardhat, and a bright yellow chin and throat. Blanding's Turtle traditional nesting areas are in the Northeast, Northwest and Southwest corners of Camp Ripley. Shells of live Blanding turtles and/or nest sites protected with wire cages may be marked with reflective tape (two 1" x 1" strips) that is visible with night vision devices. The nonpoisonous Eastern Hognose Snake may be encountered in dry, sandy openings where they sun themselves to keep warm.

(3) Other protected wildlife species observed include the Gray Wolf and birds such as the Bald Eagle, Osprey, Red-Shouldered Hawk, Upland Sandpiper, American Bittern, Yellow Rail and Trumpeter Swan. Camp Ripley is also home to the Prairie Vole, a small mammal most likely to be observed in fields.

(4) When rare or unusual wildlife are observed, whether live or dead, they should be reported to the Environmental Office. The reporting information consists of: type of wildlife or best description, date and time observed, observer's name, observer's e-mail address, grid location, and any comments about behavior or possible cause of death.

(5) All wild animals, especially skunks and raccoons, are potential carriers of the rabies virus. Individuals should not handle or feed any wild animals. If an animal bites or scratches you, seek medical assistance immediately. Report all sick or dead animals to Range Control.

#### **b. Eagle Management**

(1) Bald and Golden Eagles are federally protected under the Bald and Golden Eagle Protection Act. The CRTC goal is to protect current nesting Bald Eagle sites, and to promote new nesting sites through proper management. Many human activities can disturb Bald Eagles during the nesting season.

(2) To ensure that Bald Eagles nesting on Camp Ripley are not disturbed, a Buffer Zone is established for active nest sites. Human disturbances, including vehicle maneuvers, are restricted from entering the Buffer Zone from 15 FEB through 15 JUL. The Buffer Zone has a 200 meter radius.

c. Black Bear Management

(1) Camp Ripley is home to a stable population of black bear. In an effort to monitor this population, the Environmental Office (320.616.2718) documents incidents of troop encounters with nuisance black bear. Report all encounters with nuisance bears to Range Control.

d. To minimize nuisance bear activity, the following procedures must be followed:

(1) Do not feed, tease, or harass a bear.

(2) Field mess hall operations should immediately haul garbage to the Cantonment Area for disposal after every meal.

(3) If a bear comes into your area, stay clear of the animal, and move in the opposite direction.

(4) No dumpsters are allowed downrange without prior authorization from Range Control.

e. Many bears on Camp Ripley are collared and/or have ear tags. When reporting a nuisance black bear include whether the bear has a radio collar or the colors of ear tags.

f. Long-Eared Bat Management.

(1) The Northern Long-Eared Bat is a federally protected species and as such, needs special consideration when units are training downrange.

g. During the pup rearing season of 01JUN-31JUL, cutting of trees, alive or dead, larger than 3" diameter is not authorized.

h. The use of fog oil is restricted within 50 meters of any wood line.

**16-21 Solid Waste Disposal**

All solid waste generated in the Training Area must be brought back to either the Camp Ripley Transfer Station or to the Units transient barracks for disposal. Solid waste containers (dumpsters) are not authorized downrange. Units are not to contract directly with waste management companies to bring dumpsters to Camp Ripley.

**16-22 Aqueous Film-Forming Foam (AFFF)**

a. AFFF is a fire suppressant used to extinguish flammable liquid fires.

b. Per- and polyflouroalkyl substances (PFAS) are contaminants that are released from the use of AFFF.

c. Per the National Defense Authorization Act (NDAA), the uncontrolled release of AFFF at military installations is prohibited except in emergency situations

d. If AFFF is used in an emergency situation Camp Ripley Range Control must be notified immediately at 320.616.3137/3134.

e. These reporting requirements apply to both military and civilian assets.

**Appendixes:**

- Appendix A – [Range Descriptions](#)
- Appendix B – [Drop Zones](#)
- Appendix C – [Range Specific Medical Support](#)
- Appendix D – [CRTC Accident-Incident Report](#)
- Appendix E – [Zulu RETRANS Mast Map](#)
- Appendix F – [Heli-Pads Map](#)
- Appendix G – [White Light Roads Map](#)
- Appendix H – [Miscellaneous Range Control Forms](#)
- Appendix I – [Miller Complex Frequencies](#)

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