

Information Management

Catalog of Ranges and Training Facilities

SUMMARY of CHANGE

CG PAM 25-8.1

Catalog of Ranges and Training Facilities

This revision, dated 1 February 2026-

- o Provides clarification of range assets (throughout).
- o Makes administrative changes (throughout).
- o Updates and adds technical data in the text and tables (throughout).
- o Updates signature and approval authority
- o Adds Range 22: MK-19 Qualification & Familiarization
- o Changes to Range 12 primary function
- o Updates to DODIC restrictions for Range 8
- o Updates to restrictions for Range 8
- o Update to Appendix A: related publications
- o Update to potable water locations
- o Adds M153 CROWS II Tabletop Gunnery Trainer
- o Adds digging and earth moving in Chapter 2
- o Adds Appendix M: Engineer Valley
- o Updates AFMAN 13-212 to CRTCMAN 13-212V1
- o Updates Landing Zone (LZ) grid coordinates

UNCLASSIFIED

Camp Grayling Range Control
Maneuver Training Center
Bldg 545, Camp Grayling, 49739

*CG Pamphlet 25-8.1

Effective 1 January 2026

Information Management

Catalog of Ranges and Training Facilities

By Order of the DPOTS Director:

ANDREW L. BUSH

Major, Department of Plans, Operations,
Training and Security Director, Camp
Grayling National All-Domain Warfighting
Center

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training facilities for the purpose of units and/or agencies planning and scheduling use of Camp Grayling.

Applicability. It applies to any unit, person, organization, agency or club utilizing or occupying any range, training area or resource, to include airspace, within the installation boundaries.

Proponent and exception authority. The proponent of this pamphlet is the Director of the Department of Plans, Operations and Training, Camp Grayling National All-Domain Warfighting Center. The proponent has the authority to approve exceptions or waivers that are consistent with regulations. The proponent may delegate this approval authority, in

writing to a managing authority within the proponent agency. Users may request a waiver by providing justification that includes a full analysis of the expected benefits. All waiver requests will be endorsed by the commander or senior leader of the requesting unit.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to: ng.mi.miarng.mbx.cg-nadwc-dpots@army.mil.

Distribution. This pamphlet is available to all Camp Grayling users via the RFMSS Library and is intended for all command levels.

History. This publication is a standard revision.

Summary. Camp Grayling will use this pamphlet in conjunction with CG 385-63 dated 1 JAN 26 and CG 200-1 dated 22 FEB 23 to establish and maintain a comprehensive range safety program that details information on ranges and

Purpose: The Camp Grayling Catalog of Ranges is published to establish a comprehensive list of resources, training areas and ranges and their capabilities.

References: Refer to CG Reg 385-63 for scheduling facilities, training events and ranges on Camp Grayling for detailed information on requesting and scheduling facilities and ranges. Additional related publications and forms are listed in Appendix A.

Supplementation: This pamphlet cannot be supplemented without the approval of the Camp Grayling Director of Plans, Operations, Training and Security.

*This regulation supersedes CG PAM 25-8.1, 1 August 2024.

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Table of Contents

Chapter 1: Ranges and Training Facilities By Type

Pistol	Classification	Page
Range 1	Automated Combat Pistol	1
Range 2	25 meter paper target range	2
Shotgun	Classification	Page
Range 6A	Familiarization & Qualification	6
Rifle (5.56mm)	Classification	Page
Range 3A	25 meter zero	3
Range 3B	25 meter zero	4
Range 6B	25 meter zero	7
Range 9A	25 meter zero	9
Range 11	Automated Record Fire (ARF) Qualification	11
Range 16	25 meter zero	16
Range 18	Automated Record Fire (ARF) Qualification	19
Range 19	Automated Record Fire (ARF) Qualification	20
Range 35	1000 yard Known Distance range	29
Machine Gun (5.56mm & 7.62mm)	Classification	Page
Range 3A	10 meter zero / familiarization	3
Range 8 MPMG(-)	Automated Record Fire (ARF) Qualification	8
Range 9B	10 meter zero / familiarization	10
Machine Gun (.50 Plastic Rounds)	Classification	Page
Range 9B	10 meter zero / familiarization	10
Machine Gun (.50 Ball)	Classification	Page
Range 45	Zero & Qualification	42
Infantry Battle Course	Classification	Page
Range 5	Infantry Squad Battle Course	5
Range 12	Buddy / Team / Reflexive Fire	12
Range 39	Infantry Platoon Battle Course	30
Range 44	Squad Fire and Maneuver	41
Range 46	Company / Platoon Fire and Maneuver	43
Grenades	Classification	Page
Range 17	Fragmentation, HE	17
Range 17A	Qualification, Practice Grenades ONLY	18
Drones	Classification	Page
sUAS Program	sUAS training and scenarios	31

Grenade Launchers	Classification	Page
UAC-STA3	M203/M320 Familiarization (TP)	26
Range 15	M203/M320 Qualification	15
Range 22	MK-19 Qualification & Familiarization	23
Range 41	MK19 Familiarization	39
Mortars	Classification	Page
13 Complex Firing Points	60mm ONLY	13
Range 14	60mm Direct Lay	14
40 Complex- 500 Series Firing Points	60mm, 81mm & 120mm	47
Mines, Firing Devices & Charges	Classification	Page
13 Complex	EOD Demolition	13
Range 20	Demolition Training	21
Range 21	Light Demolition Training	22
Range 35	Inert MICLIC	29
Range 43	Heavy Demolition Training	40
Armor	Classification	Page
Multi-Purpose Range Complex (MPRC)	Tank Gunnery Tables	32
Anti-Armor	Classification	Page
Range 15	AT-4 Practice	15
Firing Point C4	TOW Inert / Live JAVELIN	44
Range 41	Live TOW (DODIC specific) / AT-4	39
Multi-Purpose Range Complex (MPRC)	TOW Inert Qualification Tables	36
Artillery	Classification	Page
Range 35	MLRS / HIMARS	29
Multi-Purpose Range Complex (MPRC)	MLRS / HIMARS	38
40 Complex	105mm and 155mm	46
- 100 thru 400 and 600 Series Firing Points		
Firing Point DF	Direct Fire	45
Aerial Gunnery	Classification	Page
Air-To-Ground (STEELGATE)	Fixed and Rotary Wing	49
Multi Purpose Range Complex (MPRC)	Helicopter Aerial Gunnery	34
40 Complex	Helicopter Door Gunnery	48
Urban Training Facilities	Classification	Page
CACTF	Combined Arms Collective Training Facility	28
C-IED / HSTL	Counter Improvised Explosive Device / Training Facility / Home Station Training Lane	25
LFSH	Live Fire Shoot House	24
UAC	Urban Assault Course; Stations 1, 2, 4 & 5	27

Chapter 2: Additional Training Assets

Training Facility	Classification	Page
AFT Track	1 mile oval track	50
Airspace	R-4201A, R-4201B, R-4202	51
CBRNE Training Facility Building		50
Digging & Earth Moving		52
Drop Zones		51
Engineer Bridge Sites		50
Forward Operating Base (FOB)	North FOB (40 Complex) & South Camp FOB	50
Fuel Pads		51
Grayling Army Airfield	Operations for military aircraft	51
Land Navigation Course	Dismounted Day & Night Course	50
Landing Zones	Operational & Medical LZs (Appendix K)	51
Parade Field		50
Potable Water Locations		52
Railhead		50
Rubble Pile	Collapsed Structure Trainer	52
South Camp AHA	Ammo Holding Area	51
Support Buildings		51
Training Areas	Northern & Southern Complexes	52
UAS Runway		51
Water Operations	Bridging & Water Purification	50
Training Aids, Devices, Simulators and Simulations (TADSS)		
Training Aids, Devices, Simulators and Simulations (TADSS)	Classification	Page
CFFT	Call For Fire Trainer	53
EST II	Engagement Skills Trainer	52
IMT	InVeris Marksmanship Trainer	53
CROWS II	M153 Tabletop Gunnery Trainer	54
TC3X	Tactical Combat Casualty Care Exportable System	53
UGT-I	Unstabilized Gunnery Trainer-Individual	53
VCOT	Virtual Convoy Operations Trainer	53
VBS3	Virtual Battle Simulator	53

Appendices:		Page
Appendix A	Section I: Publications	55
	Section II: Forms	55
	Section III: Websites	55
Appendix B	Map of RNG05 - ISBC	56
Appendix C	Map of UAC Stations 1 - 5	57
Appendix D	Map of RNG32 - CACTF	58
Appendix E	Map of MPRC	59
Appendix F	Map of RNG39 - IPBC	60
Appendix G	Firing Points	61
Appendix H	OIC/RSO requirements per AR 385-63	62
Appendix J	OIC/RSO requirements per CG 385-63	63
Appendix K	Landing Zones	64
Appendix L	Fuel Pad Locations	66
Appendix M	Engineer Valley Dig Map	67

Chapter 1: Ranges and Training Facilities

RANGE 1 (RFMSS "RNG01")

- 1) FUNCTION: Automated Combat Pistol Qualification
 - Note: Range is not compatible for LEWTAQ
- 2) LOCATION: 16TFQ 74031 44088
- 3) WEAPONS & AMMUNITION: Hand Guns
 - .45 cal, 9mm, .38 cal, .40 cal, .22 cal BALL
- 4) FIRING POINTS: 10 lanes with 6 targets per lane
 - Throughput 20 Soldiers per hour
- 5) TARGETS: Automated target lifter mechanisms w/"E" Type silhouettes on site. There are no lights on targets. Units will supply their own chemical-lights to attach to targets for night fire. Barricade requests must be submitted 90 days prior to execution.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) OPERATOR: Coordinate with Range Control for instruction on computer operation.
- 9) RANGE ASSETS:
 - Target control tower
 - Classroom
 - Ammunition breakdown building
 - Electricity
 - Lights
 - Automated target lifters
 - Public Address (PA) System
 - Heated latrine
 - Enclosed bleachers

RANGE 2 (RFMSS "RNG02")

- 1) FUNCTION:
 - Stationary Combat Pistol: 10 / 25 Meters
 - M16/M4 Series Rifles 25 Meter Zero
- 2) LOCATION: 16TFQ 73760 44107
- 3) WEAPONS & AMMUNITION: Hand Guns, M4/M16
 - .45 cal, 9mm, .38 cal, .40 cal, .22 cal BALL, 5.56mm
- 4) FIRING POINTS: 18
 - Throughput 36 Soldiers per hour
- 5) TARGETS: Green plastic and/or white foam backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RANGE ASSETS:
 - Vaulted latrine
 - Target storage shed, 24' x 24'
 - 18 firing points with lighted overhead cover
 - 18 pistol magazine tables
 - Lights

RANGE 3A (RFMSS "RNG03A")

- 1) FUNCTION:
 - M16/M4 Series Rifles 25 Meter Zero
 - M249 AR 10 Meter Zero
 - M240B and M2 10 Meter Table I and Familiarization
 - Reflexive Fire
- 2) LOCATION: 16TFQ 73198 44021
- 3) WEAPONS & AMMUNITION: Rifles & Machine guns
 - 5.56mm & 7.62mm ball
 - .50 cal (**PLASTIC ROUNDS ONLY**)
 - NO TRACER ROUNDS FOR MACHINE GUN AMMUNITION
- 4) FIRING POINTS: 22
 - 22 lanes for 25 meter firing
 - 10 lanes for 10 meter firing
- 5) TARGETS: White foam backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - Clearance to go down range beyond the 25 meter berm must be approved by Range Control prior to going beyond the berm.
 - NO DE-LINKING AMMO
- 9) RANGE ASSETS:
 - OIC Stand
 - Ammunition breakdown building
 - Bleachers
 - Male/Female latrine located across road

RANGE 3B (RFMSS "RNG03B")

- 1) FUNCTION: M16/M4 Series Rifles 25 Meter Zero
- 2) LOCATION: 16TFQ 73291 44076
- 3) WEAPONS & AMMUNITION: Rifles & Machine guns
 - 5.56mm
 - NO TRACER ROUNDS FOR MACHINE GUN AMMUNITION
- 4) FIRING POINTS: 43
 - 25 meter firing points
 - 10 meter firing points (20 firing points)
- 5) TARGETS: Green plastic and/or white foam backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - Clearance to go down range beyond the 25 meter berm must be approved by Range Control prior to going beyond the berm.
 - NO 7.62 ball ammunition
 - NO DE-LINKING AMMO
- 9) RANGE ASSETS:
 - Vaulted latrine
 - Target storage shed
 - OIC Stand
 - Ammunition breakdown building

RANGE 5 (RFMSS "RNG05 - ISBC")

- 1) FUNCTION: Infantry Squad Battle Course (ISBC)
- 2) LOCATION: 16TFQ 71840 43485 (See Appendix B for map)
 - Objective A: 16TFQ 71950 43837
 - Objective B: 16TFQ 71923 44183
 - Objective C: 16TFQ 71817 44289
- 3) WEAPONS & AMMUNITION: M/16/M4, M249, M240B, M203/M320
 - 5.56mm, 40mm (TP ONLY)
 - 7.62 (AB86 ONLY) (See restrictions below)
- 4) FIRING POINTS: TBD based on OPLAN approval
- 5) TARGETS: All targets are fully automated, and the event-specific target scenario is computer-driven and scored from the range operations center. The range operating system is fully capable of providing immediate performance feedback to the using participants.
 - 4 stationary armor targets
 - 10 stationary infantry targets
 - 2 moving infantry targets
 - 2 trench obstacles
 - 5 machine gun/observation bunkers
- 6) RANGE SAFETY: Unit will read and understand SOP associated with this range. OP Plan & DRAW must be approved 90 days to execution. One safety required for every 2 soldiers training. Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) CONFLICTS: Range closed when Range 6B or UAC STA3 are "HOT"
- 9) RESTRICTIONS:
 - Forward limitation of Charlie Engagement when Ranges 8, 16, 18 or 19 are "HOT"
 - M240B can only be utilized from a specific target box, subject to conflicts and CONOP review.
- 10) RANGE ASSETS:
 - Range operations center, tower
 - Operations/storage building
 - Classroom Facility
 - Latrine
 - Enclosed bleachers
 - Covered mess
 - Ammo breakdown building

RANGE 6A (RFMSS "RNG06A")

- 1) FUNCTION: Shotgun Qualification and Familiarization Fire
- 2) LOCATION: 16TFQ 71252 43521
- 3) WEAPONS & AMMUNITION: All Gauges of Shotguns
- 4) FIRING POINTS: 16
 - 16 lanes for Qualification
- 5) TARGETS: "E" type silhouettes on staves. Target and barricade requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS: Clearance to go down range beyond the 25 meter berm must be approved by Range Control prior to going beyond the berm.
- 9) RANGE ASSETS:
 - Vaulted latrine
 - Barricades with window opening for qualification available
 - OIC stand / platform
 - Target storage shed
 - Ammunition breakdown building

RANGE 6B (RFMSS "RNG06B")

- 1) FUNCTION: M16/M4 Series Rifle 25 Meter Zero
- 2) LOCATION: 16TFQ 71355 43500
- 3) WEAPONS & AMMUNITION: M16/M4 Rifles
 - 5.56mm ball
- 4) FIRING POINTS: 30
 - Throughput: 60 Soldiers per hour
- 5) TARGETS: White foam backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS: Clearance to go down range beyond the 25 meter berm must be approved by Range Control prior to going beyond the berm.
- 9) RANGE ASSETS:
 - Vaulted latrine
 - Ammunition breakdown building
 - Target storage shed
 - OIC stand / platform
 - Enclosed bleachers

RANGE 8 (RFMSS "RNG08 - MPMG")

- 1) FUNCTION:
 - Multi-Purpose Machine Gun Range (MPMG) (-)
 - 5.56mm & 7.62mm ball, Table II, Table III, and Familiarization Fire
 - Center 4 lanes 1000 Meter Machine Gun Transition Firing
 - Lanes 1 & 3 equipped for mounted vehicle firing points
 - Sniper Course (up to 7.62mm only)
- 2) LOCATION: 16TFQ 70302 43799
- 3) WEAPONS & AMMUNITION: Machine Gun
 - 5.56mm and 7.62mm ball
 - .50 cal (**PLASTIC ROUNDS ONLY**) (**A595, A602, A603**)
- 4) FIRING POINTS: 10
 - Throughput: 20 Soldiers per hour
- 5) TARGETS: Automated targets with lights, automated scoring and thermal targetry.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - **NO 300 WIN MAG or AA11**
 - **7.62 DODICs (AB86) are restricted to lanes 2-7**
 - **A131 is restricted to lanes 2-4**
- 9) OPERATOR: Coordinate with Range Control for instruction on computer operation.
- 10) RANGE ASSETS:
 - Target control tower
 - Public Address (PA) System
 - Indoor latrine
 - Heated classroom
 - Ammunition breakdown building
 - Covered mess area
 - MR/briefing bleacher enclosure

RANGE 9A (RFMSS "RNG09A")

- 1) FUNCTION: M16/M4 Series Rifle 25 Meter Zero
- 2) LOCATION: 16TFQ 69968 43917
- 3) WEAPONS & AMMUNITION: M16/M4 Rifles
 - 5.56mm ONLY
- 4) FIRING POINTS: 20
 - Throughput: 40 Soldiers per hour
- 5) TARGETS: Green plastic backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS: Clearance to go down range beyond the 25 meter berm must be approved by Range Control prior to going beyond the berm.
- 9) RANGE ASSETS:
 - Vaulted latrine
 - 24 x 24 storage building
 - OIC stand / platform

RANGE 9B (RFMSS "RNG09B")

- 1) FUNCTION: 10 Meter Machine Gun Zero / Familiarization
- 2) LOCATION: 16TFQ 69968 43917
- 3) WEAPONS & AMMUNITION: M16/M4 Rifles, M249 AR, M240B
 - 5.56mm and 7.62mm
 - .50 cal (**PLASTIC ROUNDS ONLY**)
- 4) FIRING POINTS: 20
 - Throughput: 40 Soldiers per hour
- 5) TARGETS: Green plastic backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS: Clearance to go down range beyond the 10 meter berm must be approved by Range Control prior to going beyond the berm.
- 9) RANGE ASSETS:
 - Target storage shed
 - OIC stand / platform
 - Enclosed bleachers
 - Vaulted Latrines

RANGE 11 (RFMSS "RNG11")

- 1) FUNCTION:
 - M16/M4 Automated Record Fire (ARF) Qualification
 - M249 AR Automated Record Fire (ARF) Qualification
- 2) LOCATION: 16TFQ 69303 44024
- 3) WEAPONS & AMMUNITION: Rifle
 - 5.56mm ball
- 4) FIRING POINTS: 10
 - Throughput: 20 Soldiers per hour
- 5) TARGETS: Range includes automated targets and scoring. IWQ regulation barricades are provided at all firing points. All targets are equipped with lights for night firing.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Howe Rd. entrance gate must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - No tracer rounds may be utilized on lanes 1, 2, 9 and 10 (exterior 2 lanes)
- 9) OPERATOR: Coordinate with Range Control for instruction on computer operation.
- 10) RANGE ASSETS:
 - Vaulted latrine
 - 24 x 24 Garage / Cold Storage
 - Automated target lifter and scoring system
 - Public Address (PA) System
 - Ammo breakdown building
 - Target control tower
 - Enclosed bleachers

RANGE 12 (RFMSS "RNG12")

- 1) FUNCTION: LEWTAQ
- 2) LOCATION: 16TFQ 68272 45013
- 3) WEAPONS & AMMUNITION: Hand Guns, M16/M4, M249, Shotgun
 - .45 cal, 9mm, .38 cal, .40 cal, .22 cal
 - 5.56mm
 - All Shotgun Gauges
- 4) FIRING POINTS: 15 lanes
- 5) TARGETS: Green plastic backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - **NO 7.62mm ammunition**
 - NO tracer rounds. Any requests will require an ETP.
- 9) RANGE ASSETS:
 - Vaulted latrine
 - 24 x 24 Shed
 - OIC platform/stand
 - Enclosed bleachers

13 Complex Firing Points (Dud Impact Area)

- 1) FUNCTION: 60mm Mortar Live Fire and EOD disposal
- 2) WEAPONS & AMMUNITION: Mortars
 - 60mm TP, WP, HE, SMK & ILL
- 3) FIRING POINTS: 16
 - **FP13-01:** 16TFQ 73265 41148
 - **FP13-02:** 16TFQ 73593 41415
 - **FP13-03:** 16TFQ 78786 41037
 - **FP13-04:** 16TFQ 74006 40574
 - **FP13-05:** 16TFQ 73773 40139
 - **FP13-06:** 16TFQ 74003 39924
 - **FP13-07:** 16TFQ 74014 39694
 - **FP13-08:** 16TFQ 74159 39559
 - **FP13-09:** 16TFQ 72165 38004
 - **FP13-10:** 16TFQ 72668 38680
 - **FP13-11:** 16TFQ 72501 37754
 - **FP13-12:** 16TFQ 72346 37783
 - **FP13-15:** 16TFQ 71620 40015
 - **FP13-16:** 16TFQ 72198 40528
 - **FP13-A1:** 16TFQ 71412 39340
 - **FP13-A2:** 16TFQ 71493 39588
- 4) OBSERVATION POINTS: 3
 - **OP-A:** 16TFQ 73900 41200
 - **OP-B:** 16TFQ 73160 38690
 - **OP-C:** 16TFQ 73150 38650
- 5) TARGETS: Stationary targets, i.e. tank hulls and vehicles
- 6) RANGE SAFETY: Units will receive approved, signed safety card/s from the Camp Grayling Range Officer prior to occupying the range. Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) GATES AND ROADBLOCKS: Road guards with communications to the range OIC and roadblocks are required on the left and right limits of firing position(s). Road blocks must be manned prior to and during "HOT" status.
- 8) CONFLICTS: Firing Points conflict with Ranges 14, 15, or 17.
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - **AT NO TIME ARE PERSONNEL ALLOWED TO ENTER THE DUDDERED IMPACT AREA!**
 - **NO OVERHEAD FIRING PERMITTED!**
- 10) RANGE ASSETS: N/A
 - Porta-John procurement is a unit responsibility
 - Permanent excess propellant burning pan (Location: 16TFQ 73748 39794)

RANGE 14 (RFMSS "RNG14")

- 1) FUNCTION: Direct Lay Mortar
- 2) LOCATION: 16TFQ 71464 39456
- 3) AMMUNITION: Mortar
 - 60mm TP/HE/SMK
- 4) FIRING POINTS: 2
- 5) TARGETS: Stationary Vehicle Hulls
- 6) RANGE SAFETY: Fire into designated areas only. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned prior to and during "HOT" status.
- 8) CONFLICTS: Range 14 **CANNOT** be occupied if Range 15 is "HOT"
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - No personnel are allowed inside the fence while any firing points are "HOT"
 - Coordinate with Range Control for the Safety Data Sheet
- 10) RANGE ASSETS:
 - Porta-John procurement is a unit responsibility
 - Permanent excess propellant burning pan (Location: 16TFQ 73748 39794)

RANGE 15 (RFMSS "RNG15")

- 1) FUNCTION:
 - Primary - M203/M320 Grenade Launcher Qualification
 - Secondary - AT-4 Sub-caliber
- 2) LOCATION: 16TFQ 72326 40717
- 3) WEAPONS & AMMUNITION: M203/M320 Grenade Launcher
 - 40mm TP, ILL, HE, & SMK
 - AT 4 Sub-caliber ONLY (9mm)
- 4) FIRING POINTS:
 - M203/M320: 4 lanes with 4 positions (8 per hour)
 - AT-4 Sub-Caliber: 5 lanes (10 per hour)
- 5) TARGETS: Zero Panel, 1-Man Bunker, 2-Man Bunker, 3-Man Machine Gun Position, Window Target, and Troops In Open
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Target requests must be submitted 90 days prior to execution. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned prior to and during "HOT" status.
- 8) CONFLICTS: Range 15 **CANNOT** be utilized if Range 14 or the 13 Complex are "HOT"
- 9) RESTRICTIONS:
 - **Minimum safe engagement distances for HE 40mm rounds is 165 meters**
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - At no time are personnel allowed past the firing positions to go down range. This is a dudded impact area!
 - Range supports 4 inner lanes (4 stations each) of qualification with M203/M320 HE rounds or supports 4 outer lanes (4 stations each) of qualification with M203/M320 TP rounds.
 - Both ammo types are not authorized to be fired simultaneously
- 10) RANGE ASSETS:
 - OIC platform/stand
 - Vaulted latrine

RANGE 16 (RFMSS "RNG16")

- 1) FUNCTION: M16/M4 Series Rifles 25 Meter Zero
- 2) LOCATION: 16TFQ 69157 47701
- 3) WEAPONS & AMMUNITION: Rifle
 - 5.56mm ball
- 4) FIRING POINTS: 33
 - Throughput: 66 Soldiers per hour
- 5) TARGETS: White foam backer boards provided for paper targets. Target requests must be submitted 90 days prior to execution. Range Control does not provide staple guns, staples or tape.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RANGE ASSETS:
 - Vaulted latrine
 - OIC platform/stand
 - Foot path available to access ARF Ranges 18 & 19
 - Ammunition breakdown building
 - Target storage shed
 - Enclosed Bleachers

RANGE 17 (RFMSS "RNG17 - LIVE GRENADE")

- 1) FUNCTION: Hand Grenade Familiarization
- 2) LOCATION: 16TFQ 73780 39781
- 3) AMMUNITION: Hand Grenades, fragmentation
- 4) FIRING POINTS: Three (3) throwing bays
 - Throughput: 6 Soldiers per hour
- 5) RANGE SAFETY: Impact area is within the berm area. **DO NOT THROW GRENADES OUT OF THE CLEARED AREA.** Other safety features are left and right limit markers. NO CROSS LANE THROWING! Scarlet streamers are to be displayed during firing. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) GATES AND ROADBLOCKS:
 - Gate going into range (impact area) must be manned prior to and during "HOT" status.
- 7) CONFLICTS: **CANNOT "OCCUPY"** when mortars are being fired.
- 8) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - At no time are personnel allowed beyond the throwing positions
 - This is a DUD impact area
 - No night time operations
 - Winter operations may be impeded by snow restrictions
- 9) RANGE ASSETS:
 - Vaulted latrine
 - Observation bunker

RANGE 17A (RFMSS "RNG17A - HAND GRENADE QUAL")

- 1) FUNCTION: Hand Grenade Qualification Course
 - Designed to meet the standards of FM 23-30
- 2) LOCATION: 16TFQ 73826 40000
- 3) AMMUNITION: Hand Grenades - **PRACTICE GRENADES ONLY!**
- 4) FIRING POINTS: 7 stations
 - Throughput: 14 Soldiers per hour
- 5) TARGETS: Each station has a different objective associated with qualification.
- 6) RANGE SAFETY: Unit specific Deliberate Risk Assessment Worksheet. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - **PRACTICE grenades only, no fragmentation grenades allowed**
 - No night time operations
- 9) RANGE ASSETS: N/A
 - Porta-John procurement is a unit responsibility

RANGE 18 (RFMSS "RNG18")

- 1) FUNCTION:
 - M16/M4 Automated Record Fire (ARF) Qualification
 - M249 AR Automated Record Fire (ARF) Qualification
- 2) LOCATION: 16TFQ 69083 47476
- 3) WEAPONS & AMMUNITION: M16/M4 Rifles, M249 AR
 - 5.56mm ball
- 4) FIRING POINTS: 6
 - Throughput: 12 Soldiers per hour
- 5) TARGETS: Range includes automated targets and scoring. IWQ regulation barricades are provided at all firing points. All targets are equipped with lights for night firing.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTION: **DO NOT** go down range without approval from Range Control
 - No tracer rounds may be utilized on lanes 1, 2, 8 and 9
- 9) OPERATOR: Coordinate with Range Control for instruction on computer operation.
- 10) RANGE ASSETS:
 - M / F latrine, block building
 - Covered mess area
 - Automated target lifter and scoring system
 - Public Address (PA) System
 - Ammo breakdown building
 - Target control tower
 - Foot path available from Range 16

RANGE 19 (RFMSS "RNG19")

- 1) FUNCTION:
 - M16/M4 Automated Record Fire (ARF) Qualification
- 2) LOCATION: 16TFQ 69697 47969
- 3) WEAPONS & AMMUNITION: Rifle
 - 5.56mm ball
- 4) FIRING POINTS: 16
 - Throughput: 32 Soldiers per hour
- 5) TARGETS: Range includes automated targets and scoring. IWQ regulation barricades are provided at all firing points. 50 Meter targets are equipped with lights for night firing.
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTION: **DO NOT** go down range without approval from Range Control
 - No tracer rounds may be utilized on lanes 1, 2, 15 and 16
- 9) OPERATOR: Coordinate with Range Control for instruction on computer operation.
- 10) RANGE ASSETS:
 - M / F latrine, block building
 - Covered mess area
 - Automated target lifter and scoring system
 - Public Address (PA) System
 - Ammo breakdown building
 - Target control tower
 - Foot path available from Range 16

RANGE 20 (RFMSS "RNG20")

- 1) FUNCTION: Demolition Range
- 2) LOCATION: 16TFQ 70452 43048
- 3) AMMUNITION:
 - TNT, C-4, COMP B, DET CORD, TIME FUSE, BLASTING CAPS, SHAPED CHARGES, & AP MINES.
 - Demolitions shall not exceed:
 - 20 pounds bare charge (non frag producing)**
 - 1 pound frag producing**
 - 10 pounds or less shaped charges (downward facing)**
- 4) RANGE SAFETY: The following requirements are dependant on materials being utilized. Blasting caps will be stored at least 100 meters from ammunition and explosives. No smoking within 100 meters of ammunition and explosives. **All personnel will wear approved ballistic helmets, IBA (body armor), eye protection, and hearing protection on this range at all times.** Scarlet streamer is to be displayed during daylight and flashing red light during night use. A five minute blast window must be radioed to the fire desk prior to detonation. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical
- 5) Range gates must be manned prior to and during "HOT" status.
 - Front Gate to range must be manned and back gate must be locked
- 6) RESTRICTION:
 - **NO STEEL CUTTING, UTILIZE RANGE 21**
 - **DD 3020 PLAN MUST BE TURNED IN TO RANGE CONTROL FOR APPROVAL NLT 30 DAYS PRIOR TO OCCUPATION OF THIS RANGE**
- 7) RANGE ASSETS:
 - Demo prep tables
 - Cement bunker
 - Porta-John procurement is a unit responsibility

RANGE 21 (RFMSS "RNG21")

- 1) FUNCTION: Light Demolition Range
- 2) LOCATION: 16TFQ 69306 41649
- 3) AMMUNITION:
 - TNT, C-4, COMP B, DET CORD, TIME FUSE, BLASTING CAPS, SHAPED CHARGES
 - Demolitions shall not exceed:
 - 5 pounds bare charge (non frag producing)**
 - 1 pound frag producing**
 - 5 pounds or less shaped charges (downward facing)**
- 4) RANGE SAFETY: As required for materials being used. Pits will be located so firers see all other pits and the immediate vicinity of the pits. Blasting caps will be stored at least 100 meters from ammunition and explosives. No smoking within 100 meters of ammunition and explosives. **All personnel will wear approved protective helmets, IBA, eye protection, and single hearing protection on this range at all times.** Scarlet streamer is to be displayed during daylight and flashing red light during night use. A five minute blast window must be radioed to the fire desk prior to detonation. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 5) Range gates must be manned prior to and during "HOT" status.
- 6) RESTRICTION:
 - **Steel cutting is only authorized in designated chamber**
 - Re-fill holes and police all materials off range
 - **DD 3020 PLAN MUST BE TURNED IN TO RANGE CONTROL FOR APPROVAL NLT 30 DAYS PRIOR TO OCCUPATION OF THIS RANGE**
- 7) RANGE ASSETS:
 - Two Viewing bunkers
 - Demo prep area
 - Ammunition Breakdown Building
 - Covered mess area
 - Porta-John procurement is a unit responsibility
 - Steel cutting chamber
 - Abatis training site

RANGE 22 (RFMSS "RNG22")

- 1) FUNCTION: MK-19 Qualification & Familiarization
- 2) LOCATION: 16TFQ 72466 39297
- 3) WEAPONS & AMMUNITION: MK-19, LAW, AT-4, SMAW, 84mm Carl Gustav
 - 40mm TP ONLY
- 4) FIRING POINTS: 3 lanes
- 5) TARGETS: Stationary vehicle hulls.
 - 400m (M113's)
 - 600m (M113's)
 - 900m (M113's)
 - 1200m (M113's)
 - 1500m (M113's)
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red light during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - MK-19 night fire is NOT AUTHORIZED
 - Firing line is located inside boundary of impact area. Only authorized movement is between range gate and designated firing line.
- 9) RANGE ASSETS:
 - Elevated firing berm
 - Latrine procurement is a unit responsibility

RANGE LFSH (RFMSS "LFSH")

- 1) FUNCTION: Live Fire Shoot House (LFSH)
- 2) LOCATION: 16TFQ 72891 43783
- 3) WEAPONS & AMMUNITION: Pistols & M4/M16
 - .45 cal, 9mm, .38 cal, .40 cal, .22 cal
 - 5.56 ball / Enhanced Performance Round (EPR)
- 4) FIRING POINTS: Scenario driven with prior approval from Range Control
- 5) RANGE SAFETY: OPLAN and DRAW must be submitted to Range Control 90 days prior to execution. Scarlet streamers are to be displayed during daytime firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) Range gates must be manned or closed prior to and during "HOT" status.
- 7) RESTRICTIONS:
 - **CANNOT** go "HOT" without Range Control approved OPLAN and DRAW
 - Requires a medic (68W) to be on site while in a "HOT" status
 - **NO 7.62mm** ammunition
 - **E-SAPI Plates are required for DoD Units**
 - Unit Commander must complete **LFSH SOP APPENDIX D (Automated Shoot House Certification Letter)** and must comply with **LFSH SOP APPENDIX E (Medical Emergencies)**
- 8) RANGE ASSETS:
 - M / F latrine
 - Ammunition breakdown building
 - Outdoor covered mess

Counter IED / HSTL (RFMSS "IED DEFEAT")

- 1) FUNCTION:
 - To assist unit Commanders with developing scenarios that meet the unit's requirements for individual and collective tasks for pre-mobilization training.
 - Develop and coordinate training events while integrating Asymmetric Warfare tasks into scenario driven training.
 - Assist senior staff with the development of custom scenarios based on the unit's specific mission and expected area of operation in accordance with current Tactics, Techniques and Procedures (TTPs).
 - Classes offered are IED-Awareness, Dismounted Operations, Mounted Operations, Home-made Explosives, Hybrid Theory, C-UAS/UAS, Subterranean Operations, Ukraine Conflict Brief, Russian Brief and other unit specific tailor-made courses.
 - Unmanned Aircraft Vehicle (UAV) are available to support troops on the ground with access to areas of operation that may be hazardous on a battlefield in a training environment.
- 2) LOCATION: 16TFQ 68052 43450
- 3) WEAPONS & AMMUNITION: M9, M16/M4, M249, M240B, M2
 - Blanks
 - Simunition rounds
 - Less-than-Lethal
- 4) FIRING POINTS: Tailor-made scenario driven lanes
- 5) RANGE SAFETY: Scarlet streamers are to be displayed during daytime firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) Range gates must be manned or closed prior to and during "HOT" status.
- 7) RESTRICTIONS: **NO LIVE AMMUNITION**
- 8) RANGE ASSETS:
 - AAR / Instruction building
 - Six square miles of training area
 - Five miles of road network with a traffic circle and overpass
 - Mounted IED Visual Indicator Lane (MIVIL)
 - Dismounted IED Visual Indicator Lane (DIVIL)
 - Vaulted and facility latrines with hand washing stations
 - 24 total buildings: 8 two-story, 16 single-floor multi-room buildings formed into a foreign city mock-up
 - Subterranean operations
 - Observation tower
 - FOB operating base on hill top

Urban Assault Course - Station 3 (RFMSS "UAC STA3")

- 1) FUNCTION: Grenadier Gunnery Trainer
 - **Station 3** - Grenadier Gunnery Trainer, a live-fire station designed for M203 gunners to practice and master target engagements in an urban setting. This training area includes a two-story facade and various firing positions to simulate a realistic environment for tactical movement and responding to fire commands. The station is used for live-fire training with small arms and 40-mm training practice grenades.
- 2) LOCATION: 16TFQ 72891 43783 (See Appendix C for map)
- 3) WEAPONS & AMMUNITION: M16/M4, M203/M320
 - 5.56mm & 40mm (TP ONLY)
- 4) FIRING POINTS: 2 lanes, scenario driven with approved CONOP
- 5) TARGETS: Automated "E" type silhouette.
- 6) RANGE SAFETY: OPLAN and DRAW must be submitted to Range Control 90 days prior to execution. Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned or closed prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - No personnel will go down range farther than last firing position without approval from Range Control
 - Live fire events close Range 5
 - **NO 7.62mm ammunition**
 - **NO M249**
 - **NO MK-19**
 - Do not shoot 5.56 at the building facade
- 9) RANGE ASSETS:
 - Control tower
 - Ammunition breakdown building
 - Porta-John procurement is a unit responsibility

Urban Assault Course (UAC) Stations 1, 2, 4, 5

1) FUNCTION:

- **Station 1** – Individual & Team Trainer; used to train individual and collective tasks, tactics, techniques and procedures, such as entering a building, clearing a room and engaging targets. This structure is comprised of three rooms, which have open doorways and windows
- **Station 2** - Squad & Platoon Trainer; used to build upon tasks learned at Station 1 and begin to learn the concepts of clearing multiple buildings increasing the complexity of command, control, and maneuver. This station is equipped with multiple rooms and designed to replicate separate buildings with a narrow street or as individual rooms inside a building with a long, connecting hallway. This station has four separate structures that face inward to create a street and introduces a two-story building with both exterior and interior stairways and catwalks.
- **Station 3** - Grenadier Gunnery Trainer (See page 26 for details)
- **Station 4** - Urban Offense/Defense Trainer; used to train platoons to attack and/or defend a building. Station 4 can also be divided into a number of smaller training stations to reinforce training or to train tasks not yet trained at the other stations. It allows the platoon
- **Station 5** - Underground Trainer, used to provide training for subterranean operations and designed to train up to a squad on clearing and moving tactically in a subterranean environment. Station 5 also contains an Enemy Prisoner-of-War training site. It contains 30,000 sq ft area surrounded by a double cyclone fence topped with barbed wire along with 2 two-story buildings with breachable doors. Units must supply their own dowel rods for the breachable doors.

2) LOCATION: (See Appendix C for map)

- Station 1 (RFMSS "UAC_STA1") GRID: 16TFQ 73243 43508
- Station 2 (RFMSS "UAC_STA2") GRID: 16TFQ 73023 43489
- Station 4 (RFMSS "UAC_STA4") GRID: 16TFQ 73098 43887
- Station 5 (RFMSS "UAC_STA5") GRID: 16TFQ 73246 43642

3) WEAPONS & AMMUNITION: M16/M4, M249, M240B, M2

- BLANKS ONLY

4) RANGE SAFETY: Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.

5) Range gates must be manned prior to and during "HOT" status.

6) RANGE ASSETS: All assets located near Station 5 entrance

- AAR / Instruction building
- M / F Latrines
- Bleachers
- Covered Mess Area

RANGE 32 (RFMSS "RNG32 - CACTF")

- 1) **FUNCTION:** Combined Arms Collective Training Facility (CACTF)
The CACTF is designed to conduct multi-echelon training up to battalion task force (TF) level. It replicates an urban environment which consists of 23 buildings, vehicular and pedestrian circulation systems and an underground trainer designed to evaluate unit urban operations proficiency. The facility consists of 2.25 square kilometers and is designed to support heavy and light infantry, armor, artillery, and aviation positioning and maneuver in a non-live fire environment. The CACTF supports combined arms training across the following operations: offense, defense, stability, and support. Units must supply their own dowel rods for the breachable doors.
- 2) **LOCATION:** 16TFQ 86628 52853 (See Appendix D for map)
- 3) **WEAPONS & AMMUNITION:** Hand Guns, M16/M4, M249, M240B, M2
 - BLANK & NON-DUDED DODICS ONLY
 - Multi-Integrated Laser Engagement System (MILES)
 - Special Effects Small-Arms Marking System (SESAMS)
 - Man Marker Round (MMR) also know as (UTM) / SIMUNITIONS
 - Smoke and Flash Bang Grenades
 - **Simulation** Door Breaching Charges
- 4) **RANGE SAFETY:** Scarlet streamers are to be displayed during daytime firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 5) Range gates must be manned or locked prior to and during "HOT" status.
- 6) **RESTRICTIONS:**
 - No smoke grenades inside of buildings
 - Helicopters can only fast rope onto flat roofed buildings
- 7) **RANGE ASSETS:**
 - 23 various buildings
 - Mouse and loop holes
 - Roads, alleys, parking areas, athletic field and parks
 - Underground sewer network
 - Elevator shaft for fast roping (with advanced notice)
 - Helicopter LZ
 - Rappel anchors at the Embassy (Bldg A4) (GRID: 16TFQ 86686 52885)
 - Rappel anchors at the Hotel (Bldg A18) (GRID: 16TFQ 86650 52868)
 - Bridging location (GRID: 16TFQ 86906 52917)
 - Rubble Pile (GRID: 16TFQ 86924 52795). Scheduled seperately in RFMSS.
 - 2 x Vaulted latrine
 - All buildings have power

RANGE 35 (RFMSS "RNG35 - KD")

- 1) FUNCTION:
 - Primary - 1,000 yard Known Distance range
 - Secondary - Detonation of Mine Clearing Line Charge (MICLIC - INERT ONLY)
- 2) LOCATION: 16TFQ 87549 51240
- 3) WEAPONS & AMMUNITION: Sniper Rifle, Rifle, MICLIC Practice Rocket
 - 5.56mm, 7.62mm, .338 Lapua, .50cal
- 4) FIRING POINTS: 10
 - Throughput 20 Soldiers per hour
- 5) TARGETS:
 - Stationary carriages
 - Iron Maidens available by request
 - Infantry targets on staves by request
 - Target requests must be submitted 30 days prior to execution
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) RANGE GATES AND ROAD BLOCKS:
 - When firing MICLIC, 4 road guards are required
 - Depending on the weapon system being used, the following gate guards will be required:
 - When Small Fan is closed, 1 vehicle, 2 personnel
 - When Large Fan is closed, 2 vehicle, 4 personnel
 - Road guards required on Bald Hill Rd. when Extended Fan is closed
- 8) CONFLICTS: Range cannot be occupied when HIMARS/MLRS are firing.
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - **NO MACHINE GUNS**
 - **NO DUD PRODUCING ROUNDS**
 - **NO INDIRECT FIRE SYSTEMS**
- 10) RANGE ASSETS:
 - Vaulted latrine
 - Covered bleachers
 - Ammunition breakdown building
 - 24 x 24 Target storage building
 - Open tower

RANGE 39 (RFMSS "RNG39 - IPBC")

- 1) FUNCTION: Infantry Platoon Battle Course (IPBC)
- 2) LOCATION: 16TFQ 87623 53615 (See Appendix F for map)
 - Objective A: 16TFQ 88092 53759
 - Objective B: 16TFQ 88703 54230
 - Objective C: 16TFQ 89054 54450
 - Objective D: 16TFQ 90517 54886
 - Objective E: 16TFQ 91032 55057
 - Objective F: 16TFQ 91380 55454
- 3) WEAPONS & AMMUNITION: Rifle, Machine Gun and M203/M320
 - 5.56mm ball and tracer
 - 7.62 ball and tracer
 - 40mm (Non Dud Producing TP ONLY)
 - SMAW (INERT ONLY)
 - Practice Grenade
- 4) FIRING POINTS: TBD based on OPLAN approval
- 5) TARGETS:
 - Automated Stationary Armor Targets
 - Stationary Infantry Target (SIT)
 - Moving Infantry Target (MIT)
- 6) RANGE SAFETY: OP Plan & DRAW must be approved and submitted **90 days prior to execution**. One safety required for every squad training. Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) RANGE GATES AND ROAD BLOCKS:
 - Depending on the weapon system being used, the following gate guards will be required:
 - When Small Fan is closed, 1 vehicle, 2 personnel
 - When Large Fan is closed, 2 vehicle, 4 personnel
 - Road guards required on Bald Hill Rd. when Extended Fan is closed
- 8) CONFLICTS: Range cannot be occupied when HIMARS/MLRS are firing
 - Use of MPRC or MICLIC closes range, unless prior coordination is made with 30 Complex Range NCOIC for co-use.
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - Forward limitation of Charlie Engagement when Range 35 is "HOT"
 - **NO DUD PRODUCING ROUNDS**
 - **NO INDIRECT FIRE SYSTEMS AUTHORIZED**
- 10) RANGE ASSETS:
 - Vaulted latrine
 - Enclosed tower
 - Covered Mess
 - Covered Bleachers
 - Ammo Holding Area
 - FORTS® Mobile Shelters 38 Model

Small UAS (sUAS) Program

1) FUNCTION:

- Primary mission of the office is to create and enhance sUAS capabilities.
- Assist unit commanders with sUAS training and scenarios to meet their individual and collective tasks.
- Assist senior staff with briefings regarding sUAS, uses, TTPs, region specific threat assessment information, and development of scenarios to incorporate sUAS capabilities and threats.
- Provide additional training and experience to enhance mission and MOS related capabilities. These can include skills such as mapping, ISR, radio networks, TAK integration, and similar.
- Act as a resource to sUAS operators and leadership on regulations, requirements, best practices, and information.

2) LOCATION:

- RANGE 32: CACTF (16TFQ 8670252822)
- BLDG 3201-R (16TFQ 8622552932)

3) RANGE SAFETY:

- Submit airspace / UFOR request form to Range Control. SOP and forms are located in the RFMSS library.
- Ensure sUAS operators are properly designated on the unit's Range Certification memo filed with Range Control.
- If only doing sUAS flight training / operations, only an OIC and sUAS operator are required.

4) RESTRICTIONS:

- May require restricted airspace, which must be scheduled a minimum of 72 hours in advance

5) RANGE ASSETS:

- Skydio 2+
- Skydio X2D (RQ-28A)
- Black Hornet 3
- AAR Classroom (GRID: 16TFQ 86238 52942) Wi-Fi enabled
- Indoor heated latrine located at 3201-R
- 2 x Vaulted latrine located at Range 32

MPRC: TANK GUNNERY (RFMSS "MPRC")

- 1) FUNCTION: Tank Table Qualification / Tank Crew Proficiency
- 2) LOCATION: 16TFQ 87696 53843 (See Appendix E for map)
- 3) WEAPONS & AMMUNITION: Rifles, Machine Guns and Tanks
 - 5.56mm, 7.62mm ball & tracer
 - .50 cal ball & tracer
 - 105mm / 120mm SABOT INERT
- 4) MANEUVER LANES: 2
 - Alpha Lane:
 - 8 Defensive Defilade Positions (4 on each lane)
 - 6 Offensive Fire Boxes (3 on each lane road)
 - Charlie Lane:
 - 8 Defensive Defilade Positions (4 on each lane)
 - 6 Offensive Fire Boxes (3 on each lane road)
- 5) TARGETS:
 - Alpha Lane:
 - 4 Moving Armor Targets
 - 19 Stationary Armor Targets
 - Charlie Lane:
 - 4 Moving Armor Targets
 - 16 Stationary Armor Targets
- 6) RANGE SAFETY: Left and right limit markers. Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
 - The use of the Multiple Integrated Laser System (MILES) has the same requirements for use as a live fire exercise, with the following exceptions & requirements:
 - Unit is responsible for requesting MILES from the TSC 120 days in advance.
 - Unit is responsible for requesting LTIDS from the 30 Complex Range Staff 90 days in advance and is responsible for providing the LTIDS batteries and velcro to attach to requested targets.
 - LFX/STX training OPLAN and DRAW must be submitted to Range Control NLT 90 Days prior to execution.
- 7) RANGE GATES AND ROAD BLOCKS:
 - Depending on the weapon system being used, the following gate guards will be required:
 - When Small Fan is closed, 1 vehicle, 2 personnel
 - When Large Fan is closed, 2 vehicle, 4 personnel
 - Road guards required on Bald Hill Rd. when Extended Fan is closed

- 8) CONFLICTS: Use of MPRC closes some 600 series firing points
- 9) RESTRICTIONS:
- Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - **NO DUD PRODUCING ROUNDS**
 - **NO INDIRECT FIRE SYSTEMS AUTHORIZED**
 - **NO AP/API ROUNDS**
- 10) RANGE ASSETS:
- Vaulted latrine
 - Covered bleachers
 - Ammunition breakdown building
 - Ellis Tower
 - Tank loading dock
 - FORTS® Mobile Shelters 38 Model
 - Advanced Crew Evaluator II (ACE II) w/ Thermal Imagery Cameras
 - Battle Effects Simulators (BES)

30 COMPLEX AERIAL GUNNERY (RFMSS "MPRC")

- 1) FUNCTION: Practice and qualification for helicopter delivered weapons and sub-caliber ADS (Air Defense System)
- 2) LOCATION: 16TFQ 87696 53843
- 3) WEAPONS & AMMUNITION: Apache, Cobra, Blackhawk
 - 5.56mm, 7.62mm ball & tracer
 - .50 cal ball & tracer (**NO API or AP**)
 - 20mm & 30mm (**TPT ONLY**)
- 4) FIRING POINTS: Scenario Based
- 5) TARGETS: Automated & Stationary Moving Armor
 - Gun Target sheets must be turned in 90 days in advance
 - Moving Armor Target System (MATS)
 - Stationary Armor Target System (SATS)
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FM's, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
 - LFX/STX training OPLAN and DRAW shall be submitted to Range Control NLT 90 Days prior to execution.
 - WDZs will be used to restrict headings and altitudes based upon scenarios to ensure the safety of the range infrastructure and personnel.
- 7) RANGE GATES AND ROAD BLOCKS:
 - Depending on the weapon system being used, the following gate guards will be required:
 - When Small Fan is closed, 1 vehicle, 2 personnel
 - When Large Fan is closed, 2 vehicle, 4 personnel
 - Road guards required on Bald Hill Rd. when Extended Fan is closed
- 8) CONFLICTS: Use of MPRC closes some 600 series firing points west of Wakely Bridge Rd.
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - **NO DUD PRODUCING ROUNDS**
 - **NO INDIRECT FIRE SYSTEMS AUTHORIZED**
 - **NO AP/API ROUNDS**
 - Altitude for firing is restricted; maximum altitude and attack angles for firing will be coordinated through Range Control.

10) RANGE ASSETS:

- Vaulted latrine
- Covered bleachers
- Ammunition breakdown building
- Ellis Tower
- Tank loading dock
- FORTS® Mobile Shelters 38 Model
- Advanced Crew Evaluator II (ACE II) w/ Thermal Imagery Cameras
- Battle Effects Simulators (BES)

MPRC: TOW (RFMSS "MPRC")

- 1) FUNCTION:
 - TOW ITAS FTS Qualification Tables 3-12
- 2) LOCATION: 16TFQ 87696 53843
- 3) WEAPONS & AMMUNITION:
 - TOW Missile (**INERT WARHEADS ONLY**)
 - TOW Missile (**ITAS**)
- 4) MANEUVER LANES: 2
 - Alpha Lane:
 - 8 Defensive Defilade Positions (4 on each lane)
 - 6 Offensive Fire Boxes (3 on each lane road)
 - Charlie Lane:
 - 8 Defensive Defilade Positions (4 on each lane)
 - 6 Offensive Fire Boxes (3 on each lane road)
- 5) TARGETS:
 - Alpha Lane:
 - 4 Moving Armor Targets
 - 19 Stationary Armor Targets
 - Charlie Lane:
 - 4 Moving Armor Targets
 - 16 Stationary Armor Targets
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red lights during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
 - The use of the Multiple Integrated Laser System (MILES) has the same requirements for use as a live fire exercise, with the following exceptions & requirements:
 - Unit is responsible for requesting MILES from the TSC 120 days in advance
 - Unit is responsible for requesting LTIDS from the 30 Complex Range Staff 90 days in advance and is responsible for providing the LTIDS batteries and velcro to attach to requested targets.
 - LFX/STX training OPLAN and DRAW shall be submitted to Range Control NLT 90 Days prior to scheduled use.
 - LASER Eye Safe distance to be utilized is 250 meters

7) RANGE GATES AND ROAD BLOCKS:

- Depending on the weapon system being used, the following gate guards will be required:
 - When Small Fan is closed, 1 vehicle, 2 personnel
 - When Large Fan is closed, 2 vehicle, 4 personnel
 - Road guards required on Bald Hill Rd. when Extended Fan is closed

8) CONFLICTS:

- Use of MPRC closes 600 series firing points with the exception of FP600 & FP602

9) RESTRICTIONS:

- Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
- NO DUD PRODUCING ROUNDS
- NO INDIRECT FIRE SYSTEMS AUTHORIZED
- NO API ROUNDS
- The MPRC is considered a CLEAN RANGE, therefore, the unit **MUST police up the guide wire** expelled during the TOW firing; failure will result in delay of range clearance.

10) RANGE ASSETS:

- Vaulted latrine
- Covered bleachers
- Ammunition breakdown building
- Ellis Tower
- Tank loading dock
- FORTS® Mobile Shelters 38 Model
- Advanced Crew Evaluator II (ACE II) w/ Thermal Imagery Cameras
- Battle Effects Simulators (BES)

MPRC: HIMARS / MLRS (RFMSS "MPRC")

- 1) FUNCTION: HIMARS/MLRS/RRPR firing points / various locations firing into DZ Miller
- 2) LOCATION: 16TFQ 87696 53843
- 3) WEAPONS & AMMUNITION: HIMARS / MLRS
 - Reduced Range Practice Round (RRPR)
- 4) FIRING POINTS: Scenario based with prior approval from Range Control
- 5) TARGETS: DZ Miller impact area
- 6) RANGE SAFETY: LFX/STX training OPLAN and DRAW shall be submitted to Range Control NLT 120 Days prior to execution. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) RANGE GATES AND ROAD BLOCKS:
 - Depending on the weapon system being used, the following gate guards will be required:
 - When Small Fan is closed, 1 vehicle, 2 personnel
 - When Large Fan is closed, 2 vehicle, 4 personnel
 - Road guards required on Bald Hill Rd. when Extended Fan is closed
- 8) CONFLICTS:
 - Use of MPRC closes 600 series firing points with the exception of FP600 and FP602
 - Closes Range 35 & MPRC
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - **NO DUD PRODUCING ROUNDS**
 - Unit must observe round impact using one of three means; visual, radar or helicopter
 - The MPRC is considered a CLEAN RANGE, therefore the unit MUST police up rounds expelled during firing; failure will result in delay of range clearance.
- 10) RANGE ASSETS:
 - Vaulted latrine
 - Ellis Tower
 - Ammunition breakdown building
 - Advanced Crew Evaluator II (ACE II) w/ Thermal Imagery Cameras
 - Battle Effects Simulators (BES)
 - Covered bleachers
 - Tank loading dock
 - FORTS® Mobile Shelters 38 Model

RANGE 41 (RFMSS "RNG41")

- 1) FUNCTION: Anti-Tank Rockets, Grenade Launchers and TOW (LIVE)
- 2) LOCATION: 16TFQ 91950 65090
- 3) WEAPONS & AMMUNITION: MK-19, LAW, AT-4, SMAW, 84mm Carl Gustav
 - 66mm HEAT
 - 84mm HEAT
 - 40mm HE/HEDP/TP (BA30 Authorized)
 - TOW 2A: Only DODICs WH05 & WH06
 - Refer to AR 385-63 for PPE requirements and restrictions on rounds fired based on sound pressure
 - NOTE: M320 rounds will not reach the targets
- 4) FIRING POINTS:
 - 2 lanes for LAW, AT-4, SMAW, 84mm Carl Gustav
 - Firing line moves forward to reach targets
 - 8 ground and 2 vehicle FP for MK-19 familiarization
 - 2 vehicle FP for TOW
- 5) TARGETS: Stationary vehicle hulls.
 - 400m (2 M113's)
 - 600m (2 M113's)
 - 800m (2 M60 Tanks)
 - 1100m (2 M60 Tanks)
 - 1300m (2 M60 Tanks)
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red light during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned prior to and during "HOT" status.
 - Firing TOW requires additional gate closures. Must be coordinated with 40 Control.
- 8) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - .50 cal is NOT AUTHORIZED
 - MK-19 night fire is NOT AUTHORIZED
 - Firing line is located inside boundary of impact area. Only authorized movement is between range gate and designated firing line.
- 9) RANGE ASSETS:
 - Vaulted latrine
 - OIC Tower
 - Elevated firing berm
 - Additional latrine procurement is a unit responsibility

RANGE 43 (RFMSS "RNG43")

- 1) FUNCTION: Heavy Demolition Range
- 2) LOCATION: 16TFQ 94480 66436
- 3) AMMUNITION:
 - Shape Charges
 - Line Charges
 - Cratering Charges
 - Claymore
 - Bangalore Torpedo
- 4) TARGETS: Stationary E-type silhouettes on staves and other materials are available upon request. Target requests and any additional documentation must be submitted 90 days prior to execution.
- 5) RANGE SAFETY: OP Plan & DRAW must be approved 90 days prior to execution. Scarlet streamers are to be displayed during daylight firing and flashing red light during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) Range gates must be manned prior to and during "HOT" status.
 - Additional gate guards may be required based on Surface Danger Zone (SDZ)
- 7) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - **40 POUNDS NEW** surface detonation only
 - Located inside boundary of impact area. The only authorized movement is between range gate and designated detonation area.
 - **DEMOLITION RECONNAISSANCE PLAN (DD 3020) MUST BE SUBMITTED TO RANGE CONTROL FOR APPROVAL NLT 90 DAYS PRIOR TO OCCUPATION OF THIS RANGE**
- 8) RANGE ASSETS:
 - Vaulted latrine
 - Additional latrine procurement is a unit responsibility

RANGE 44 (RFMSS "RNG44")

- 1) FUNCTION: Squad Fire and Maneuver
- 2) LOCATION: 16TFQ 94310 68710
- 3) WEAPONS & AMMUNITION: M16/M4, M249, M240B, M203/M320
 - 5.56mm and 7.62mm ball / tracer
 - 40mm TP and ILL
- 4) TARGETS: Stationary E-type silhouettes on staves; additional targetry requires prior coordination with 40 Control. Target requests must be submitted 90 days prior to execution. Unit may bring targets for use on this range. Range Control does not provide staple guns, staples or tape.
- 5) RANGE SAFETY: OP Plan & DRAW must be approved 90 days prior to execution. Scarlet streamer is to be displayed by the range entrance gate. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) Range gates must be manned prior to and during "HOT" status.
- 7) CONFLICTS: Range closes Helicopter Door Gunnery
 - No one may be down range on Range 45 without Range 44 being in a "CHECK FIRE" status
- 8) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - LFX/STX training plan of operation shall be submitted to Range Control **NLT 90 Days** prior to scheduled use. Specific event restrictions are scenario driven.
 - The only authorized movement is within designated fire maneuver boxes.
- 9) RANGE ASSETS:
 - Vaulted latrine
 - Additional latrine procurement is a unit responsibility

RANGE 45 (RFMSS "RNG45")

- 1) FUNCTION: Heavy Sniper Familiarization / M2 Zero and Qualification Range
- 2) LOCATION: 16TFQ 89445 69522
- 3) WEAPONS & AMMUNITION: M249, M240B, M2, Sniper Rifles
 - .50cal ball and tracer
 - 7.62mm ball and tracer
 - 5.56mm ball and tracer
 - .300 Norma & .338 Norma
- 4) FIRING POINTS: 3
- 5) TARGETS: Automated stationary armor and infantry targets from 400m to 1500m. Steel sniper targets available upon request. Target requests must be submitted 30 days prior to execution.
 - 400m (3 Single SIT Targets)
 - 500m (3 Single SIT Zero Targets)
 - 600m (3 Double SIT Targets)
 - 800m (3 Double SIT Targets)
 - 1100m (3 SAT Frontal Targets)
 - 1500m (3 SAT Frontal Targets)
- 6) RANGE SAFETY: Left and right limit markers. NO CROSS LANE FIRING! Scarlet streamers are to be displayed during daylight firing and flashing red light during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned prior to and during "HOT" status.
- 8) CONFLICTS:
 - Range closes Helicopter Door Gunnery
 - Firing anything 7.62mm and above closes Range 43 & Firing Points 500-506 and 525-527
 - Aerial gunnery scheduled during the same time may cause range to be placed in a "CHECK FIRE" status.
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - Anything greater than 7.62 closes Range 44 and FP's 200, 201 & 205
 - No Lapua rounds authorized
 - No vehicle movement authorized while firing
 - The only authorized movement allowed is between the range gate and the firing line.
- 10) RANGE ASSETS:
 - OIC Tower with laptop computer
 - Vaulted latrine

RANGE 46 (RFMSS "RNG46")

- 1) FUNCTION: Company / Platoon Fire and Maneuver
- 2) LOCATION: 16TFQ 88570 66730
- 3) WEAPONS & AMMUNITION: M16/M4, M249, M240B, M320, Sniper systems
 - 5.56mm and 7.62mm ball / tracer
 - 40mm, Chalk Rounds
 - Demolition Breaching Charges
 - TP Ammunition
 - Pyrotechnics
- 4) TARGETS: Stationary E-type silhouettes on staves and SIT (Stationary Infantry Targets); additional targetry requires prior coordination with 40 Control. Target requests must be submitted 90 days prior to execution. Unit may bring targets for use on this range. Range Control does not provide staple guns, staples or tape.
- 5) RANGE SAFETY: OP Plan & DRAW must be approved 90 days prior to execution. Scarlet streamer is to be displayed by the range entrance gate. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) Range gates must be manned prior to and during "HOT" status.
- 7) CONFLICTS: Range closes Helicopter Door Gunnery and Range 44
- 8) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - LFX/STX training plan of operation shall be submitted to Range Control **NLT 90 Days** prior to scheduled use. Specific event restrictions are scenario driven.
 - The only authorized movement is within designated fire maneuver boxes.
- 9) RANGE ASSETS:
 - Vaulted latrine

Firing Point C4 (RFMSS "FP-C4")

- 1) FUNCTION:
 - TOW (Inert ONLY)
 - Javelin
- 2) LOCATION: 16TFQ 90824 70673
- 3) AMMUNITION:
 - Javelin (DODICs must be approved by 40 Control)
 - TOW (**Inert ONLY**)
 - Refer to AR 385-63 for PPE requirements and restrictions on rounds fired based on sound pressure
- 4) TARGETS: Hard Targets - 800 meters to 4000 meters
- 5) RANGE SAFETY: Left and Right limits will be established per weapon system in advance by 40 Control. Scarlet streamer is to be displayed by the range entrance gate. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 6) Range gates must be manned prior to and during "HOT" status.
- 7) RESTRICTIONS:
 - **DO NOT ENGAGE** Air-To-Ground Targets (North of 70 grid line)
 - Firing line is located inside boundary of impact area. Only authorized movement is between range gate and firing line.
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - SMAW, LAW & AT-4 are not authorized
- 8) ASSETS: N/A
 - Porta-John procurement is a unit responsibility

Firing Point Direct Fire (RFMSS "FP-DF")

- 1) FUNCTION:
 - Artillery Direct Fire
- 2) LOCATION: 16TFQ 90470 70340
- 3) AMMUNITION:
 - 105mm and 155mm (HE / Practice)
 - Refer to AR 385-63 for PPE requirements and restrictions
- 4) FIRING POINTS: 4 lanes
- 5) TARGETS: Hard Targets - 800 meters to 1200 meters
- 6) RANGE SAFETY: Left and Right limits will be established per weapon system in advance by 40 Control. Scarlet streamer is to be displayed by the range entrance gate. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) Range gates must be manned prior to and during "HOT" status.
- 8) RESTRICTIONS:
 - **DO NOT ENGAGE** Air-To-Ground Targets (North of 70 grid line)
 - Firing line is located inside boundary of impact area. Only authorized movement is between range gate and firing line.
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - Javelin is not authorized
- 9) ASSETS: N/A
 - Porta-John procurement is a unit responsibility

40 Complex Artillery Firing Points (RFMSS "FPXXX")

- 1) FUNCTION: Artillery Firing Proficiency & Maneuver Training
- 2) WEAPONS & AMMUNITION: M119, M777, M109,
 - 105mm towed (AFCS & non-AFCS) (HE, ILL, WP, SMK)
 - 155mm towed and self propelled (AFCS & non-AFCS) (HE, ILL, WP, SMK)
- 3) FIRING POINTS: 71 firing points (100, 200, 300, 400 & 600 series)
 - See **Appendix G** for names, sizes and locations
- 4) OBSERVATION POINTS: 3
 - **OP-4:** 16TFQ 88060 67020
 - **OP-5:** 16TFQ 88360 66170
 - **OP-6:** 16TFQ 88560 65720
- 5) TARGETS: Tank hulls and vehicles in single convoy arrays & sporadic locations/intervals
 - Target list is available from 40 Control
- 6) RANGE SAFETY: Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) GATES AND ROADBLOCKS: **Units responsibility to restrict access to area "E"**. Gate and road guards are required to maintain communication with the range OIC.
- 8) CONFLICTS: Firing Points North of 70 grid line are subject to "CHECK FIRES" when aerial gunnery is in progress.
 - Artillery fire closes Helicopter Door Gunnery
 - STEELGATE and 40 Control will deconflict airspace daily
- 9) RESTRICTIONS:
 - WP rounds must impact in designated area
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - 600 series firing points: PD Fuzes ONLY for all fires over CR 612
- 10) RANGE ASSETS:
 - Declination Station:
 - Bud Hill: 16TFQ 90225 60205
 - Two permanent excess propellant burning pans
 - 40 Complex: 16TFQ 88741 66389 (1 pan)
 - 13 Complex: 16TFQ 73748 39794 (1 pan)

40 Complex Mortar Firing Points (RFMSS "FPXXX")

- 1) FUNCTION: Mortar Live Fire
- 2) WEAPONS & AMMUNITION: Ground mounted and carrier mounted systems
 - 60mm, HE, ILL, WP and Training Practice
 - 81mm, HE, ILL, RP and Training Practice
 - 120mm, HE, ILL, WP and Training Practice
- 3) FIRING POINTS: 28 firing points (500 series)
 - See **Appendix G** for names, sizes and locations
- 4) OBSERVATION POINTS: 3
 - **OP-4:** 16TFQ 88060 67020
 - **OP-5:** 16TFQ 88360 66170
 - **OP-6:** 16TFQ 88560 65720
- 5) TARGETS: Tank hulls and vehicles in single convoy arrays
 - Target list is available from 40 Control Staff @ OP5 (bldg. 4001R)
- 6) RANGE SAFETY: Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
- 7) GATES AND ROADBLOCKS: Units responsibility to restrict SDZ access and to supply their own comms with gate/road guards. Gate and road guards are required to maintain communication with the range OIC.
- 8) CONFLICTS: Firing Points North of 70 grid line are subject to "CHECK FIRES" when aerial gunnery is in progress.
 - Mortar fire closes Helicopter Door Gunnery
 - STEELGATE and 40 Control will deconflict airspace daily
- 9) RESTRICTIONS:
 - Range requires restricted airspace when "HOT" which must be scheduled a minimum of 72 hours in advance
 - Minimum charge allowed based on range to impact box
 - NO overhead firing is permitted
 - WP rounds must impact in designated area
 - Range 45 closes FPs 500-505 and 525-527
 - **No 60mm WP without a pre-approved Concept of Operations (BA14 ONLY) M722A1**
- 10) RANGE ASSETS:
 - Declination Station:
 - Bud Hill: 16TFQ 90225 60205
 - Two permanent excess propellant burning pans
 - 40 Complex: 16TFQ 88741 66389 (1 pan)
 - 13 Complex: 16TFQ 73748 39794 (1 pan)

40 Complex Helicopter Door Gunnery

- 1) FUNCTION: Dry-fire training and qualification for Helicopter Door Gunners
 - **Army:** must schedule both air and ground assets (**RFMSS: R-4201A & A/G-A**)
 - **Air Force:** must schedule both air and ground assets (**RFMSS: R-4201A & A/G-AF**)
- 2) LOCATION:
 - Course Start Point: 16TFQ 90059 66781 • Course End Point: 16TFQ 89686 68859
- 3) WEAPONS & AMMUNITION: M240H
 - 7.62mm ball and tracer
- 4) FIRING POINTS: Five tactical runs that contain two LZs. Targets are not electronically scored. Units may coordinate with Fort Hood to acquire the AWSS Scoring system. Prior coordination with Range Control required for the AWSS system.
- 5) TARGETS: Hard Targets: APC's, vehicle hulls, and E-type silhouettes
- 6) RANGE SAFETY: Left and right limit markers for each engagement are marked by yellow 55 gallon barrels. Start and cease fire points are marked by red and white 55 gallon barrels. Scarlet streamers are to be displayed during daylight firing and flashing red light during night fire. Reference CG 385-63, AR 385-63, DA PAM 385-64 and appropriate FMs, TCs and TMs for further safety guidance. Reference Appendix H and J for OIC, RSO and medical requirements.
 - Range cadre must be present for orientation flight of Door Gunnery Scenario
 - Units are required to bring their own form of comms with aircraft
- 7) CONFLICTS:
 - Helicopter gunnery cannot be "HOT" when Air-to-Ground or Indirect Fire is "HOT" without prior de-confliction between 40 Complex NCOIC and STEELGATE
 - Range 44 and 45 close Door Gunnery
- 8) RESTRICTIONS:
 - OIC & RSO are required to be at OP-5 when "HOT"
 - Medics stage at Kinney Rd. Gate for fastest employment in emergency
 - Aircraft **MUST** stay south of 69 grid line
 - All targets are south of the 69 grid line, **DO NOT** engage targets outside of yellow barrel limit markers
 - Training scenario must be coordinated through Range Control via a Concept of Operations to determine and manage potential range conflicts
- 9) RANGE ASSETS:
 - Hard Targets
 - OP-5 Tower
 - DV Pad

Air National Guard's Aerial Gunnery Range (RFMSS "R-4201A" "R-4201B")

- 1) **FUNCTION:** Grayling Air Gunnery Range's impact area is owned by MIARNG. Range Control manages the airspace for the Grayling Air Gunnery Range airspace.
 - R-4201A is the primary airspace for the Grayling Air Gunnery Range and the associated 40 Complex, managed by Camp Grayling, Michigan Army National Guard. 4201A airspace is also utilized for mortar, artillery, helicopter, and UAS operations.
 - R-4201B is associated with the 30 Complex, and will be made available to users of the Grayling Air Gunnery Range when available. It is used by RQ-7 (Shadow) UASs, army helicopters, and small arms with a high vertical hazard. When any of these assets are utilizing the airspace, 4201B may be limited or unavailable. In addition, the R-4201B airspace is for dry attacks and NO combat lasers are authorized.

- 2) **WEAPONS & AMMUNITION, AS APPROVED BY MOU:**
 - See **CRTCMAN 13-212V1, 10 March 2025**

- 3) **SCHEDULING:** Grayling Air Gunnery Range staff (through Camp Grayling Range Control) manages the scheduling process for Grayling Air Gunnery Range (R-4201A/B). Black Talon manages the scheduling of the Huron Water Range (R-4207) and all MOA and ATCAA airspace. Do not contact Camp Grayling directly for scheduling the Aerial Gunnery Range.
 - Center Scheduling Enterprise (CSE): <https://cseaf.eglin.af.mil/CSE/home.aspx>
 - Camp Grayling Air Gunnery Range Scheduler (Air Force):
 - COM 989-354-6335 / DSN 741-6335
 - usaf.mi.mi-crtc.list.fal-range@mail.mil
 - Camp Grayling Range Control Scheduler (Army):
 - COM: 989-344-6169 / DSN 623-3169
 - ng.mi.miarng.mbx.cgjmtc-scheduling@mail.mil
 - Normal Grayling Air Gunnery Range hours are Monday through Friday, 0800-1630 L, Eastern Standard Time (EST) and must be submitted by the 15th of the month prior.

- 4) **RANGE SAFETY:** Fire response and reporting. All air and ground users must immediately report fires to Steelgate and Camp Grayling Range Control. Grayling Air Gunnery Range staff will assess each fire and respond for smaller fires that can be contained by range personnel. For fires that are beyond the capability of the Grayling Air Gunnery Range staff, RCOs have the responsibility to immediately notify Camp Grayling Range Control.
 - There are two defined noise abatement areas within the boundaries of the restricted areas. These noise abatement areas should be avoided by 1500' AGL or 1500' laterally from homes. Safety of flight due to weather concerns, blind on other flight members or critical tactical training requirements take precedence over avoidance of noise sensitive areas.

Chapter 2: Additional Training Assets

Land Navigation (RFMSS "LAND NAV") is a dismounted day / night Land Navigation Course. This course is **NOT** self-correcting. It has 8 starting points & 50 total marked points. Range assets include 100 m pace count station, vaulted latrines and a 24 x 24 garage: LOCATION: 16TFQ 77205 43464

CBRNE Training Facility Building (RFMSS "NBC") can accommodate 15 - 20 Soldiers at a time. Capsules are the only authorized dispersion method. Canisters and grenades are UNAUTHORIZED. Units should coordinate for local latrine services: LOCATION: 16TFQ 70524 43699

AFT Track (RFMSS "AFT") is a 1 mile oval track with a 12 foot wide running/walking path, marked at each quarter mile interval. Assets include two pull-up bars and a vaulted latrine. LOCATION: 16TFQ 76407 43330.

Parade Field (RFMSS "PARADE FLD") is a 24 acre area utilized for command functions, physical training and helicopter landing. LOCATION: 16TFQ 75188 43723

Forward Operating Base (FOB)

- **South Forward Operating Base (RFMSS "FOB-S TTB")** 166 acre bermed location for use in training for contingency operations. LOCATION: 16TFQ 67032 43120
- **North Forward Operating Base (RFMSS "FOB-N TTB")** 19.6 acre fenced compound with guard towers, water point, support buildings and M/F latrine with shower point. Operations Support BLDG 1549 is scheduled separately from the NFOB (See support buildings for details). LOCATION: 16TFQ 89364 62064

Engineer Bridge Sites

- **King's Pond (RFMSS "KINGPD")** Medium Girder Bridge (MGB), Dry Support Bridge (DSB) and the Mabey-Johnson Bridge (MJB)
 - LOCATION: 16TFQ 68772 42458
- **Lake Margrethe (RFMSS "MARG LK")** Improved Ribbon Bridge (IRB)
 - LOCATION: 16TFQ 75492 43891
- **Howes Lake (RFMSS "HOWELK")** Improved Ribbon Bridge (IRB)
 - LOCATION: 16TFQ 73012 50495
- **Sand Lake (RFMSS "SANDLK")** Improved Ribbon Bridge (IRB)
 - LOCATION: 16TFQ 95376 70966
- **Range 32 (RFMSS "RNG32 - CACTF")** Medium Girder Bridge (MGB), Dry Support Bridge (DSB) and the Mabey-Johnson Bridge (MJB)
 - LOCATION: 16TFQ 86909 52939

Water Operations: IOT schedule water operations an operation plan must be turned into Range Control for prior approval by command staff. The body of water to be used must be scheduled in RFMSS and approved by Camp Grayling Environmental (CG 200-1 para 2.6).

Railhead (RFMSS "RAILHEAD") Located on the southwest corner of the Grayling Army Airfield (GAAF). See CG Logistics request SOP. LOCATION: 16TFQ 80084 48953

UAS Runway (RFMSS "UAS STRIP#1") is a 1000 ft. gravel runway for UAS operations with access to restricted airspace R-4201A and R-4201B. LOCATION: 16TFQ 89580 61956

Drop Zones (DZ)

- Miller DZ (**RFMSS "DZ-M"**) 200 acre area capable of handling personnel and / or cargo drops. LOCATION: 16TFQ 95524 56868
- Trash DZ (**RFMSS "DZ-T"**) 215 acre area, capable of handling cargo drops only. LOCATION: 16TFQ 91725 71942
- AuSable DZ (**RFMSS "STA07"**) 500 yard radius personnel drop only. LOCATION: 16TFQ 79834 49650
- Post DZ (**RFMSS "NTA07"**) 120 acre area capable of handling personnel and / or cargo drops. LOCATION: 16TFQ 92697 56414

Airspace

- **R-4201A:** Maximum Altitude (MSL ft.) 23000. Located primarily over the 40 Complex
- **R-4201B:** Maximum Altitude (MSL ft.) 23000. Located primarily over the 30 Complex
- **R-4202:** Maximum Altitude (MSL ft.) 8200. Located primarily over the 13 Complex

Landing Zones (LZ) For Operational & Training Use

- See Appendix K for a detailed map of all operational and medical LZs

Support Buildings

- BLDG 1480: (**RFMSS "1480"**) 1 Bay. LOCATION: 16TFQ 87207 53675
- BLDG 1549: (**RFMSS "FOB-N OPS BLDG - 1549"**) LOCATION: 16TFQ 89395 62181

Grayling Army Airfield (RFMSS "STA07") Grayling Army Airfield (RFMSS "STA07") Operations Center for military aircraft with an Air Traffic Control Tower, Class D airspace, Base Operations, and refueling capabilities. Non-Precision Instrument approaches can be made using VOR, NDB, and RNAV (GPS) to runway 14. Runways 14/32 and 5/23 are 5000 x 150 lit by Medium Intensity Runway Lights (MIRLs), Precision Approach Position Indicating System (PAPIS), and Runway End Indicator Lighting System (REILS). There are 14 paved universal parking pads ("West Ramp" 6 and "East Ramp 8") designed for CH-47s. Other aircraft can be accommodated with prior coordination. Sod tie downs for rotary aircraft are also located on the airfield. An 18,000 SF hangar is also available designed to accommodate 2xUH-60 or 1xCH-47. This hangar can accommodate other aircraft types and numbers. Prior coordination with Grayling Army Airfield Base Operations, (989) 344-4301, is required for the use of the West and East Ramps as well as the hangar. LOCATION: 16TFQ 79834 49650

Fuel Pad Locations: Camp Grayling contains 30 fuel pads; 12 on cantonment, 8 on South Camp, 2 on the 30 Complex, 3 on various 30 Complex Training Areas and 5 on various 40 Complex Training Areas. See Appendix L for a complete list of locations, with grid coordinates.

South Camp Ammo Holding Area (RFMSS "SOUTH CAMP AHA") is a 230' x 119' (.62 acre) fenced in area that can support up to BDE size AHA requirements. Porta-John procurement is a unit responsibility, however range latrines, located on RNG08, are within walking distance and may be used if the unit has the range reserved for use. LOCATION: 16TFQ 702 438

Rubble Pile (RFMSS "RUBBLE PILE") Is a collapsed structure training area used for search & rescue training. LOCATION: 16TFQ 86924 52795

Training Areas (RFMSS "STA__" / "NTA__") Camp Grayling contains 24 Southern Training Areas (STA) and 30 Northern Training Areas (NTA). When utilizing training areas for events such as bivouac and other stationary activities grid coordinates MUST be submitted to Range Control. Items such as C-wire are not authorized for use without an ETP. Daily Facility Usage Reports MUST be submitted DAILY for each training area scheduled. Each training area has different training restrictions associated with it, please refer to CG 200-1, limitations memo or contact Camp Grayling Environmental.

Digging & Earth Moving: In accordance with MI Act 451 Part 91, no mechanical earth moving or hand digging is allowed within 500 feet of any lake, pond, river, saturated wetland, or dry wetland. All mechanical earth moving or hand digging at STA 1-3, STA 8, STA 17-24 & NTA 26 requires authorization from Range Control and Environmental. Mechanical earth moving must be pre-authorized, with the exception of individual fighting positions, crew-serve weapons positions, and slit latrines. No building roads or berms without prior authorization from Range Control. No clearing or grubbing without prior approval from the Environmental Department. Engineer Valley is a pre-authorized dig location, any earthwork conducted must be backfilled prior to turn in. Reference Appendix M for location and boundaries.

Potable Water Locations

- South Camp (RNG08): 16TFQ 70142 43798
- Cantonment (BLDG 560): 16TFQ 74508 43448
- 30 Complex (MPRC): 16TFQ 87287 53695
- 40 Complex (NFOB): 16TFQ 89314 62181
- MATES (NTA01): 16TFQ 85660 50822

Training Aids, Devices, Simulators and Simulations (TADSS)

The **EST II** suites provide initial and sustainment marksmanship training, static unit collective gunnery and tactical training, and shoot/dont shoot training. It supports the following three modes of training: marksmanship, judgmental, and use of force. Facility utilization requires certified instructor/operator personnel; in the event unit does not have certified I/O, contact 989-344-6313 to schedule a course. LOCATION: BLDG 333

- Room #1 (**RFMSS "EST II 10-LANE"**) Suite is equipped with six (6) M9, two (2) M320, two (2) M4 w/ M320, seven (7) M4, three (3) M16A2, five (5) M16A4, two (2) M249, two (2) M240B, two (2) M1200, two (2) M2, two (2) MK19, one (1) T & E, one (1) AT4
- Room #2 (**RFMSS "EST II 10-LANE CREW"**) Suite is equipped with two (2) M9, two (2) M2, two (2) MK19, two (2) M320, two (2) M4 w/ M320, seven (7) M4, three (3) M16A2, five (5) M16A4, two (2) M249, two (2) M240B, two (2) M2100, two (2) Tripods, two (2) Pintles, two (2) T & E, one (1) AT4

InVeris Marksmanship Trainer (IMT) (RFMSS: IMT 10-LANE BLUE FIRE) The IMT suite provides initial and sustainment marksmanship training, and shoot/don't shoot training. It supports the following two modes of training: marksmanship and judgmental use of force. The room is equipped with 13 M4 rifles and 12 M17 pistols. However, when shooting marksmanship, there are 10 lanes for the M4 and 4 with the M17 per iteration. Facility utilization requires certified instructor/operator personnel; in the event unit does not have certified I/O, contact 989-344-6313 to schedule a course. LOCATION: BLDG 333

Call For Fire Trainer 3 (RFMSS "CFFT") The CFFT is a lightweight, rapidly deployable, observed fire-training system that provides multiple simulated battlefield environments for instructing fire support specialists, joint fires observers and soldiers at the institutional and operational unit level. The CFFT is capable of training all artillery, type II and III close air support, naval gunfire and mortar missions. The configuration 1:12 (one instructor to 12 students) is deployable. LOCATION: BLDG 333

Unstabilized Gunnery Trainer-Individual (UGT-I) Trains un-stabilized gunnery IAW doctrinal tasks and RPMs in TC 3-20.31 and TC 4-11.46. This system is one of two trainers that meets standards for table II gunnery. Facility utilization requires one (1) certified instructor/operator. Suite consists of the following trainers and must be scheduled individually in RFMSS. LOCATION: BLDG 333

- RFMSS "UGT-I: M-2 #1"
- RFMSS "UGT-I: M-2 #2"
- RFMSS "UGT-I: M-240B #1"
- RFMSS "UGT-I: M-240B #2"
- RFMSS "UGT-I: M-240B #3"
- RFMSS "UGT-I: M-240B #4"
- RFMSS "UGT-I: MK-19 #1"
- RFMSS "UGT-I: MK-19 #2"
- RFMSS "UGT-I: MK-19 #3"
- RFMSS "UGT-I: MK-19 #4"

Virtual Convoy Operations Trainer (VCOT) (RFMSS "VCOT 115" "VCOT 54" & "VCOT 91") Trains unstabilized gunnery IAW doctrinal tasks and RPMs in TC 3-20.31 and TC 4-11.46. Capable of training at the individual, crew, section and platoon level for gunnery drills. This is the second of two trainers that meet Table II for Gunnery Standards. It is also utilized in Combat Patrol missions in order for the unit to enhance their abilities to conduct particular battle drills. It has the ability to play back the scenario so that you can conduct an AAR. This device requires one (1) unit provided certified instructor/operator. LOCATION: BLDG 333

Tactical Combat Casualty Care Exportable Soldier System (TC3X): Located at BLDG 328

- **TC3X - Lower Body A:** Hemo lower with quick release knee.
- **TC3X - Lower Body B:** Hemo lower with quick release knee.
- **TC3X - Upper with Amputated Arm:** Upper pulses breathing with amputated arm.
- **TC3X - Upper with Bendable Arm:** Upper pulses breathing with 90 degree bendable arm.
- **TC3X - Trainer Medical K9:** K9 Diesel has active bleeding with 28 different features and medical intervention sites.

Virtual Battle Simulator (VBS3) (RFMSS "VBS3 - CG SIMS CTR") This system is a semiimmersive, first person, games-for-training platform. It provides an environment to train soldiers and leaders, platoon and below, on lethal and non-lethal mission critical tasks and at company and TF levels without troops. It enables leaders to develop and refine intuitive decision-making skills on C2 and Maneuver and Force Protection, providing dynamic training areas, hundreds of simulated military and civilian entities, and a range of geo-typical (generic) as well as actual geospecific terrains. LOCATION: BLDG 333A

M153 CROWS II Tabletop Gunnery Trainer (RFMSS "CROWS")

The M153 CROWS II Tabletop Gunnery Trainer is a standalone PC-based training device. The system allows new Gunners to become familiar with the CROWS prior to any qualification, field exercise or combat situations. The trainer also provides training to locate, identify, and engage enemy targets with the .50 caliber M2 machine gun, M240 7.62mm machine gun, M249 5.56mm machine gun and 40mm Mk 19 grenade launcher in accordance with TC 3-20.31 Crew Training and Qualification standards. The vehicle gunner operates the trainer and instructional system from a touchscreen monitor and controls the weapon with a high-fidelity control grip. Crew records are stored and can be transferred to any CROWS Tabletop Trainer. LOCATION: BLDG 333

Key features include:

- Three selectable weapon platforms
 - > M2 .50 caliber machine gun
 - > M240 7.62mm machine gin
 - > M249 5.56mm machine gun
 - > MK19 40mm grenade launcher
- Reconfigurable Vehicles
- Boresight and Zero training exercise
- Training exercises using a desert visual terrain database
- Simulated adverse visibility conditions
- Small footprint and quick set up time
- Utilizes standard 120VAC power
- Compact transportble pelican case (24" x 19" x 16")
- Portable crew records

NOTE: A list of all TADSS courses offered at Camp Grayling and FCTC is available upon request.

Appendix A: Publications, Forms and Websites

Section I: Related Publications

AFMAN 13-212/Alpena CRTC Supplement 1
AR 75-1 Malfunctions Involving Ammunition and Explosives
AR 95-2 Airspace, Airfields/Heliports, Flight Activities, Air Traffic Control, & Navigational Aids
AR 95-27 Operational Procedures for Aircraft Carrying Hazardous Materials
AR 200-1 Environmental Protection and Enhancement
AR 350-19 The Army Sustainable Range Program
AR 350–38 Policies and Management for Training Aids, Devices, Simulators, and Simulations
AR 385-10 Army Safety Program
AR 385-63 Range Safety
AR 385-64 US Army Explosives Safety Program
ATP 5-19 Risk management
CG APG Aviation Procedures Guide
CG 200-1 Environmental Quality
CG 385-63 Safety Regulation
CG LFSH SOP
CG Soldier Field Card
DA PAM 385-64 Ammunition Explosives Safety Standards
FAA Handbook 7400.2 Procedures for Handling Airspace Matters
PEO STRI Index and Description of Army Training Devices Catalog
TC 25-1 Training Land
TC 25-8 Training Ranges

Section II: Forms

CG 2-43R Facility Request Form	DD 2977 Deliberate Risk Assessment Worksheet
CG 2-44R Target Request Form	DD 3020 Breaching Recon Record
CG Strength Report	Policy Letter for Concertina Wire Location
CG Training Site Agreement	Command Certification Memorandum
Daily Facility Usage Report	Environmental Compliance Agreement
DA 2062 Hand Reciept	Frequency Support Request Form
DA 3265 EOD Incident Report	
DA 1687 Notice of Delegation of Authority	
DA 5692-R Ammunition Consumption Certificate	

Section III: Websites

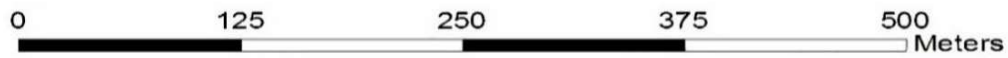
RFMSS (RCAS):

- <https://rfmssbackup.liberty.aedc.army.mil/grayling/pages/login.aspx>

RFMSS (Non-RCAS):

- <https://rfmss.liberty.aedc.army.mil/grayling/pages/login.aspx>

Appendix B: RNG05 - Infantry Squad Battle Course (ISBC)



Legend		
Stationary Targets	Moving Targets	Fence Line
■ Infantry	— Infantry	—
■ Armor	— Armor	Roads
■ Simulator		—

1:2,000

Appendix C: Urban Assault Course (UAC) Stations 1- 5



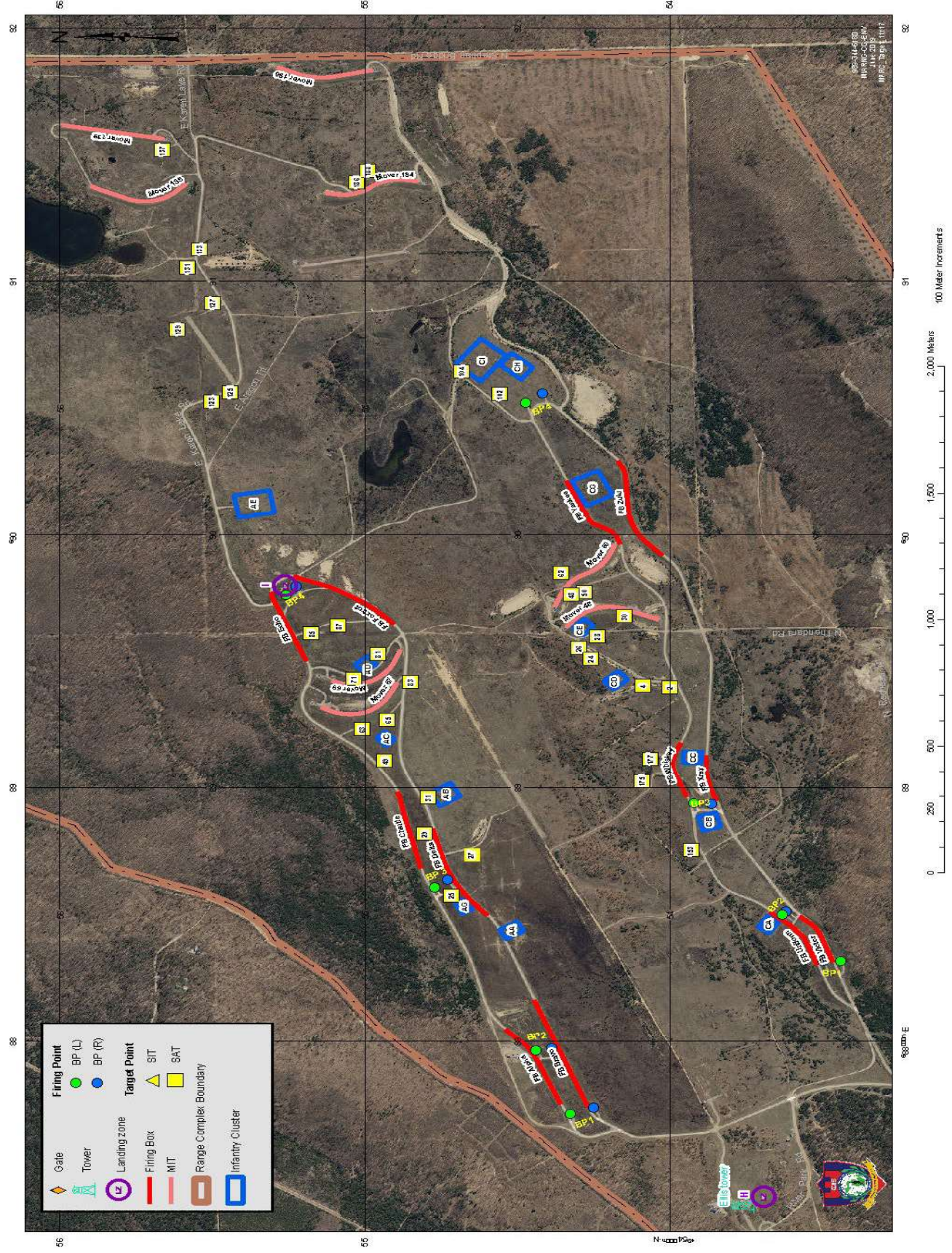
Appendix D: RNG32 - Combined Arms Collective Training Facility (CACTF)



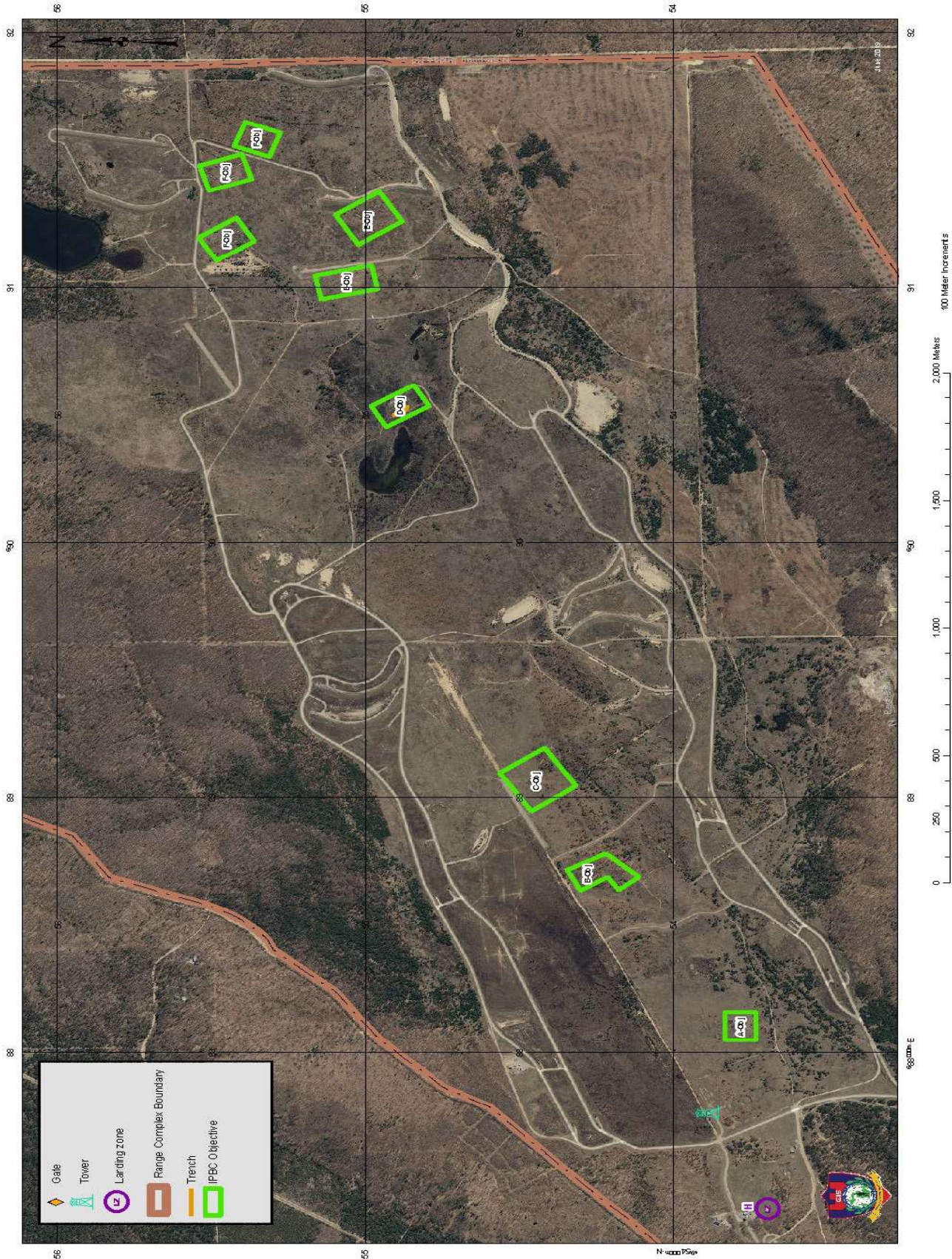
**Camp Grayling
Combined Arms Collective Training Facility - CACTF**



Appendix E: Multi-Purpose Range Complex (MPRC)



Appendix F: Range 39 Infantry Platoon Battle Course (IPBC)



Appendix G: Firing Points

Artillery Firing Points							
FP#	Acres	MGRS Grid	Location	FP#	Acres	MGRS Grid	Location
100	0.19	16T FQ 9115573153	NTA30	307	7.08	16T FQ 8951862702	NTA23
101	7.97	16T FQ 9192473377	NTA30	308	8.84	16T FQ 8993562673	NTA23
102	6.32	16T FQ 9210073420	NTA30	321	4.27	16T FQ 8646164509	NTA22
103	6.2	16T FQ 9231273421	NTA30	323	7.32	16T FQ 8682066928	NTA26
104	7.85	16T FQ 9352572360	NTA29	400	18.16	16T FQ 8616268433	NTA26
105	4.75	16T FQ 9674070733	NTA29	401	16.76	16T FQ 8614168673	NTA26
106	8.83	16T FQ 9692370450	NTA29	405	2.08	16T FQ 8761368736	NTA26
107	7.29	16T FQ 9524270507	NTA27	406	15.53	16T FQ 8603868934	NTA26
108	9.96	16T FQ 9682470179	NTA29	600	8.3	16T FQ 8963560458	NTA17
109	5.14	16T FQ 9463470372	NTA27	601	5.35	16T FQ 8964358469	NTA13
110	4.38	16T FQ 9681169892	NTA25	602	3.98	16T FQ 9029159245	NTA18
112	6.28	16T FQ 9588371498	NTA29	603	3.15	16T FQ 9061757743	NTA13
113	7.06	16T FQ 9487070518	NTA27	604	2.67	16T FQ 9302658908	NTA14
114	4.61	16T FQ 9247273298	NTA27	606	6.03	16T FQ 9344459019	NTA14
115	5.81	16T FQ 9641469867	NTA25	607	6.37	16T FQ 9618660788	NTA15
117	6.99	16T FQ 9165773602	NTA30	608	10.05	16T FQ 9652361084	NTA15
118	7.3	16T FQ 9143173506	NTA30	609	2.88	16T FQ 9490559182	NTA14
119	6.26	16T FQ 9171973304	NTA30	610	18.08	16T FQ 9437158461	NTA14
120	8.76	16T FQ 9093872862	NTA30	611	6.44	16T FQ 9319358499	NTA14
121	13.62	16T FQ 9067872715	NTA30	630	4.8	16T FQ 9898559618	NTA15
122	6.29	16T FQ 9411271780	NTA29	631	9.08	16T FQ 9582656676	NTA07
123	5.89	16T FQ 9728167751	NTA25	Mortar Firing Points			
124	0.48	16T FQ 9695568623	NTA25	FP#	Acres	MGRS Grid	Location
125	6.14	16T FQ 9791269015	NTA25	500	2.48	16T FQ 9435766757	NTA25
126	4.65	16T FQ 9779769248	NTA25	501	0.69	16T FQ 9440667124	NTA25
127	5.62	16T FQ 9724169839	NTA25	502	0.17	16T FQ 9443267302	NTA25
128	6.83	16T FQ 9606370343	NTA27	503	2.41	16T FQ 9443767696	NTA27
200	8.75	16T FQ 9450465454	NTA24	504	5.25	16T FQ 9438867860	NTA27
201	6.31	16T FQ 9477765386	NTA25	505	0.23	16T FQ 9435168300	NTA27
202	8.96	16T FQ 9115962722	NTA24	506	0.71	16T FQ 9436968650	NTA27
203	7.27	16T FQ 9418464422	NTA24	507	0.66	16T FQ 8999769979	40 Comp.
204	1.97	16T FQ 9130964385	NTA24	508	0.42	16T FQ 8979569801	40 Comp.
205	8.19	16T FQ 9434865069	NTA25	509	0.15	16T FQ 8866668851	NTA26
206	6.13	16T FQ 9480364759	NTA25	510	0.63	16T FQ 8816668177	NTA26
207	7.37	16T FQ 9572765806	NTA25	511	1.82	16T FQ 8803567865	NTA26
208	3.08	16T FQ 9619766234	NTA25	512	0.44	16T FQ 8794867578	NTA26
209	7.16	16T FQ 9613564083	NTA25	513	1.81	16T FQ 8787767349	NTA26
210	2.25	16T FQ 9468964074	NTA25	514	0.41	16T FQ 8800567156	NTA26
211	8.38	16T FQ 9489863710	NTA25	515	5.49	16T FQ 8822467052	NTA22
212	6.15	16T FQ 9463264579	NTA25	516	0.84	16T FQ 8848866679	NTA22
213	4.2	16T FQ 9413663940	NTA25	517	5.47	16T FQ 8861866298	NTA23
214	5.33	16T FQ 9261263884	NTA24	518	2.94	16T FQ 8882065903	40 Comp.
215	7.08	16T FQ 9514165167	NTA25	519	2.19	16T FQ 8907465384	NTA23
221	6.01	16T FQ 9539466860	NTA25	520	1.15	16T FQ 8932165041	NTA23
222	6.28	16T FQ 9562765464	NTA25	521	0.1	16T FQ 8993064891	NTA23
300	11.29	16T FQ 8891362584	NTA23	522	0.61	16T FQ 9076764905	NTA23
301	3.23	16T FQ 8874862573	NTA23	523	1.41	16T FQ 9136864885	NTA24
302	17.23	16T FQ 8834863480	NTA23	524	0.31	16T FQ 9234165111	NTA24
303	9.75	16T FQ 8770763691	NTA22	525	0.21	16T FQ 9274365171	NTA24
304	9.26	16T FQ 8781264337	NTA23	526	0.11	16T FQ 9330465247	NTA24
305	7.43	16T FQ 8674266112	NTA22	527	0.07	16T FQ 9393565405	NTA24

Appendix H: DA PAM 385-63 OIC/RSO Requirements

Table 1-1
Officer In Charge and Range Safety Officer appointment requirements

Weapon system	OIC ¹			RSO ¹		
	Officer	Warrant officer (WO)	Noncommissioned officer (NCO)	Officer	WO	NCO
Practice hand grenades; sub-caliber training devices; laser devices; firing devices; simulators and trip flares; small arms and machine guns.	X	X	E-6	X	X	E-5
Chemical agents and smoke ²	X	X	E-6	X	X	E-5
Aerial gunnery and air defense weapons; live grenades, grenade launchers, and grenade machine guns; live mines and demolitions; tank and fighting vehicle cannons.	X	X	E-7	X	X	E-6
Field artillery ³	X	X	E-7	X	X	E-6
Mortars	X	X	E-6	X	X	E-6 ⁴

Table 1-1
Officer In Charge and Range Safety Officer appointment requirements—Continued

Air defense artillery rockets and guided missiles	X	X		X	X ⁵	
Direct fire antitank rockets and missiles	X	X	E-7	X	X	E-6
Live-fire exercises using organic weapons, squad through company, battery, troop.	X	X	E-7	X	X	E-6
CALFEX/CAX using outside fire support, troop, battery, squad, platoon, company; or battalion and larger. ⁶	X	X	E-7	X	X	E-6

Notes:

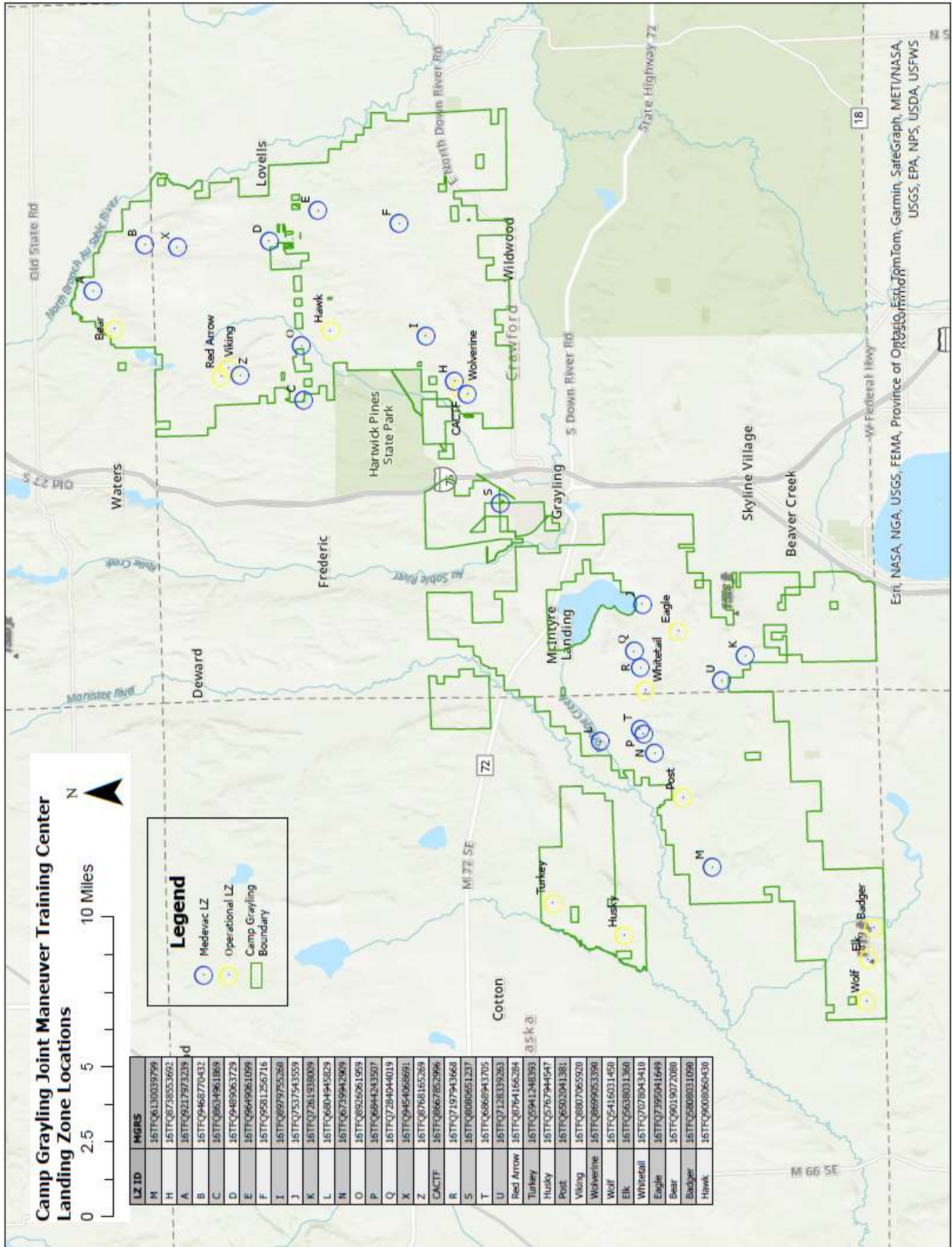
- ¹ Civilians in the grade of general schedule (GS)-07 and above, or equivalent, may act as OIC; GS-05 and above, or equivalent, may act as RSO.
- ² For the Marine Corps, OIC and RSO must be E-4 and above and be chemical, biological, radiological, and nuclear (CBRN) MOS 5702/5711 when conducting CBRN or smoke training. For the Army, OIC and RSO must be CBRN qualified when conducting CBRN or smoke training.
- ³ Use of E-7s as OICs is authorized only when approved by the senior commander (Army)/installation commander (Marine Corps). Duties of the RSO are normally performed by either the battery executive officer or the platoon leader.
- ⁴ RSO for Marine Corps can be an E-5 for mortar training activities.
- ⁵ Senior Range Safety Officer (SRSO) will be a chief warrant officer four, chief warrant officer four or higher, or a civilian in the grade of GS-12 or above.
- ⁶ For battalion or larger CALFEX/CAX, OIC will be a field grade commissioned officer; exercise RSO will be E-7 or above.

Appendix J: CG 385-63 OIC/RSO Requirements

Table 2-4, MTC Minimum Training Facility Requirements

FACILITY / WEAPON SYSTEM	OIC	RSO	MEDIC (68W)	CLS	I / O	Safety Brief	ADDITIONAL INFORMATION
EST II					X		One (1) certified I/O; One (1) Pelican Case with corresponding hand receipt
UGT-I					X		One (1) certified I/O for all systems
CFFT					X		One (1) certified I/O
VBS3	X						Coordination with Mr. Brian Lince
VCOT					X		One (1) certified I/O
IED DEFEAT	X	X		X		X	
LAND NAV	X			X		X	
UAC	X	X		X		X	
RAPPEL	X	X	X			X	Rappel Master Certification
NBC	X	X		X		X	One (1) 74D MOS and provide proof
LFSSH	E-7	E-6	X			X	Reference LFSSH SOP for Appendices D & E
TRAINING AREA (Fire Event)	X	X		X		X	Must monitor Range Control frequency at all times.
TRAINING AREA (Non-Fire Event)	X					X	Must monitor Range Control frequency at all times.
UAS OPERATIONS						X	Pilot certification for specific model
M9, M4/M16, SHOTGUN, M249, M240, M2	X	X		X		X	Minimum Rank for OIC: SSG / E-6 Minimum Rank for RSO: SGT / E-5
M203/M320, MK-19, LIVE GRENADE	X	X	X			X	Minimum Rank for OIC: SFC / E-7 Minimum Rank for RSO: SSG / E-6
M203/M320 TP, MK-19 TP, PRACTICE GRENADE	X	X		X		X	Minimum Rank for OIC: SFC / E-7 Minimum Rank for RSO: SSG / E-6
MORTARS	X	X	X			X	Minimum Rank for OIC: SSG / E-6 Minimum Rank for RSO: SGT / E-5
ARTILLERY	X	X	X			X	Minimum Rank for OIC: 2LT / O-1 Minimum Rank for RSO: SFC / E-7
MLRS / HIMARS	X	X	X			X	Minimum Rank for OIC: 2LT / O-1 Minimum Rank for RSO: SFC / E-7

Appendix K: Landing Zone Locations



Appendix K: Landing Zone Locations

CG LZ Identifier	MGRS	Training Area	LZ Type	On Installation Map
A	16TFQ9217973239	NTA27	Medevac	Yes
B	16TFQ9468770432	NTA27	Medevac	Yes
C	16TFQ8634961869	NTA22	Medevac	Yes
D	16TFQ9489063729	NTA25	Medevac	Yes
E	16TFQ9649061099	NTA15	Medevac	Yes
F	16TFQ9581256716	NTA07	Medevac	Yes
H	16TFQ8738553692	30 Complex	Medevac	Yes
I	16TFQ8979755260	30 Complex	Medevac	Yes
J	16TFQ7537543559	Parade Field	Medevac	Yes
K	16TFQ7261938009	STA20	Medevac	Yes
L	16TFQ6804945829	Sm Arms	Medevac	Yes
M	16TFQ6130039799	STA13	Medevac	Yes
N	16TFQ6739942909	STA13	Medevac	Yes
O	16TFQ8926061959	NTA16	Medevac	Yes
P	16TFQ6844243507	STA14	Medevac	Yes
Q	16TFQ7284044019	Sm Arms	Medevac	Yes
R	16TFQ7197943668	Sm Arms	Medevac	Yes
S	16TFQ8080651237	NA	Medevac	Yes
T	16TFQ6868943705	STA14	Medevac	Yes
U	16TFQ7128339263	STA15	Medevac	Yes
X	16TFQ9454068691	NTA27	Medevac	Yes
Z	16TFQ8768165269	NTA23	Medevac	Yes
Badger	16TFQ5808031090	STA22	Operational LZ	No
Bear	16TFQ9019072080	NTA28	Operational LZ	No
CACTF	16TFQ8667852996	30 Complex	Operational LZ	Yes
Eagle	16TFQ7395041649	STA16	Operational LZ	No
Elk	16TFQ5638031360	STA22	Operational LZ	No
Hawk	16TFQ9008060430	NTA18	Operational LZ	No
Husky	16TFQ5767944547	STA08	Operational LZ	No
Post	16TFQ6502041381	STA12	Operational LZ	No
Red Arrow	16TFQ8764166284	NTA22	Operational LZ	No
Turkey	16TFQ5941248393	STA08	Operational LZ	No
Viking	16TFQ8807065920	NTA23	Operational LZ	No
Whitetail	16TFQ7078043410	STA15	Operational LZ	No
Wolf	16TFQ5416031450	STA22	Operational LZ	No
Wolverine	16TFQ8699053390	30 Complex	Operational LZ	No

Appendix L: Fuel Pad Locations

Facility ID	Description & Location	Volume	MGRS Grid
26B15-SP580	SPILL PAD AT 0580A (Cantonment)	5475	16TFQ7422843221
26B15-SP581	SPILL PAD AT 00580 (Cantonment)	5300	16TFQ7419643248
26B15-SP582	SPILL PAD AT 0580B (Cantonment)	5378	16TFQ7425443255
26B15-FPD01	SPILL PAD AT BULK FUEL (Cantonment)	4751	16TFQ7419143061
26B15-FPD02	SPILL PAD AT BULK FUEL (Cantonment)	2061	16TFQ7417743101
26B15-FPD03	SPILL PAD AT BULK FUEL (Cantonment)	2049	16TFQ7415943149
26B15-FPD04	SPILL PAD AT BULK FUEL (Cantonment)	1617	16TFQ7414943179
26B15-FPD05	SPILL PAD AT BULK FUEL (Cantonment)	1983	16TFQ7414043207
26B15-FPD06	SPILL PAD AT BULK FUEL (Cantonment)	4671	16TFQ7413443238
26B15-FPD07	SPILL PAD AT BULK FUEL (Cantonment)	1562	16TFQ7412843271
26B15-FPD08	SPILL PAD AT BULK FUEL (Cantonment)	1531	16TFQ7412443298
26B15-FPD09	SPILL PAD AT BULK FUEL (Cantonment)	1562	16TFQ7412043329
26B15-FPD10	SPILL PAD AT END OF HOWE RD (STA14)	2199	16TFQ6900343563
26B15-FPD11	SPILL PAD AT HOWES LK (STA04)	1436	16TFQ7291950374
26B15-FPD12	SPILL PAD IN SOUTH CAMP (STA13)	1989	16TFQ6554440841
26B15-FPD13	SPILL PAD IN SOUTH CAMP (STA13)	2042	16TFQ6592138782
26B15-FPD14	SPILL PAD IN SOUTH CAMP (STA14)	1795	16TFQ6884138825
26B15-FPD15	SPILL PAD IN SOUTH CAMP, NE CORNER OF RANGE 13 (STA16)	1795	16TFQ7418341740
26B15-FP500	SPILL PAD AT 0500R, HOWE RD NEAR ENGINEER VALLEY (STA15)	1952	16TFQ7198843276
26B15-FPMAT	UBEROOTH TANK PARK (NTA01)	1922	16TFQ8579450994
26B15-FPMAT	UBEROOTH TANK PARK (NTA01)	1922	16TFQ8581450998
26B15-FPMAT	UBEROOTH TANK PARK (NTA01)	1922	16TFQ8583351002
26B15-FPD16	OATES RD & TWIN BRIDGE (NTA25)	1908	16TFQ9592466008
26B15-FPD17	PAD ON RD TO OP-5 (Bear Lk Rd.) (NTA23)	1997	16TFQ8783863167
26B15-FPD18	OUTSIDE MAIN GATE TO ATG TOWER (NTA27)	1863	16TFQ9224572519
26B15-FPD19	NEAR FP-109 (NTA27)	1863	16TFQ9479970478
26B15-P1R36	AT BLDG 1420 (30 Complex)	5206	16TFQ8646551313
26B15-FPD20	FIDDLER'S GREEN (NTA22)	5139	16TFQ8631961989
26B15-FP39R	FUEL PAD AT 3900R, BEHIND MPRC TOWER (30 Complex)	1840	16TFQ8737253543
26B15-SP583	SPILL PAD IN SOUTH CAMP - Not for military vehicle use; for small equipment like lawn mowers	-9999	16TFQ7020643765

***Cantonment area fueling operations must take place on designated fuel pads. Use of non-cantonment area field fueling pads is strongly encouraged, but not required. No fueling operations allowed within 400 ft. of any lake, river, stream or wetland. All fueling sites must have spill control materials present.**

Appendix M: Engineer Valley Dig Map

